

**Bureaucratic Entrepreneurship:
Administrative behavioral changes and e-
Government advancement in Bangladesh**

by

Hasanuzzaman Zaman

A thesis submitted to the Faculty of Graduate and Postdoctoral
Affairs in partial fulfillment of the requirements for the degree
of

Doctor of Philosophy

in

Public Policy

Carleton University
Ottawa, Ontario

© 2021

Hasanuzzaman Zaman

Abstract

This study analyzes how a postcolonial democracy like Bangladesh is experimenting with electronic or e-Government agendas, to address challenges in public service delivery traditions and processes, through soft administrative reforms. The mainstream literature on Bangladesh focuses on how the dual colonial legacy structured bureaucrats' behavior within the post-independence political context, making it unresponsive to societal needs. Taking a cue from this, the present study investigates the political, structural, and behavioral conditions which impeded successive public administration reforms overtime in Bangladesh, and analyzes the conditions which may have influenced administrative behavior for e-Government implementation. It looks at the power struggles at the higher levels of bureaucracy, and its effect on the implementation of public administration reforms.

The dissertation uses a mixed-method approach: content analysis, interviews, and survey findings. An analysis of secondary literature charts out the colonial formation of the Bangladesh bureaucracy, how it endured and resisted reforms under different regimes, and how the onset of Digital Bangladesh created new political expectations of the public administration. This study demonstrates mechanisms through which ideas generated by different international models such as New Public Management (NPM), digital era governance (DEG), New Public Governance (NPG) and design thinking (DT), were applied nationally to make the Weberian-colonial bureaucracy more entrepreneurial and citizen-centric. The study explores how these models influenced the design of capacity building initiatives, some of which continued despite politicization of the bureaucracy, and set the ground for e-Government transformation under Digital Bangladesh.

A survey of field-level bureaucrats, who attended an empathy training program, was carried out for identifying behavioral and organizational determinants of successful e-Government innovation. Results from a multivariate logistic regression identified entrepreneurial orientation of the bureaucracy as one of the key determinants of successful innovation. The present study emphasizes that bureaucratic entrepreneurship can be observed in emerging post-NPM approaches such as NPG, DEG and DT. It concludes with the policy, practical and research implications arguing that Weberian-colonial bureaucracies in developing countries require political and administrative support in the form of policies, strategies, and innovation toolkits, for implementing e-Government innovation, within the administrative bounds of the system.

Acknowledgements

I am indebted to my thesis supervisor, Professor Gopika Solanki. To Professor Solanki, I owe a special debt: for her guidance, advice and views as a political scientist which exerted a major influence on my thinking about public administration. Without her encouragement and kindness, I would not have been able to complete this study.

A special thanks to my two thesis committee members, Professor Vandna Bhatia and Professor Jose Galdo. To Professor Bhatia and Professor Galdo, I owe a special thanks for their advice and feedback. Without Professor Galdo's help, I could not have used the quantitative techniques for analyzing the survey findings in the dissertation. I am grateful to Professor Ahmed Shafiqul Huque and Professor Steven Muegge for providing me with constructive feedback and advice during the defence.

A silent thanks to the 442 field-level survey respondents, and 31 interviewees comprising top-level representatives from the government of Bangladesh, international donor agencies alongside NGOs and think-tanks in Bangladesh.

To my two sons, Rehman and Arhaan, thank you for your continued curiosity in what I do. I hope you never run out of your sense of curiosity, for as long as I live. With your curiosity, I hope to extend my grasp in understanding complex topics.

A special thanks to my parents for making it possible for me to reach this education level, and to my parents-in-law who provided me with the accommodation, food, and emotional support during my study in Ottawa, Canada.

And, finally, a note of love to my wife, Nazia. She had to put up with my countless and ungodly hours of study and sleep, over the last six years. Without Nazia's support as a best friend, I could not have embarked upon this journey in Fall, 2015 at the School of Public Policy and Administration (SPPA), in Carleton University, Ottawa, Canada.

Table of Contents

<i>Abstract</i>	<i>ii</i>
<i>Acknowledgements</i>	<i>iv</i>
<i>List of tables</i>	<i>vii</i>
<i>List of figures</i>	<i>viii</i>
<i>List of boxes</i>	<i>viii</i>
<i>List of appendices</i>	<i>viii</i>
<i>List of acronyms</i>	<i>ix</i>
CHAPTER 1. INTRODUCTION	1
1.1. e-Government paradox in Bangladesh	4
1.2. Research questions: National and international public policy perspectives	9
1.3. Methodology	14
1.3.1. Content analysis	15
1.3.2. Interviews.....	17
1.3.3. Survey	22
1.4. Conceptual framework and arguments	23
1.5. Going forward	28
CHAPTER 2. HISTORICAL OVERVIEW: LEGACY OF DUAL COLONIAL RULE AND POSTCOLONIAL MILITARY DICTATORSHIP	31
2.1. Bureaucracy is governed by “principle of office hierarchy...levels of graded authority...a firmly ordered system of super- and sub-ordination”	34
2.2. Bureaucracy is characterized by “fixed official jurisdictional areas,” “continual fulfilment of...duties”	42
2.3. Bureaucracy requires “full working capacity of the official” to achieve efficiency and “thorough and expert training” for decision-making	52
2.4. Postcolonial state and bureaucracy in Bangladesh: From 1972 to 1990	57
2.4.1. Presidential and military rule from 1971 to 1990	60
2.4.2. New Public Management (NPM) and the Bangladesh bureaucracy	68
2.5. Historical Overview: A Summary	75
CHAPTER 3. BUREAUCRATIC CHANGE FROM 1991 TO 2008: ROTATION BETWEEN POLITICAL PARTIES AND MILITARY INTERVENTION (ONCE AGAIN)	79
3.1. International context and perspectives: From New Public Management (NPM) to nudge theory-based design thinking (DT) ideas	84
3.1.1. International reforms in the 1990s and early 2000s, and their reception in Bangladesh	88
3.2. 1991-2008: Political context and implications for reforms	91
3.2.1. 1991-1996: Bangladesh Nationalist Party (BNP) government	94
3.2.2. 1996-2001: Awami League government	97
3.2.3. 2001-2006: BNP government	100

3.2.4. 2007-08: Non-party Caretaker Government (NCG) by the military	104
3.3. Reforms: Projects and capacity building initiatives	108
3.3.1. SICT Project: Dawning of e-Government in Bangladesh.....	113
3.3.2. Managing at the Top (MATT): The first behavioral change initiative	116
3.3.3. Improving Public Service and Total Quality Management (IPS-TQM): Targeting field-level administration officers for service delivery improvement	121
3.3.4. a2i: From “Access to Information” to “Aspire to Innovate”	123
3.4. Political context and institutional change from 1991 to 2008	126
<i>CHAPTER 4. BUREAUCRATIC ENTREPRENEURSHIP: IMPLEMENTATION OF E-GOVERNMENT BETWEEN 2009 AND 2020.....</i>	<i>129</i>
4.1. Public value management (PVM) and Design Thinking (DT).....	133
4.1.1. DT ideas, strategies, and institutions	135
4.1.2. Innovation process: Bureaucrat versus the manager.....	139
4.1.3. Creative adaptation of DT strategies.....	142
4.2. Political context and e-Government	144
4.2.1. National political context: 2009 to 2020.....	146
4.2.2. Enabling environment for e-Government adoption	150
4.3. Digital Bangladesh (2009-2020): e-Governance reforms, e-Government outcomes.....	157
4.3.1. Large-scale e-Government projects	158
4.3.2. Citizen-centric e-Governance reforms	161
4.4. Empathy Training Program (ETP): Building empathy and entrepreneurial mindset	169
4.4.1. Stage I: Empathy based ideas generation and innovation plan.....	171
4.4.2. Stage II: Implementation of innovation plan	172
4.4.3. Stage III: Replication, diffusion and sharing the story of innovation.....	173
4.4.4. Outcomes of ETP	173
4.5. Entrepreneurship and innovation under Digital Bangladesh.....	176
<i>CHAPTER 5. ANALYZING THE EMPATHY TRAINING PROGRAM (ETP): A WHOLE-OF-GOVERNMENT APPROACH TOWARD EMBEDDING.....</i>	<i>180</i>
<i>E-GOVERNMENT</i>	<i>180</i>
5.1. Public administration structure in Bangladesh	184
5.2. Empathy Training Program (ETP): Survey design, sampling, and descriptive statistics	189
5.2.1. Administrative behavior: Blocks, components, and elements	191
5.2.2. Sampling process and size	195
5.2.3. Findings: Descriptive statistics	197
5.3. Multivariate logit regression analysis and findings	206
5.3.1. Model 1 (control variables): Social demography characteristics.....	208
5.3.2. Model 2: Social demography and individual level behavioral elements .	210
5.3.3. Model 3: Social demography, individual and organizational level elements	213
5.3.4. Model 4: Mean and principal component-based indices	219

5.3.5. Goodness-of-fit	222
5.4. Summing up.....	228
CHAPTER 6. CONCLUSION.....	232
6.1. Structural-behavioral recommendations for e-Government innovation.....	240
6.1.1. Reducing excessing dependence on a2i’s leadership.....	241
6.1.2. Institutionalizing innovation units	242
6.1.3. Sustainability of e-Government innovations	242
6.1.4. Streamlining policy instruments	243
6.1.5. Institutionalizing awards for innovation	244
6.1.6. Creation of a centralized database for e-Government advancement	244
6.2. Contributions to existing literature.....	245
6.3. Limitations and future studies.....	247
Reference.....	251

List of tables

Table 1: Bangladesh: Key development indicators	7
Table 2: Political context and public administration reforms in Bangladesh	83
Table 3: Summarizing major capacity building initiatives aimed at changing bureaucratic behavior	111
Table 4: Empathy Training Program (ETP): Indicators	173
Table 5: Respondents and attrition rate (response in percentage)	197
Table 6: Social demography characteristics of respondents (response as a %).....	200
Table 7: Administrative behavioral aspects of the culture of innovation (n=218)	204
Table 8: Logit regression analysis for successful innovation implementation (model 1)	208
Table 9: Logit regression analysis for successful innovation implementation (model 2)	211
Table 10: Logit regression analysis for successful innovation implementation (model 3).....	215
Table 11: Logit regression analysis for successful innovation implementation (model 4).....	220
Table 12: Observed and predicted frequencies for successful e-Government innovation by model 2 regression (with the Cutoff of 0.5).....	226
Table 13: Observed and predicted frequencies for successful e-Government innovation by model 3 regression (with the Cutoff of 0.55).....	227
Table 14: Observed and predicted frequencies for successful e-Government with PCA based indices regression (with 0.55 Cutoff)	228

List of figures

Figure 1: Bureaucratic entrepreneurship: A conceptual framework.....	24
Figure 2: Administrative structure in Bangladesh	186
Figure 3: Sensitivity/specificity of prediction for model 2	224
Figure 4: Sensitivity/specificity of prediction for model 3	225
Figure 5: Sensitivity/specificity of prediction for principal components for model 4	227
Figure 6: Evolution of administrative behavioral change training initiatives.....	237

List of boxes

Box 1: Design Thinking (DT) institutions in Canada and Europe.....	139
Box 2: ETP cases of TCV based public service delivery innovation	174

List of appendices

Appendix 1: Research participant recruiting materials.....	267
Appendix 2: List of primary documents and materials.....	267
Appendix 3: Interview list	274
Appendix 4: Research Instrument: Interview questions	276
Appendix 5: Empathy Training Program (ETP): Survey instrument	278
Appendix 6: Logit regression results for successful innovation with pooled sample (n=442).....	283

List of acronyms

a2i – Aspire to Innovate (previously, Access to Information)
ACC – Anti-Corruption Commission
ADB – Asian Development Bank
AI – Artificial Intelligence
APA – Annual Performance Agreement
ARC – Administrative Reorganization Committee (ARC)
ASRC – Administrative and Service Reorganization Committee
ASYCUDA – Automated System for Customs Data
AUC – Area under ROC curve
BBS – Bangladesh Bureau of Statistics
BCC – Bangladesh Computer Council
BCS – Bangladesh Civil Service
BNP – Bangladesh National Party
BPATC – Bangladesh Public Administration Training Centre
BPSC – Bangladesh Public Service Commission
BPR – Business process re-engineering
BTTB – Bangladesh Telegraph and Telephone Board
CARC – Civil Administration Restoration Committee
CARR – Committee for Administrative Reform and Reorganization
CIDA – Canadian International Development Agency (now, Global Affairs Canada)
CSP – Civil Service of Pakistan
CIO – Chief Innovation Officer
CPI – Corruption Perception Index
DC – Deputy Commissioner
DEG – Digital Enhanced Governance
DFID – Department for International Development
DT – Design Thinking
e-GIF – e-Government Interoperability Framework
e-GP – Electronic government procurement
EGDI – Electronic Government Development Index
ETP – Empathy Training Program
FTC – Foundation Training Course
GAC – Global Affairs Canada
GED – General Economics Division
GIU – Governance Innovation Unit
GoB – Government of the People’s Republic of Bangladesh
GRS – Grievance Redressal System
HCD – Human-centered design
IAS – Indian Administrative Service
IDC – International donors community
IsDB – Islamic Development Bank
ICS – Imperial Civil Service
ICT – Information and communication technology
IMF – International Monetary Fund
IO – Innovation Officer
IPS – Improving Public Service
ISP – Internet Service Provider
ITES – Information Technology-enabled Service

ITU – International Telecommunication Union
JICA – Japan International Cooperation Agency
KII – Key informant interviews
KOICA – Korean International Cooperation Agency
LDC – Least Developed Country
LICT – Leveraging ICT for Growth, Employment and Governance
MATT – Managing at the Top
MOPA – Ministry of Public Administration
MSO – Mandatory strategic objectives
NCG – Non-party Caretaker Government
NGO – Non-government organization
NIS – National Integrity Strategy
NPC – National Pay Commission
NPG – New Public Governance
NPM – New Public Management
NREGA – National Rural Employment Guarantee Act
OECD – Organization for Economic Cooperation and Development
ORS – Oral Rehydration Solution
OSD – Officer on special duty
OYOP – One Year One Project
PARC – Public Administration Reforms Commission
PIP – Performance Improvement Project
PMO – Prime Minister’s Office
PVM – Public Value Management
RRC – Regulatory Reforms Commission
RTI – Right to Information
S-PIP – Super Performance Improvement Project
SA – Structural Adjustment
SAPRI – Structural Adjustment Participatory Review Initiative
SICT – Support to ICT project
SIF – Service Innovation Fund
SIP – Small Improvement Project
SPS – Service Process Simplification
SRO – Statutory regulatory orders
TCV – Time, cost, and visit
TQM – Total Quality Management
UDC – Union Digital Center
UISC – Union Information and Service Center
UNDESA – United Nations Department for Economic and Social Affairs
UNDP – United Nations Development Program
UNO – Upazila Nirbahi Officer
USAID – United States Agency for International Development
VOIP – Voice Over Internet Protocol
WGI – Worldwide Governance Indicator
WIT – Work Improvement Team

CHAPTER 1. INTRODUCTION

All 193 United Nations (UN) member states today have some form of electronic or e-Government presence through government websites, national portals and service delivery specific online platforms supported by sophisticated artificial intelligence (AI) technologies (UNDESA, 2018). The level of e-Government advancement varies between high-income, older democracies and low-income, young democracies, many of which are developing economies and belong in the least developed country (LDC) group (OECD, 2017; World Bank, 2016). In the older democracies, e-Government has reached a “very high” online service transformation level (UNDESA, 2020) where, increasingly, citizens and public sector organizations are collaborating in co-designing public policies (Gouillart & Hallett, 2015; Osborne, Radnor, & Strokosch, 2016), along with the utilization of AI and robotics for accelerating the delivery of public services (Shah, O’Leary, Guszczka, & Howe, 2020).

On the other hand, many of the world’s LDCs hover between low and medium levels of e-Government (UNDESA, 2018, 2020), and these governments are far from connecting with citizens through online platforms, and making service delivery processes more participatory and responsive. World Bank (2016) argued that although e-Government can generate “digital dividends” for LDCs by reducing public service delivery related transaction costs, governments not only lack the financial resources, but their public administration systems also resist adopting new technologies improving service delivery processes through the digital transformation of the functions and structures of the existing government system.

The concept of e-Government involves the automation or computerization of existing paper-based procedures which prompts new styles of leadership, new ways of listening to citizens and the new ways of organization and delivering information and services (Kettani & Moulin, 2014). While e-Government can be conceptualized as the

government system, e-Governance is a functionality. The process of using information and communication technology (ICT), managing e-Government tools for good governance purposes, is called e-Governance (ibid), and the “e” part stands for the ICT enabled platform or infrastructure that transforms traditional, paper-based, circuitous, and cumbersome public service delivery processes.

In the thesis, the concept of e-Governance encompasses the definition of governance provided by the Worldwide Governance Indicators (Kaufmann, Kraay, & Mastruzzi, 2019)¹. Similar to governance, e-Governance is broadly defined as the set of traditions and institutions by which authority in a country is exercised through the capacity of the bureaucracy to implement policies, and the institutions that govern economic and social interactions between citizens and the state. The concept of e-Governance focuses on two complementary *inside* aspects: a public administration aspect, which focuses on transforming the system from the inside of the organization, and, a technical aspect, which also focuses on the inside of the government operations and processes (Bhatnagar, 2004). Addressing a government’s capability and technical inside aspects makes e-Government a subset of e-Governance (Kettani & Moulin, 2014).

Although crucial to the success of e-Government, the public bureaucracy in the LDCs has not been studied as extensively as other components of the public sector. According to Peters (2021), much of the contemporary political science ignores 95 percent of the street-level employees of the government, and public administration often ignores the political environment within which it functions. The values involved in e-Government implementation decisions depends on means-ends relationships

¹ The notion of e-Governance does not cover the private sector such as the e-Commerce or e-Business applications in the present thesis.

which connect them with objectives or activities that are valued in themselves. In other words, paraphrasing Simon (1997, p. 61), the value inhering in the desired end of implementing e-Government is transferred to the electronic means by a process of anticipation. If e-Government is the deployment of electronic or “e” means to transform the functions and operations of governments, e-Governance is the application of “e” means to simplify and improve the governing aspects of governance, through increased interactions between government and citizens (Kettani & Moulin, 2014). Thus, e-Governance can be conceptualized as the conditions and endogenous processes which creates a congenial environment for e-Government implementation by challenging established traditions which makes bureaucracies resist innovation. Such conditions can be generated through new political positions and visions, and through policy instruments. The dissertation uses administrative traditions for understanding how public administration systems function, and how they became amenable to e-Government change over time.

1.1. e-Government paradox in Bangladesh

Along with Bhutan and Cambodia, Bangladesh was identified as one of the three LDC leaders by the latest *e-Government Development Index* (EGDI) report (UNDESA, 2020)². Over the last thirty years, between 1990 and 2020, Bangladesh boosted per capita income from USD 320 to USD 2,010, improved life expectancy from 58 to 74 years, more than doubled literacy rates from 35 per cent to 76 per cent, and halved the national poverty rate from 48.9 per cent in 2000 to 21.3 per cent in 2020 (see Table 1). Growth averaged more than 6 per cent over the last two decades which

² Bangladesh recorded a strong progress under the e-Participation Index (EPI) – moving to the high EPI level in 2020 (UNDESA, 2020). The EPI measures availability of online information in the areas of education, health, social protection, employment, environment and justice; use of digital channels (including mobile devices/platforms) and open data technologies, availability of public procurement notifications and tender results online; and, amongst other measures, evidence of free access to online government information and services through the national portal and one-stop kiosks.

enabled the Bangladesh economy to achieve two key milestones: firstly, moving from low-income to a low-middle-income status in 2015 and meeting the criteria in 2018 for graduating out of the LDC status by 2024; and, secondly, increasing nationwide access to ICT. For example, in 2000, less than 0.1 per cent of the households used the Internet; in less than two decades, it increased to 38 per cent. Similarly, mobile penetration recorded less than 0.2 per cent in 2000, which stood at 101.4 per cent in 2020.

Scholarly works on e-Government are heavily based on high-income, Western developed countries' contexts and private sector's experiences (Halvorsen, Hauknes, Miles, & Roste, 2005; Kearney, Hirich, & Roche, 2009; OECD, 2017), emphasizing the importance of organizational culture, leadership and incentives influencing improvements in public services (Borins, 2002; Sørensen & Torfing, 2015). There is little systematic evidence and published scholarship on public administration linking administrative behavior and implementation of e-Government in the context of Bangladesh, or any other LDC (Bertelli, Hassan, Honig, Rogger, & Williams, 2020; Bhuiyan, 2011; Twizeyimana & Andersson, 2019). In most non-Western postcolonial countries like Bangladesh, India and Pakistan, public administration largely originated from the British colonial rule, and thus, reflected some basic features of the Weberian bureaucratic model such as formality, hierarchy, merit-based selection, and specialization (Zafarullah, 2001). While this tradition of public administration continued with greater priorities given to nation-building and development under postcolonial developmental regimes, there emerged a greater concern for changing administrative structures and behaviors for responding to citizens' needs (UNDP, 2004). Because the Weberian-colonial apparatus was not open and willing to adopt ICT for reducing their discretion over paperwork, which would lead to the acceleration of

public service delivery to citizens, implementation of e-Government faced two broad and major challenges in Bangladesh.

Firstly, under colonial rule, common priorities were given to bureaucratic principles such as specialization, qualification, and impersonal rules to ensure discipline, and control, and impose loyalty and law and order (Haque, Wal, & Berg, 2021). The exogenous, colonial roots of the bureaucracy in Bangladesh made it more inward looking than the traditional Weberian system, resisting administrative reforms and changes which aimed at reducing distance with the society (Haque, 1997; Jahan, 2006; Zafarullah, 2013a, 2016).

Secondly, progress in economic growth and social development in Bangladesh have been autonomous of governance and public administration, making the country's economic success a "development paradox" (Mahmud, Ahmed, & Mahajan, 2008). One of the six dimensions under the World Bank's *World Governance Indicators* (WGI) is government effectiveness (Kaufmann, Kraay, & Mastruzzi, 2019). This dimension reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies (ibid). The performance of Bangladesh under the government effectiveness dimension demonstrates a deteriorating state of governance as the country's ranking declined from 136th (out of 196 countries) to 160th (out of 209 countries) between 2000 and 2019³.

Under the Transparency International's *Corruption Perception Index* (CPI), Bangladesh was the top corrupt country in the world between 2001 and 2004, while it

³ Please visit the following website for more information <http://info.worldbank.org/governance/wgi/> (Accessed on September 16, 2021).

ranked as the twelfth most corrupt country in 2020 (TI, 2021)⁴. Similarly, the latest *Global Competitiveness Report* by the World Economic Forum identified the bureaucracy and corruption as the two top-most problematic factors undermining business environment and adoption of e-Government (Schwab, 2019).

The first EGDI placed Bangladesh at 119th out of 144 countries (UNDESA, 2001). The following EGDI report in 2003 ranked the country at 159th out of 173 countries (UNDESA, 2003)⁵. In 2008, the year when “Digital Bangladesh” was introduced as a political agenda, Bangladesh ranked 142nd out of 182 countries (UNDESA, 2008). However, by 2010, when Bangladesh had adopted a ten-year *Perspective Plan* for the implementation of Digital Bangladesh to achieve Vision 2021 (GED, 2010), it moved up to 134th out of 193 countries (UNDESA, 2010). By 2016, Bangladesh progressed to 124th (UNDESA, 2016), and moved further to 119th in 2020, owing to a strong performance under the online service sub-index of the EGDI (UNDESA, 2020)⁶.

Table 1: Bangladesh: Key development indicators

Indicator	1990	2000/01	2010	2016	2019/20
GDP growth (%)	4.6	6.0	6.3	6.6	6.9
GNI per capita, Atlas method (current US\$)	320	440	800	1,220	2,010
Poverty headcount ratio at national poverty lines (% of population)	-	48.9	31.5	24.3	21.3
Life expectancy at birth, total (years)	58	65	70	72	74
Literacy rate, adult total (% of people aged 15 and above)	35.3	47.5	47.1	72.6	76

⁴ The CPI ranks countries and territories by their perceived levels of public sector corruption according to experts and businesspeople. Bangladesh is ahead of only war-ravaged Afghanistan according to the latest CPI, although it outperforms India and Pakistan in social and income indicators.

⁵ Bangladesh also ranks poorly in *Global Innovation Index* (116th out of 130 countries) and *Global Knowledge Index* (112th out of 138 countries). These indices have taken a more market-based, human capital oriented towards measuring the success of development through digital transformation, unlike the EGDI (Cornell University, INSEAD, & WIPO, 2020; UNDP and MBRF, 2020).

⁶ The online sub-index under the EGDI measures the level of online transformation of service delivery processes provided by the public administration.

Corruption Perception Index (CPI) rank	-	133 (out of 133)	143 (out of 176)	145 (out of 178)	146 (out of 180)
Government Effectiveness (Worldwide Governance Indicator, WGI)	-	136 (out of 196)	155 (out of 210)	156 (out of 209)	160 (out of 209)
Global Competitiveness Index (GCI) (out of 141 countries)	-	-	113	107	105
e-Government Development Index (EGDI) rank (out of 193 countries)	-	119 (out of 144)	134 (out of 193)	124	119
e-Participation Index		123 (out of 144)	102 (out of 193)	84	95
Household using Internet (% population)	-	Less than 0.1	3.7	9.2	38
Mobile phone penetration (% of population)	-	0.2	45	84	101.4

Source: Compiled from Bangladesh Bureau of Statistics (BBS), World Bank's Worldwide Governance Indicators, Transparency International reports, UNDESA e-Government development index, International Telecommunication Union (ITU).

The EGDI trend reveals an e-Government development paradox⁷ which calls for further investigation: if Bangladesh is performing poorly on governance indicators under the CPI and WGI, but doing well on e-Government under EGDI, what exact set of conditions are undergirding digital transformation successes and failures, and the change in traditions? The starting point of the thesis is how traditions shaped the understanding of governance and public administration in Bangladesh. “Administrative traditions provide one way of creating a more comprehensive explanation of the structure and behavior of public bureaucracies” (p. 23). This argument is extended to understand how e-Government service delivery innovation efforts can create opportunities for a “soft” type of behavioral change within the public administration system, i.e., from inside-out of the organization. The analysis can explain the

⁷ The e-Government paradox has been conceptualized as a contrast between high level of investment in policy efforts in the ICT sector, alongside low adoption of e-Government processes in high-income, developed countries (Savoldelli, Codagnone, & Misuraca, 2014).

advancement of Bangladesh in the EGDI from a new structural-behavioral perspective, given that the current public administration literature is more concerned with the implementation and achievement of ICT policy objectives, impact of administrative regulations, and infrastructural limitations from the e-Government perspective (Bhuiyan, 2011; Hasan, 2014; Osman, 2016).

1.2. Research questions: National and international public policy perspectives

From an international perspective, there is one dominant explanation of change in the public sector – the New Public Management (NPM) and market models. The public administration reform literature suggests that the NPM ideas played a key role in bringing about structural-organizational changes on the ground in many developing countries (Bhattacharya & Titumir, 2001; Samaratunge, Alam, & Teicher, 2008; Zafarullah & Sarker, 2016). Bangladesh too experimented with NPM type of reforms and scholars have focused on the failures of the NPM model (Aminuzzaman, 1994; Samaratunge et al., 2008; Zafarullah, 2002). The NPM reforms were more ad hoc in nature as a response to pressures from the international donors community (IDC) and it has been argued that on their own, NPM could not suffice to achieve the goal of policy reforms of e-Government transformation (Samaratunge et al., 2008; Sarker, 2006).

The participatory approach to administrative reform or New Public Governance (Osborne, 2010) has emphasized values of public involvement rather than efficiency. Change in public administration has also been influenced by technology, and especially by e-Government (Homburg, 2008). Besides speeding up the flow of information, more important changes are appearing in the relationships between government and citizens (Peters, 2021). Under e-Government, “rather than having a civil service employing large numbers of “street- level bureaucrats” who meet with citizens and decide about

individual claims, much of contact of citizens with government would be electronic” (ibid, p. 23). Although administrative reforms have been an enduring feature of the public sector, the thesis analyzes the role those administrative traditions, influenced by international factors, play in shaping e-Governance reform processes leading to e-Government outcomes.

Studies on policy diffusion to Bangladesh have been restricted to the NPM model, and the dissertation applies four other models in order to provide a new ground-level perspective on how international ideas travelled to Bangladesh, through different policies and capacity-building training programs, and challenged established structural-behavioral traditions. These are: public value management (PVM), digital era governance (DEG), New Public Governance (NPG) and most recently, nudge theory- and empathy-based design thinking (DT) ideas and strategies.

Emerging models of e-Government are increasingly recognized and represented under DEG reforms (Tassabehji, Hackney, & Popovič, 2016). After the advent of Internet, the DEG scholars recommended establishing design principles to make bureaucrats understanding the value of e-Government for becoming more responsive to citizens’ needs through “e” means (Dunleavy, Margetts, Bastow, & Tinkler, 2006). Researchers have noted that many e-Government programs have proven to be disappointing (Hardy & Williams, 2011), from a lack of understanding about the governing relationships between institutional arrangements for implementing e-Government (Luna-Reyes & Gil-Garcia, 2011). A prominent feature of DT is user engagement, wherein the perspectives of citizens and the experiences of those that use and/or are affected by a service are primary inputs to the design of ICT enabled services (Mintrom, 2019; Mintrom & Luetjens, 2016). Research studies have not yet examined how DT and DEG may have shaped the process of e-Government discourse and e-

Governance reforms from an LDC's perspective. This analysis is important to contextualize the process of e-Government implementation and for understanding how the public administration system needed to evolve from being colonial, hierarchical and centralized, and into becoming more creative, responsive, and stakeholder-oriented, in order to better serve citizens (UNDP, 2007).

At the domestic level, scholars have examined how the Weberian legal-rational barriers were baked into organizational structures during colonial rule, which made bureaucrats non-responsive to society's needs, while citizens and political authorities were also distrustful of the public administration system (Haque, 1997; Jamil, 2002; Mollah, 2013; Zafarullah & Huque, 2001). Scholars have not investigated how the colonial origins of administrative structures perpetuated non-responsive and hostile bureaucracy-citizen relationships, and how these behaviors needed to be re-directed to allow for e-Governance reforms to take place in the transformation of service delivery processes. The present study pulls in various public administration reform models alongside the role of IDC, the political setting, and organizational factors to provide a new behavioral change perspective of e-Government implementation, based on the experience of an LDC, i.e., Bangladesh.

It has been argued that all social and political systems have sets of values that shape the behavior of public bureaucrats and understanding the avenues through which culture affects behavior is difficult (Peters, 2021). A study on e-Government implementation from an administrative behavioral perspective requires considering the Weberian structural-behavioral characteristics of the public administration system in Bangladesh, and understanding the impact of the colonial traditions of the structures and behaviors which made it antithetical to change and innovation, unlike bureaucracies in high-income, older democracies with no colonial traditions. For example, there is a

consensus amongst scholars on how successive governments after Bangladesh independence failed to bring about structural-behavioral changes to reduce the bureaucracy-citizen gap (Jahan, 2006; Khan, 2013; Khan & Haque, 2013; Zafarullah, 2016). The present study provides an alternate view on how the process of embedding e-Government within the bureaucracy benefitted from behavioral change initiatives which were continuously implemented or scaled up, despite the rotation of political parties and the intervention by military.

Whether and how the political Digital Bangladesh agenda provided a new direction and purpose for the public administration to use ICT in achieving e-Government policy goals, has not been considered by scholars. The few research studies on Digital Bangladesh and e-Government which have analyzed a wide array of policies and their objectives, human capital, infrastructural and technological issues (Bhatnagar, 2014; Bhuiyan, 2011; Osman, 2016; Zafarullah, 2016), lack a theoretical framework and do not account for continuities of different initiatives. During the interviews with government authorities and internationally funded project-level representatives, it was learned that e-Government implementation has been influenced by DT ideas, although scholars have not yet applied this model to study the administrative structural and behavioral perspectives. For example, there are no studies examining how the Aspire to Innovate (a2i), the DT institution of the Bangladesh government, has been working to create the conditions conducive for bringing about incremental behavioral changes within the Bangladesh bureaucracy. The purpose of a2i is to lead the e-Government goals of Digital Bangladesh with a focus on simplifying access to information and services to citizens using ICT. By applying non-NPM contemporary models in analyzing different public administration reforms, the present

study considers successes and challenges of e-Government implementation from the structural-behavioral change perspectives.

In the absence of a framework for conceptualizing micro-level, incremental behavioral changes through e-Government implementation, this study proposes a new nested framework in Section 1.2. This framework is useful to investigate the two research questions for analyzing the e-Government change from the administrative behavioral perspective:

- What political, structural, and behavioral conditions impeded successive public administration reforms over time in Bangladesh, thereby creating the e-Government governance paradox and influencing e-Government advancement?
- Under what conditions can behavior of bureaucrats, working under a public administration system with a colonial legacy perpetuated by non-responsive structures, change to influence the process of e-Government implementation?

The two research questions offer the broad parameters for the investigation of administrative behavioral perspectives from an LDC's context and examining the structural-behavioral aspects of the public administration in Bangladesh, before defining its relationship with e-Government implementation. The next section of this introductory chapter outlines the methodology that will be used throughout the study. A conceptual framework for understanding the broader themes and scope of the current dissertation is presented before the final section. The final section of the chapter provides a roadmap of the dissertation by chapter.

1.3. Methodology

The present dissertation employs a mixed-method approach to study public administrative behavior and e-Government implementation from the inside-out perspective, i.e., how structures and behaviors of the organization and individual need to be changed to embed the use of technology for accelerating the delivery of information and services to citizens. It takes a top-down approach to study the history of e-Government within the context of the public administration, and how the e-Governance reforms needed to consider ground realities for adding a public value creating angle to innovations in public service delivery. The mixed method consists of content analysis, open-ended interviews with 31 key informants, and a survey of 218 randomly selected bureaucrats who attended an Empathy Training Program (ETP), implemented by the a2i in collaboration with Cabinet Division and Ministry of Public Administration (MoPA). It combines primary (interviews, survey, legal and government documents) and secondary sources of information (books, journal articles, newspaper articles, reports, etc.). While the survey provided a field-level analysis of administrative behavioral elements and their association with successful e-Government or innovation implementation, interviewing was the central resource through which the study engaged with investigating the research questions. Interviews provided an economical means of getting access to primary documents that are not publicly accessible for analysis, and conducted in a way to get bureaucrats, and representatives from donor agencies and think-tanks to ‘think-out-loud’ about issues and topics related to the two research questions. Citizens were not interviewed because of the research focus on the inside aspects of the bureaucracy, and whether and how the bureaucrats are able to understand citizens’ needs for driving innovation.

Both research questions required extensive interviews and collection of primary documents to study the process and type of incremental changes in administrative behavior resulting simultaneously from e-Governance reforms and e-Government implementation. For example, content analysis of government and IDC documents was done to analyze how the international non-NPM models may have converged through various policies and trainings, thereby paving the way for the implementation of e-Government through incremental administrative behavioral change. Although there is some research on different training initiatives (Hossain, Kumasey, Eldridge, Kravariti, & Bawole, 2018; Majeed, 2011; Ullah, 2018), it does not analyze the type of incremental structural-behavioral changes that can help to explain the e-Government paradox in Bangladesh.

An analysis of the literature helped to identify potential academics, political science, and e-Government innovation experts, who would be the most appropriate interviewees given the research questions. The study recruited some of them by contacting acquaintances who had first-hand knowledge or experiences in the corresponding institutions. In other cases, the author contacted potential participants directly by email or telephone after collecting their contact information from the interviewees. The thesis used pseudonyms to protect the anonymity of the interviewees. The survey, interviews and transcriptions were conducted in accordance with guidelines provided by the Carleton University Research Ethics Board (Appendix 1 presents the materials used for recruiting research participants).

1.3.1. Content analysis

Research questions were studied using historical, archived evidence and published secondary materials to construct an evolutionary narrative about the present-day nature of bureaucracy in Bangladesh, such as reports from international donor

agencies and government appointed public sector reform commissions, policies, rules, and strategies. The review of secondary literature included books, journal and newspaper articles, and research reports on different administrative trainings and projects, which are not available in the public domain and needed to be collected during the time of interview, or from the location indicated by the participants (see Appendix 2 for a list of primary documents). The study aimed to access and examine unpublished written materials relating to capacity building initiatives of the bureaucracy, e-Government projects, and new policies and strategies of the government. It was important to access materials from the late 1990s when the e-Government agenda emerged at the global level and influenced the policymaking discourse in Bangladesh. These materials, consisting of reports on e-Government aspects, training initiatives, and proposed changes in existing policies, provided a holistic overview of how public administration reforms were conceived by the bureaucracy in Bangladesh.

A review of these unpublished materials provided a deeper understanding of the type of structural-behavioral changes which were required to make the Weberian-colonial bureaucracy more citizen-centric. Given the absence of a central database covering all major public administration behavioral change training programs, the study identified some key gaps in the discourse regarding their spillover effects. The gaps confirmed how lessons from one training program was applied to the other and the next, creating an internal virtuous cycle from the top-level to the field-level, accumulating to the design of capacity development programs for changing behavior of bureaucrats as users of ICT. Interviews with academics helped to elicit new information for analyzing how the non-NPM public administration models were applied in changing the bureaucratic behavior. These primary documents were useful to further understand the incremental changes in administrative behavior over time. For example, documents

relating to the proposed technology revisions in “Secretariat Instructions,” a colonial policy tool, was accessed to understand the type of e-Government back-end changes which were required to extend the bureau’s boundaries for online transformation of traditional public service delivery process. During the interviews with academics and international donor agencies, the a2i was singled out as the main driver for successful e-Government implementation in Bangladesh.

1.3.2. Interviews

Besides analysis of secondary resources and primary documents, the two research questions were studied qualitatively using a snowball/referral sampling method to identify and recruit key informants. Snowball sampling has been used in the study to recruit samples because members of the desired population are hard to identify and access. Snowball was the only sampling method that could have been used to obtain a reasonably representative sample of participants with knowledge about e-Governance reforms and public administration in Bangladesh, particularly to understand how colonial legacies shaped the bureaucracy’s behavior, and how post-independence public administration reforms, tried to reorient bureaucratic behavior for making it more technologically advanced and citizen-centric. Participants were recruited through a referral sampling method, targeting key experts with background knowledge of public administration history, e-Governance reforms, alongside the state and level of e-Government implementation in Bangladesh. Semi-structured, open-ended interviews were conducted to acquire an understanding of public administration reforms and their impact on service delivery processes from the experiences of both government (current and retired bureaucrats), and non-government actors (donor agencies, think-tanks, academics and non-government organizations or NGOs).

A total of 31 key informant interviews (KIIs) were conducted for the present study between July to September 2019, and December 2019 to January 2020 (see Appendix 3 for the interview list). Interview questions (see Appendix 4) were designed specifically to cover three categories of participants: government (including bureaucrats and project personnel), non-government (think-tanks, NGOs, and academics), and international donor agencies (UNDP Bangladesh, World Bank, DFID, etc.). Respondents (r) are referred to as r1, r2, r3...r31 throughout the study to protect the anonymity of the interviewees. The participants are categorized in five groups – government (r1 to r8), members from two ICT projects in the ICT Division, i.e., a2i and LICT (r9 to r14), local think-tanks engaged in governance and public administration research (r15 to r20), local and international academics (r21 to r25), and members from the IDC (r26 to r31) with expertise on Bangladesh’s public administration reforms.

Interviewees were generally targeted due to their experience on public administration in Bangladesh and position within their organizations. Most interviewees occupied (or have occupied) at least a “director” level post within their respective organizations. The highest ranked interview participants were the principal secretary to the prime minister of Bangladesh (r1), and the resident representative of UNDP Bangladesh (r27). Interviews were conducted with public administration researchers and experts who had experience working in Bangladesh. As much as possible, interviewees were targeted to ensure representation from all major government, non-government, and donor agency organizations. For instance, an interviewee represented his experience as a former country director of the UNDP Bangladesh and a current senior director at the world’s largest NGO – BRAC (r15). Given the admittedly limited sample of interviewees, targeting participants from

different government and international organizations was done in efforts to limit potential bias, by ensuring that multiple organizational viewpoints were accounted for throughout the analysis.

The study began by reaching out to a couple of government representatives of Bangladesh in Ottawa, using their e-mail addresses provided in their website. The first interview was held with the first secretary of the High Commission of Bangladesh (r8) on 08 July 2019. He provided e-mail addresses of a former vice president of the Canadian International Development Agency (CIDA, now part of Global Affairs Canada) (r31), and other government and non-government personnel, including a2i project's policy advisor (r9). Out of the six people mentioned by r8, three were sent an invitation letter for being interviewed, and one of them, r9, agreed to be interviewed.

The first interview in Dhaka, Bangladesh, took place with r9 (interview, July 21, 2019), and the interview lasted 105 minutes. Interview questions related to a2i and its journey from a project to the government's e-Government innovation hub. He provided an overarching understanding of the bureaucratic traditions and history, level and state of e-Government implementation in Bangladesh. R9 provided insights on how international ideas influenced the design of different training initiatives, policies, and strategies for achieving the policy goals of Digital Bangladesh.

During the interview, research support was sought from r9 to access training programs data. He provided a list of contacts and introduced three of his colleagues, one of whom, r10, led the ETP implementation at the field-level. R10 provided key insights about how the a2i embarked upon a "Quick Wins" process for changing bureaucratic behavior incrementally through capacity building trainings, supported by the Prime Minister's Office (PMO). Both r9 and r10 provided a list of academic and government contacts who were interviewed for the study. For example, two

representatives from the ICT Division's Leveraging ICT or LICT project were interviewed, who were a former technology expert and a communication expert at a2i, respectively (r13 and r14). These representatives provided information on the LICT project and their own experience in working at a2i, especially in the areas of e-Government implementation

The second interview took place with r15 (interview, July 21, 2019). His views were instrumental in acquiring a comprehensive view of the different projects and initiatives which predated the a2i, and how these may have created the conditions for e-Government implementation. R15 provided access to documents relating to the Support to ICT (SICT) project, e-Government background studies from the late 1990s to mid-2000s and provided key information about the strengths and weaknesses of a2i as an innovation hub. He also provided a list of contacts which included top-level government personnel, along with representatives from donor agencies and think-tanks.

The recruitment of participants continued to snowball, and they were invited purposively based on their location, and their familiarity with the research topics. Four top-level bureaucrats (r1 to r4) and four mid-level bureaucrats (r5 to r8) provided insights into the government's state of e-Government implementation and utilization. Interview questions related to the colonial structures and administrative behavior, post-independence role and functions, and application of formal rules alongside informal practices. Given their long tenure as bureaucrats, they could provide a deeper understanding of organizational factors which helped to discern bureaucratic experience formation, and how the bureaucracy was shaped to resist change. Top-level and mid-level bureaucrats indicated Digital Bangladesh was the key vision in setting out a set of e-Government priorities and aligning administrative interests, by making it

focused on using ICT as a means for enabling bureaucrats to become more perceptive of citizens' needs.

There are many think-tanks in Bangladesh, and it was important to target those with a research focus on governance, public administration, and e-Government. Three representatives from the BRAC Institute of Governance and Development (BIGD) and one from Centre for Peace and Justice, both affiliated with BRAC University, were interviewed by the present study (r16 to r19). The present study reached out to six academic scholars, and five were interviewed by the study (r21 to r25). Out of eight donor representatives contacted by the researcher, six agreed to be interviewed (r26 to r27).

The diverse portfolio of respondents allowed for collecting information from a wide variety of sources with different views but on the same topic – changes in administrative behavior as a result of e-Government implementation aimed at accelerating public service delivery to citizens. Their views and opinions were critical in learning about policies, initiatives and programs which were not identified in the initial stage of this study. Interviews were relevant to access key documents and to acquire an understanding of the colonial implications and the present-day administrative context in Bangladesh. At the same time, interviews proved to be useful to learn about the factors which molded bureaucratic experience, the political and international environment which helped to create opportunities for bureaucratic change to occur, and how these shaped the conditions for public service delivery innovations to take place through training initiatives. Interviews helped to acquire a deeper understanding of the endogenous conditions which were created by external interventions such as through the impact of particular training programs on the Bangladesh public administration, to become more citizen centric.

1.3.3. Survey

In order to assess the impact of capacity building training initiatives on changing administrative behavior for e-Government implementation, it was important to access information about participants from the training programs. Data on who participated in what training program is not readily available and it was important to target a population of a specific training program. Interviews with Cabinet Division and a2i officials helped to access the data on the ETP and the survey specifically targeted the population of field-level civil servants who had participated in the ETP. A structured survey instrument was developed and administered over six months, July 2019 to December 2019, via online and email questionnaires in English and Bangla, using Qualtrics (see Appendix 5 for the survey questions).

A deliberate strategy was to generate insights from respondents belonging to the rural, field-level public administration (143 or 65.6 per cent of the random sample). Peters (2021) argued that the emphasis on the upper echelons of the service has ignored the decision-making role of those other levels, and especially the officials at the bottom in regular conflict with clients. These “street- level bureaucrats” (Lipsky 2010) make thousands of decisions each day and may be all that the average citizen ever sees of the public sector.

There are three parts to the ETP survey. The first part of the survey comprises social demography characteristics such as gender, age, location, level and type of education, years of service (tenure), location of works (or position in the hierarchy), and respondents’ perceptions on the utility of the government’s innovation toolkit in implementing e-Government. The last two parts are a combination of three works – a culture of innovation framework developed by Rao and Weintraub (2013) for private sector managers and entrepreneurs, administrative culture framework by Jamil (2002)

for public administration in Bangladesh, and research by Norman, Banerjee, Prabhu & Yunus (2020) on the impact of empathy on land records related service delivery in Bangladesh.

1.4. Conceptual framework and arguments

One of the key features of administrative traditions is the relationship between state and society (Peters, 2021). This relationship has substantial relevance for the conduct of public administration. A second feature of administrative traditions is based on the relationship that is assumed to exist between politicians and their civil servants (ibid). The basic question for this dimension is the extent to which public servants are expected to be autonomous from political pressures, administering the law *sine ira ac studio* (ibid). While public administrators should be responsive to their political “masters” they should also be responsible to law, and civil servants therefore may be caught between conflicting demands.

The nested framework in Figure 1 combines Weberian characteristics of the older states with those defining Bangladesh’s public bureaucracy. It enables analysis of the web of political and public administrative institutions, understand their complex interactions in relation to public service delivery innovation, and analyze administrative traditions by separating the three mainstream models of public administration: Weberian or the old school of thought, NPM and its reinventing government implications, and other non-NPM models such as DEG and DT strategies. The nested arrangement is useful to contextualize the analysis on the behavioral aspects of e-Government implementation from a LDC’s perspective, within the broader public policy and administration context.

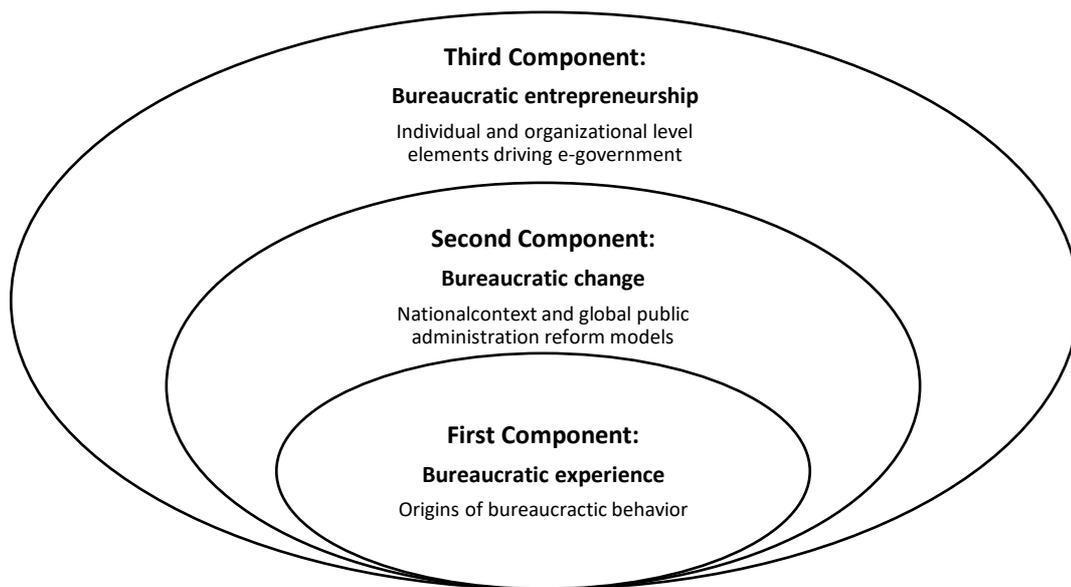


Figure 1: Bureaucratic entrepreneurship: A conceptual framework

The bureaucratic experience component is at the core of the conceptual framework. It examines the colonial traditions of the Bangladesh bureaucracy and its conduct in relation to the society. On one hand, the contemporary Western model of Weberian bureaucracy operates within a cultural atmosphere which has been conducive to the advancement of e-Government; on the other hand, postcolonial LDCs like Bangladesh adopted bureaucratic and judicial systems transported from the colonial metropole, which were conceptualized as Weberian but deviated from Weberian standards. The first component establishes how the structural legacy of colonial rule is embedded in administrative behavioral norms. The British and Pakistani traditions of training bureaucrats as guardians and “masters” created a large gap between the formal official rules and the actual bureaucratic practices. The colonial administrative habits and values were unrelated to local traditions which continued to be formalistic in reproducing the symbolism, but not the substance of a Weberian form of bureaucracy. For example, although postcolonial states prescribed recruitment and promotion

policies based on merit and achievement, in practice, many of them used ascriptive criteria such as political loyalty and affiliation (Haque, 1997; Jahan, 2006).

The second component of the model examines bureaucratic change at three levels: (a) international ideas and discourse on public administration reforms, (b) national political context and the public administration priorities of successive governments, and (c) a wide array of policies and training programs to bring about structural-behavioral changes within the public administration. Any study on change ought to consider the enduring features of political and social life (rules, norms, procedures), because they structure the behavior of bureaucrats and cannot be changed easily or instantaneously (Mahoney & Thelen, 2010). For instance, the restoration of parliamentary democracy in 1991 and 2008 created new expectations from the public administration system. At the same time, implementation of policies and training initiatives based on ideas from different international public administration models aimed at reforming colonial practices for introducing incremental structural-behavioral changes. In driving e-Government, bureaucrats needed to be re-trained with new ICT skills and innovation tools to implement citizen-centric service delivery reforms.

The final component conceptualizes behavioral change in terms of bureaucratic entrepreneurship. It examines the changing nature of politicization of bureaucracy as a source of “soft patronage” to mobilize bureaucrats’ support (both at the national and field-level), for achieving the policy goals of e-Government under Digital Bangladesh. By drawing upon the Digital Bangladesh experience, the third component examines how digital transformation is being driven by public sector managers with support from decentralized units or DT institutions, also known as innovation hubs – a point noted by DEG scholars when analyzing developed countries’ experiences with e-Government adoption (Dunleavy et. al., 2015). While different training programs in the late 1990s

and early 2000s drew upon the NPM model, training programs under Digital Bangladesh were a blend of PVM, DEG and DT ideas. The former included *Managing at the Top* (MATT)⁸ and *Kaizen*⁹ trainings, while the latter included Quick Wins¹⁰ and ETP¹¹. The third component encompasses bureaucratic change and bureaucratic experience to explore how the adoption of e-Government under Digital Bangladesh has been about nudging government personnel to become more entrepreneurial in using ICTs in the implementation of public service delivery innovations.

The nested framework shows how the discussion in the present thesis will transition from bureaucratic experience to bureaucratic change, and to the bureaucratic entrepreneurship component. The bureaucratic experience develops a set of analytic dimensions to understand the Weberian-colonial nature of administrative systems, and to the behavior of bureaucrats within them. These dimensions are applied in the remainder of the components for understanding a wide range of bureaucratic changes, at the political, organizational, and behavioral level, within the public administration system. The present dissertation tests a new proposition, i.e., e-Government paradox in the form of increasing e-Government advancement, against a weak bureaucratic capacity portrait, as borne out by CPI and government effectiveness dimension under the WGI. It presents the novel argument that administrative behavior reforms can contribute to e-Government implementation, and those international factors and

⁸ MATT was supported by now the defunct UK's Department for International Development (DFID) in collaboration with the Bangladesh Public Administration Center (BPATC). MATT was implemented in two phases targeting top-level bureaucrats at the ministry level for acquiring an understanding of citizens' needs.

⁹ Kaizen trainings were supported by Japan International Cooperation Agency (JICA) and implemented in collaboration with BPATC. It was also implemented in two phases like MATT, targeting field-level bureaucrats and enabling them to use total quality management (TQM) methods for service delivery improvement.

¹⁰ These were the first series of capacity building exercises targeting ministry-level bureaucrats to use ICT. It was implemented by a2i with support from UNDP Bangladesh.

¹¹ The ETP was implemented by a2i with government's support to further embed the use of ICT under a whole-of-government approach, particularly at the field-level.

national context can shape the process of digital transformation in an LDC like Bangladesh. By providing insights into the behavior of bureaucrats as they adopt ICT, the dissertation presents an analysis of whether and how e-Government can facilitate incremental administrative behavioral changes in a postcolonial LDC like Bangladesh.

The conceptual framework is used to investigate the two research questions and set the argument on how public policy analysis of e-Government implementation from a new structural-behavioral change perspective, can broaden understanding about the behaviors and values of bureaucrats as change-agents of modern-day government. While other rival explanations can be made for arguing that e-Government advancement has been possible due to the increasing use of ICT and access to cheap mobile phones and Internet, the present dissertation provides a new perspective from the capacity of the bureaucracy. This perspective is more holistic in the sense that it discussed how the origins of the Bangladesh bureaucracy made bureaucrats antithetical to change and innovation, and how different reform models can explain the type of changes which were achieved for making the bureaucrats more citizen-centric, and more like a public sector entrepreneur.

With the triangulation of methods – perusal of primary and secondary material, survey material, and in-depth interviews – the findings are valid and relevant for governance, public policy and administration scholars, development practitioners, with an interest on enabling bureaucrats to become more perceptive of citizens’ needs through e-Government implementation. Findings from all the methods draw the similar conclusion that the Weberian-colonial bureaucratic experience needed to be changed in a way that would allow for bureaucrats to adopt an entrepreneurial mindset and empathic attitudes.

While the first research question examines how public service delivery processes and interactions may have been shaped by historical forces, the second question begins with the examination of the e-Government paradox from a behavioral change perspective. These questions set the argument on whether the inauguration of political visions such as Digital Bangladesh can create favorable political conditions and mobilize the administrative support in bringing about incremental administrative behavioral changes through e-Government implementation. In substantiating this argument, the present study analyzes the significance of political and international contexts, and large-scale capacity building programs for equipping bureaucrats to change the colonial processes guiding public service delivery interactions between bureaucrats and citizens.

1.5. Going forward

In investigating the two research questions, the dissertation begins with a study of the political origins of the Bangladesh bureaucracy, reforms of important structural-institutional arrangements, and the impact of such endogenous processes that exerted a long-lasting influence on behavioral and political developments. It considers three critical historical junctures to understanding the structural-behavioral foundations and changes in the Bangladesh bureaucracy: first, the dual colonial-rule until 1971 followed by similar colonial styled, military-turned civilian governments until 1990; second, the beginning of parliamentary democracy in 1991 and emergence of politicization as a source of patronage for bureaucrats; and, third, the launch of Digital Bangladesh agenda by the current government of Bangladesh in 2008, preceded by two-year rule by a non-party caretaker government (NCG), backed by, once again, the military. The choice of the years are historically important moments which created both uncertainty and opportunities for the future of the bureaucracy, and allowed for political agency and

choice to play a decisive causal role in setting the public administration on certain paths of incremental change.

Chapter 2 begins with the colonial origins of the bureaucracy and how it was used by British and Pakistani rulers, and its post-independence structures and behaviors until 1990. The first question is explored in Chapter 2 in relation to the first component of bureaucratic experience in Figure 1. An examination of colonial traditions is of relevance because of the way it shaped the relationship and values of bureaucracy with military and political authorities, by distancing bureaucrats from local context and creating an atmosphere of political-administration distrust. It presents the ideas of colonial type of administrative behavior and demonstrates the limited scope for bureaucrats to engage in practices protecting citizens' welfare.

Chapter 3 deals with the political period between 1991 and 2008. It points to how colonial ways influenced political perspectives of the bureaucracy, which permeated new bureaucratic values and behaviors because of politicization and political patronage. This chapter complements secondary literature on global public administration reform models with primary documents and interviews focusing on Bangladesh's experience to investigate the second research question. Chapter 3 is the middle component in Figure 1, and it analyzes how structural changes were made and different administrative behavioral change initiatives undertaken, through top-down political acquiescence. International inputs led to some hybrid changes in the colonial-structural legacy through different trainings aimed at changing administrative behavior.

The second research question is explored in more detail in Chapter 4. Insights from public sector entrepreneurship and e-Government implementation in developed countries have been used as a reference point to set the analytical ground. Chapter 4 is the third component in Figure 1, and it focuses on the political period between 2009

and 2020, and how new policies and tools were adopted to drive forward e-Government implementation in Bangladesh during this period. It demonstrates a legal-rational process guiding innovation in public service delivery within the administration's bounds, and how political developments created the scope for such structured processes of incremental change to take place within bureaucracy.

Chapter 5 further examines the third component with a statistical analysis of ETP, using a logit regression model to analyze the nexus between administrative behavior and e-Government implementation. A closer examination of the ETP, a DT led initiative, has been carried out through a primary survey where public service delivery process innovation has been studied from the administrative behavioral and organizational perspectives. The chapter also provides a snapshot of the public administration structure in Bangladesh to help contextualize the survey design and results. It examines the conditions under which bureaucrats can be nudged to implement innovations by leveraging e-Government, and finds that entrepreneurship and empathy, alongside collaborative behavior in the form of internal collaboration and organizational support, can be associated with e-Government type of innovations.

Chapter 6 is the concluding chapter. It presents a synthesis of the dissertation and points out the limitations and contributions. It offers insights for policymakers and scholars to undertake future research studies to study how the implementation of e-Government agendas, can impact administrative behavior by making it more responsive to citizens' needs, especially in low-income and middle-income economies. It also points to the limitation such as focusing on implementation process of e-Government innovation and not its scaling up or diffusion aspects, and calls for further research on administrative behavior in relation to the e-Government transformation of public service delivery processes in LDCs and other developing countries.

**CHAPTER 2. HISTORICAL OVERVIEW: LEGACY OF DUAL COLONIAL
RULE AND POSTCOLONIAL MILITARY DICTATORSHIP**

This chapter presents the initial governing conditions which created in the initial traditions of the bureaucracy. The values of bureaucratic traditions become diluted particularly in which British and French cultural traditions differed, with different needs for governing (see Braibanti 1966; Conklin et.al., 2011). The British tradition of indirect rule in the India sub-continent stands in sharp contrast with the French tradition of direct rule, uniformity, and incorporation (see Lange et al., 2006). In the India sub-continent, for example, Britain ruled a significant portion of the sub-continent through training the indigenous royalty, rather than through more direct means (Lange, 2009). In contrast, the French style of colonialism in Africa and Asia saw less utilization of the institutions and legal frameworks available within the indigenous society.

This chapter offers a historical overview of the colonial bureaucracy and examines its structural-contextual legacy in shaping bureaucratic behavior and decision-making processes in postcolonial states of South Asia – Bangladesh, India, and Pakistan. It is based on secondary data and interviews; it marries the literature on Weberian bureaucracy to the body of literature on postcolonial state-formation to explain the nature and context of bureaucratic behavior in Bangladesh. It focuses on the structural-behavioral characteristics of colonial rule which created a master-slave dichotomy in administrators' relationship with citizens, indoctrinating such misbehavior and maladministration as efficient values.

The administrative root of Bangladesh overlaps with the Indian sub-continent's political history, which can be traced back from the time of Kautilya (321-296 BC) to the reign of Mughal emperors (1200-1757), before the beginning of British colonial rule (1757-1947), followed by military-administrative type of colonial rule by Pakistan (1947-1971). The Mauryan and Mughal empires were the patrimonial-bureaucratic form of organization where political and administrative power revolved around the

king/emperor, which entailed obedience and loyalty to the king (as a person) and not to an impersonal office (Blake, 1979). Bureaucracy, therefore, existed in the form of recruitment at the king's pleasure which changed during the British colonial period, but only to serve the imperial interests. The latter left a strong footprint of Weberian bureaucratic values such as "impersonal rules, standard operating procedures and rule of law," (Jamil, Dhakal, & Raj, 2019, p.4), or what Weber called the legal-rational characteristics of bureaucracy as an organization. Although public administration had different organizational forms and functions under different period, its objective under the British and Pakistan colonial rule remained the same – controlling and exercising administrative authority on behalf of an external or outside authority.

For the bureaucracy, its internal structure has been projected as a rationalistic model, or as a machine to achieve defined ends using some legally acceptable means (Hummel, 2008; Simon, 1997). In the context of colonized societies, bureaucracy was a way to exercise power by using the administrative instrument of control. While the Weberian literature upholds a legal-rationalistic model of bureaucracy, postcolonial bureaucracies developed under the imperative of an authoritarian system whose objective was to govern the colonized, by suppressing them. This legacy shaped administrative behavior in the post-independence context and as a result, studying postcolonial bureaucracies requires marrying the framework of Weberian bureaucracy with postcolonial state-formation. In addition, the psychologically compelling source of colonial bureaucratic duty had a serious social impact, making bureaucrats more loyal, submissive to imperial rulers and viewing politicians as rabble-rousers, while citizens were obedient but distrustful of the colonial administration (Jahan, 1972).

It has been argued that as a project of cultural analysis, the task of the postcolonial critic lies in investigating the role of cultural forms and systems of

knowledge in legitimizing and sustaining asymmetrical power relations, along with the associated processes of social exclusion through administrative domination (Chakrabarty, 1992). The central theme in *Colonialism and Its Forms of Knowledge* is the “Orientalizing” of India in the context of the relationship between knowledge and power (Cohn, 1996). The main line of critique of Cohn’s argument is the point that the linkage between local knowledge, practices and colonial rule remains ambiguous, rather than clear-cut. “The British established themselves as the new rulers of India [and] they constructed a system of codes of conduct which constantly distanced them physically, socially and culturally from their Indian subjects” (Cohn, 1996, p. 111).

The headings for Sections 2.1 to 2.3 concern the key characteristics of legal-rational bureaucracy, which have been adopted from Weber (1968, p. 956-98), and applied in the present context to understand the difference between established values and deviant behaviors, during the British and Pakistani colonial rule until 1971, followed by military-styled dictatorship until 1990. Section 2.4 examines the postcolonial context covering the first two decades after political independence, from 1971 to 1990. This discussion sheds light into how the Bangladesh public administration operated after independence drawing upon its dual colonial legacy. Section 2.5 summarizes the historical overview and sets up the discussion of the administrative structural and behavioral changes that took place after the restoration of parliamentary democracy in 1991, in Chapter 3.

2.1. Bureaucracy is governed by “principle of office hierarchy...levels of graded authority...a firmly ordered system of super- and sub-ordination”

British imperialism in the India sub-continent started with the overthrowing of the last free Nawab of Bengal when the British governor, Robert Clive, received £234,000 from Mir Jafar for his support in replacing Siraj-ud-daula (Cohn, 1966, p.

94)¹². When the British East India Company assumed governorship of Bengal in 1765, it recruited various categories of employees. The Act of 1773 bifurcated the civil and commercial functions of the Company, and it became necessary to separate personnel classifications. A hierarchical structure of classes and grades was also introduced, where merit replaced the system of patronage (Jamil, Askvik, & Dhakal, 2013). The first civil service recruitment examination took place in 1855 (Tinker, 1966), and the Indian Civil Service Act, 1861 validated certain irregular appointments made in the past and expressly reserved (or, as is known today, used quotas), a covenanted service for the future of all the most important service posts. This enforcement of a covenanted monopoly virtually deprived Indians of rising to the higher levels of administration. It caused irregular, politically expedient appointments, and it was embedded as a practice characterizing the recruitment of bureaucrats by political authorities.

The Indian partition in 1947 divided up the Indian sub-continent into two independent states – India and Pakistan – and Bangladesh (or East Pakistan as it was known then), was administered by Pakistan between 1947 and 1971. The Civil Service of Pakistan (CSP) became the direct descendent of the British colonial Imperial Civil Service (ICS) and it resembled the legal-rational authority system described by Weber. It was characterized by merit-based recruitment and promotion, hierarchy, fixed salary, separation between private and official life, official functions defined by rules, service tenure and job stability (Khan & Haque, 2013). However, these characteristics did not translate into establishing healthy bureaucracy-citizen relationships. For example, the hierarchy was used to suppress political movements and exploit citizens, and this vice-

¹² By the last free Nawab it is implied that hereafter, the other nawabs or kings of different provinces paid a tax to the British to get financial permission to work in their own lands.

regal system continued to characterize Bangladesh public administration under Pakistani colonial rule.

After 1947, West Pakistan adopted a similar strategy to exclude East Pakistan (or Bangladeshi) bureaucrats from being recruited and promoted up the administrative hierarchy. Upon independence in 1947, Pakistan opted for the vice-regal system instead of the Westminster parliamentary system which provided for a strong central government. The constitution of 1956 further perpetuated the essentially strong position of the center (West Pakistan) vis-à-vis East Pakistan. The constitution of West Pakistan gave ample power and protection to the CSP officers, and the conditions of the services were protected from arbitrary decisions in case of dismissal or removal from service. Pakistan, even after independence, “continued to be an administrative state” because of its “excessive reliance on the bureaucracy for nation building and development” (Zafarullah & Huque, 2001, p. 1384). The administrators were seen as the champions of the administrative state - the hallmark of the British empire (Huque, 2005; Khan & Haque, 2013).

In 1786, the post of district collector was empowered with magisterial, judicial and police powers and by 1857, the district was established as the key administrative unit and the district officer as the key figure in field-level public administration (Tinker, 1966). Above the district there was the commissioner, exercising supervision over a division, a collection of districts which varied according to their size. In Bengal, each division contained only three to four districts. Within the district, the highest administrative unit was the sub-division, which was designed for purposes of general administration and magisterial control. A subdivision officer (or upazila nirbahi officer as it is known today), was usually a young civilian of some three or four years in service, exercising his first independent responsibilities. The district office became the key

player at the district level and the Deputy Commissioner or DC, as it was renamed under Pakistan in 1959, performed all functions of the judiciary and executive, right from the time of the Company's rule. The non-separation of powers enabled colonial governments to provide unlimited administrative discretion to the bureaucrats, with no accountability for their actions.

Thus, for decades under colonial rule, the DC continued to execute magisterial, administrative and revenue functions. Braibanti (1966, p. 21) argued that colonial or imperial rule was essentially "rule by administrative discretion...unchecked by political or other countervailing forces." This trend continued after the independence of India and Pakistan in 1947. Between 1947 and 1971, an elite CSP developed as the legitimate heir to the ICS. West Pakistan's military regime depended on the vice-regal civil administration system to manage crisis in politics, but in the absence of an ideology and effective political institutions, "the civil bureaucracy proved of limited value as an integrative force" (Jahan, 1972, p. 166). A key feature of West Pakistan's vice-regal system was the central services, especially the CSP, which administered most of the key decision-making posts in both the center and the provinces. "As was the case in pre-independence India, the central services were the single stable bond between the center and the provinces" (ibid, p. 29), and from the time of partition in 1947, a marked imbalance existed between East Pakistan and West Pakistan in the higher echelons of bureaucracy.

Between 1947 and 1957, Bangladesh's (East Pakistan) representation in the national power elite was limited with a 5 per cent representation in the military elite and about 30 per cent in civil service bureaucracy (Jahan, 1972, p. 24-25). Recruitment to the CSP was extremely limited and selective because Pakistan, like the British colonial rulers, needed bureaucrats who would be loyal, and able to maintain discipline,

law and order for their domination in East Pakistan (Zafarullah, 2002). In 1963, in East Pakistan, of 3,905 students receiving a Bachelor of Arts degree in liberal arts (the vast majority of whom wished to enter CSP), only 13 were taken into the CSP (Jahan, 1972, p. 142). The recruitment policy under West Pakistan relied upon an ethnic majoritarian principle, leading to non-accountability of the bureaucracy and to the exclusion of East Pakistani representation at the provincial political authority level.

As a result, a smooth transition to hold the two wings – East Pakistan and West Pakistan – together, through a single national administration system, became impossible. The objectives and functions of district administration changed only partially after 1947. During the British period, there was no development program for administration by the DC. He was engaged in some social welfare programs and administering institutions having high discretion in making decisions. In the post-India partition West Pakistan period, the DC was assigned to coordinate many social and economic development projects. This role further increased when East Pakistan gained political independence after a bloody nine-month liberation war in 1971, after which, DCs at the district level assumed a more powerful administrative role for directing rural development programs, relieving them of their judicial function.

Bureaucracy in colonial societies was created to perform certain duties (primarily revenue collection and judicial functions), without using the hierarchy for speeding up decisions which would positively impact citizens' lives and meet their needs. Ideally, the lowest level of the administrative hierarchy carries out an organization's objective, and as individuals, field-level bureaucrats represent the hopes of citizens for fair and effective treatment by government (Simon, 1997, p. 12). This was opposite in case of colonized societies which suffered from a high degree of bureaucratic domination and control, and coerced by the state through food deprivation,

moral submission and lacking any identity to claim ownership over any means of production (Braibanti, 1966).

A bureaucracy, irrespective of its colonial or post-colonial origins, establishes standard practices for making decisions on a particular task, and how it is to be executed (Simon, 1997). It divides work among its members and assigns tasks to be accomplished. For example, a field-level bureaucrat is concerned only with sending files up the hierarchy chain of command, not giving particular attention to the other steps or operative functions, which are equally important to the accomplishment of their task. They are “pen-pushers” transmitting decisions downward and laterally or even upward, through the ranks by establishing systems of authority, which flow from all directions influencing both the organizational environment and their behavior. According to Simon (1997, p. 121), “No plague has produced a rate of mortality higher than the rate that customarily afflicts central-office communications between the time they leave the issuing office and the moment when they are assumed to be effected in the revised practice of the operative employees.”

The aforesaid hierarchical plague resonated well with the way colonial bureaucracies were used to enable field-level bureaucrats to yield high discretionary power, for making citizens suffer. According to Mathur (2016, p. 5), the Indian state is “best understood as a relational set of bureaucratic practices [starting with] reading, writing, lettering, filing, producing, and circulating documents, holding meetings and conducting audits— which allow the developmental Indian state to come into being.” By analyzing one of the world’s largest employment generation schemes for the extreme poor, enacted by the National Rural Employment Generation Act (NREGA), Mathur (2016) outlines the long and cumbersome processes through which NREGA travels from New Delhi, complete with detailed protocols and operational guidelines,

to the remotest parts of India, where such protocols and guidelines obtain spectral properties, transforming from guidelines of verification to objects of obscurantism.

For example, hierarchy as a means for delegation of authority facilitates quick decision-making although it resulted in the opposite for postcolonial bureaucracies like Bangladesh, which endured dual colonial rule. Mathur (2016) argued that the art of official letter writing required immense affective investments by bureaucrats across the hierarchy. She categorized letters dispatched from and to the Chamoli offices into distinct genres, such as “introductory letters” and “clarificatory letters”, as well as some strange ones, like “the letter as protective shield”, “the fantastical letter”, and “the forgotten letter” and delineates how each genre is carefully drafted, and how the text is laden with subtexts which are picked up by bureaucrats positioned along the hierarchy. Mathur explored the sarkari affect by analyzing several meetings that constitute a significant portion of government life anywhere, but most certainly in South Asian postcolonial states like Bangladesh, India, and Pakistan. Such formal meetings were used as an avenue to indoctrinate a particular ‘sarkari’ embodiment in bureaucrats — a submission to authority, as well as the ability to command it (Mathur, 2016), as well as a feeling of elitism for not having to deal with their regular day-to-day activities concerning citizens’ needs.

Social structures in colonized societies surrendered to the bureaucracy long before it could be rationally organized to be compatible with the society’s needs. In other words, a legal-rational, over-developed bureaucracy was already in place in postcolonial states, long before the emergence of structures which would develop into mutually beneficial social arrangements reflecting the beginning of modern society. Rationally organized action as the final stage of society’s development process was preceded by community and social arrangement in the history of human existence in

the older states (Braibanti, 1966). These older states are today's technologically advanced, high-income Western OECD developed economies such as the US, the UK and Canada, Denmark, France, Germany, Sweden, etc. The process of nation building in these older states was shaped by industrial and democratic revolutions catering to political demands, far before the emergence of a strong, legal-rational bureaucratic system (ibid).

In new South Asian postcolonial states, society's formation was strikingly different, "with the elements being reversed...Bureaucratization occurred first, accelerated by colonial or imperial rule," and "politics remained sedated by bureaucracy" (Braibanti, 1966, pp. 6-7). One of the challenges in the development of a postcolonial bureaucratic apparatus was an ideological commitment to colonial administration, instead of allowing political growth to counteract administrative hegemony and attuning it with society's needs (Zafarullah, 1987). This practice was further accentuated by the military retention of state power and the subsequent dependence on senior civil servants to govern the country under the vice-regal system in East Pakistan.

For example, the office of the governor of each wing was used as an instrument of centralization, because governors were powerful men with strong family backgrounds (Jahan, 1972). Article 92A of the *Government of India Act of 1935* (article 193 in 1956 constitution) (Braibanti, 1966) enabled West Pakistan government to dismiss East Pakistan's provincial government and impose direct central rule anytime through a hierarchical system, giving West Pakistan a super-ordination function over East Pakistan (ibid). This Article was used to thwart any challenge coming from the political forces in East Pakistan.

The military developed a close working alliance with civil bureaucracy between 1956 and 1971 because their views on politicians as rabble-rousers, and the country's problems and solutions, converged (Ahamed, 2004). Bangladesh gained independence on December 16, 1971. Under Pakistan's colonial rule (1947-71), bureaucrats engaged in malpractice and corruption as a result of their command over state resources, and their relationships with military rulers and political leaders (Burki, 1969). Colonization by the British and later by West Pakistan deepened the hierarchical system in an exploitative manner in East Pakistan, which further embedded a colonial sense of elitism and distanced bureaucracy from citizens. After independence, colonial memory shaped the mechanisms and governed bureaucratic behavior and performance in Bangladesh, for meeting the efficiency criteria of making best use of state's resources and being submissive to the one controlling the bureaucracy (see Section 2.4).

2.2. Bureaucracy is characterized by "fixed official jurisdictional areas," "continual fulfilment of...duties"

Mathur's (2016) *Paper Tiger* marks a clever allusion to the dual nature of the "Sarkar" — first, the paper makeup, and second, the inefficiency when confronted with emergencies. The book closes with a surprise for the Chamoli bureaucracy which is pushed to its limits with the arrival of a leopard in Gopeshwar. As the leopard picks off one victim after another, Mathur (2016) closely follows a bureaucracy struggling to operationalize the draconian Wildlife Preservation Act. The latter values charismatic megafauna more than humans and Mathur demonstrates how letters, petitions, and meetings continue to characterize government operations, and how such paperwork impedes taking quick and responsive actions by the bureaucracy to protect public welfare.

Paperwork and written records make visible both what bureaucrats at the different hierarchy levels are ordered to do and what they actually do (Hummel, 2008). General rules are codified to tune administrative behavior with organizational goals and efficiency. Formal rules were in existence long before Bangladesh's emergence as an independent state in December 1971. For example, the India Act of 1784 introduced rules of conduct which prohibited civil servants from accepting gifts or indulging in corrupt practices on pain of punishment by law. The ICS started practicing merit-based recruitment after the reforms initiated by the Northcote-Trevelyan Report in 1854 (Haque & Haque, 2019). These early reforms focused mostly on guidelines and codes of behavior for meritocracy, political neutrality, and accountability, which eventually resulted in creating the Indian bureaucracy. These administrative reforms existed on paper but did not help to positively shape bureaucratic behavior under colonial rule. For example, even if a Bangladeshi, Indian, or West Pakistani possessed all the abilities and attributes, he would not be able to become the viceroy. Therefore, merit had a different value for South Asian bureaucrats under colonial rule, and later for East Pakistani bureaucrats under West Pakistan's rule.

Paper-based management allows bureaucracy to store memory (known as artificial memory) and it routinizes decision-making processes (Simon, 1997). During Pakistani rule and after Bangladesh gained independence, it was convenient for bureaucrats to rely upon the past psychological and artificial British colonial memory. Bureaucrats exhibited a colonial habit of mistreating citizens as they were not accustomed to a "serving" function. Habit, like memory, is a form of organizational routine and once a service delivery habit was set, for example in making citizens wait for simple services such as birth certificates or land ownership records, it continued until an external, positive stimuli could reverse that direction. Furthermore, bureaucrats

depend on routines to deal with the complexity of work tasks, and such routinization insulates them from having to deal with the human dimensions of problem situations (Lipsky, 2010; Simon, 1997).

The dependence of poor people on government services created a context in which interactions with bureaucrats had substantial psychological implications. Bureaucrats were instructed from the top and trained with values where distancing themselves from citizens was a routinized way for achieving organizational efficiency. “Efficiency implied making citizens wait for simple services for long hours and days even, or even denying them access if the bureaucrat felt like it (r31, interview, January 22, 2020). Psychological sanctions were aimed at reducing citizens’ demands as well as to demotivate them from coming to the bureaus seeking information and services (as a form of political and administrative oppression).

During the British and West Pakistani colonial period, the correction of administrative behavior based on written reports from below was a lengthy and time-consuming process because of the geographic distance. The psychological implications were thus compounded by a geographical dimension as decisions took time to travel from London to Delhi (1765-1947), and then from Lahore to Dacca (1947-1971). Thus, citizens in East Pakistan were trapped as they had neither the support of administration nor politicians, and they fell prey to the structural processes which were created to exploit them for meeting revenue targets. Gupta (2012) argued that corruption practices were established during the British colonial rule as a result of bribes, further fueled by paperwork required for availing services. “Corruption is a central aspect of those routine operations of the bureaucracy that enable the very gesture of inclusion to produce an outcome that is its opposite,” and, extreme poverty is structurally “(re)produced through the arbitrary practices of bureaucracy,” such as paperwork

(Gupta, 2012, p. 109-110). Paper-based management created artificial memory which allowed newly recruited bureaucrats at the higher ranks of the state bureaucracy (in Uttar Pradesh in India) to frequently make decisions based upon what their predecessors wrote down in their reports and files (Gupta, 2012). These reports and files were influenced by local elites to exclude the poor of their rights to public information and services such as birth registration certificates, land records, etc.

Scholars have also pointed to how formal and informal regulation shaped citizens' experiences of waiting for public services, where relations of power and discretion created a fertile ground for delaying decisions and making citizens wait (Auyero, 2012). Auyero's (2012) description of the citizens' waiting experience demonstrates how the behavior of welfare bureaucrats were predominantly arbitrary, leaving citizens to a "a feeling of powerlessness [...] as it inducts poor people into a process, they can neither understand nor control" (ibid, p. 146). Auyero (2012) made the following observation of the way bureaucratic duty and operations entailed making citizens wait through delays and uncertainty:

It is the mundane, routinized and bureaucratized 'patient model' of domination, more than the actual physical coercion by the state, which produces a compliant complicity from the dominated towards the dominating powers of the state. Poor people's subordination is created and re-created through innumerable acts of waiting [...] Poor people learn through endless delays and random changes that they have to comply with the requirements of an unpredictable state ('sit and wait'). In a few cases, the uncertain waiting exhausts and discourages poor people, and these end up dropping out of sight - that is not coming back to the welfare office, ceasing the process of applying for an ID, not attending the next meeting, and so forth. For the most part, however, the unreliability and

unpredictability have the paradoxical effect of binding the destitute to the state.
(pp. 178-79)

Bureaucrats in colonial states made citizens wait for long hours and often required some form of political endorsement in the form of “demand orders” (known as “tadbirs” in Bangla), from either local or national elites, and sometimes both depending upon the type of service being sought by a citizen. Some scholars have argued that accountability and transparency mechanisms such as budget control and reporting, can be manipulated by using one’s tadbir power (Khan & Haque, 2013). Tadbir is a form of “personalized lobbying to influence an administrative decision or action flouting formal rules or abusing discretionary administrative power” (ibid, p. 208). Tadbir affects virtually all administrative processes, including promotion, transfer, budget allocation, audits, performance appraisal (Jamil, 2002).

Hull’s (2012) study of Pakistan complements Gupta’s and Mathur’s emphasis on social norms and paperwork as state practices that contributed to bureaucrats behaving in an authoritative, draconian manner. A detailed assessment of face-to-face encounters taking place in the offices of the local urban planning bureaucracies demonstrated the distanced engagements between bureaucrats and citizens, and how paperwork or “material artifacts” shaped relationships (Hull, 2012). The “whiff” of bureaucracy discouraged citizens from seeking service and this pushed individuals to seek the support of local elites with whom they had no previous relation. A system of “parchis” or written notes (equivalent to tadbirs in Bangladesh) was developed to demonstrate the backing of influential figures for citizens seeking services. Bureaucracy’s paperwork, a practice established during colonial times for efficiency purposes, trumped citizens’ needs after political independence of the colonized

societies. Imperial seals were replaced by signatures and administrative paperwork to exert control over citizens and state resources.

The first attempt at reducing the distance between field-level officers and citizens through change in structures and rules came about with the establishment of a system of local bodies under the “Basic Democracies Order” in 1959. It borrowed features from the old panchayats of Ancient India and the local bodies introduced by the British in Bengal. Jahan (1972, p.11) viewed it as “scantly veiled measures to perpetuate the power of [military] the regime” because it suppressed and substituted for a vigorous political process at the local level. The Basic Democracies program attempted to strengthen CSPs by turning DCs into the lynchpins of the administration. It conferred political decision-making authority to the bureaucracy: divisional commissioners were responsible to monitor the activities of elected representatives, nominate and appoint members, and authorized to nominate and appoint the official and non-official members of district councils (Burki, 1969).

A former director general of Asian Development Bank (ADB), provided key insights about the history of the public administration in Bangladesh (r16, interview, September 5, 2019). He shared an archive which presented the major arguments for modifying the Basic Democracies to fit a two-economy nation (interview, September 05, 2019). This memo was directly communicated to President Ayub Khan by a CSP officer (the interviewee’s father) on 27 October 1958. The memo focused on two main points. First, because of its peculiar geography and distance, West Pakistan required distinct administration and economic management policies. Second, the one-economy policy pursued by various West Pakistani governments worked to East Pakistan’s disadvantage and resulted in economic disparity between the two wings. The structural differences between the two economies – West Pakistan having a large share of

manufacturing and private capital, and East Pakistan being predominantly agricultural with little private capital – required separate economic strategies and administrative arrangements in the two regions. East Pakistan required more manpower and a more locally tailored recruitment policy to meet citizens’ needs and implement development programs.

Ayub Khan elevated bureaucracy in order to deinstitutionalize political parties and aimed at absolute authoritarian control, which did not fare well with the Bengali intelligentsia. The two-economy model started to draw strong support from bureaucracy and citizens, calling for greater political and administrative autonomy¹³. Bureaucrats in East Pakistan favored the two-economy system because they found in it the key to their autonomy from the center’s fiscal and administrative control. It appealed to the businessmen in East Pakistan as it was a way for the elimination of competition from big businesses in West Pakistan (Jahan, 1972). The two-nation model spurred strong interest in the political groups when regional conflict came to dominate the bureaucracy, because the DC, as a CSP officer, at the district level combined the functions of a political leader and an administrator (Jahan, 2006).

The CSP used its position and power for colonial administration in East Pakistan and it displayed traits of a Weberian bureaucracy as it implemented rational rules in recruitment, training, control and compensation (Haque, 1997; Huque, 1997; Jahan, 2001). However, it was not prepared to engage in sharing power and authority with the politicians and constitutionally mandated organizations such as parliamentary committees led by elected members of the parliament. The disregard for the minister by the bureaucrat was simply carried over as a normal practice in post-colonial Pakistan

¹³ The two-economy idea paved the way for designing a “Six-Point” demand in 1966. It marked a significant radicalization of East Pakistan’s demands for autonomy – administrative, economic, and political.

on the grounds that the political atmosphere in the country was highly faction-ridden and self-destructive (Rahman, 2002).

Postcolonial bureaucracy increased a bureaucrat's jurisdictional area but did not lead to fulfilment of duties, as far as being compatible with society's needs was concerned (Haque, 1997). Bureaucrats were trained to view citizens as slaves or subjects under their control, and politicians as rabble-rousers (Jahan, 1972). This has been foundationally important because "the purposiveness brings about an integration in the pattern of behavior; for, if administration consists in "getting things done" by groups of people, purpose provides a principal criterion in determining what things are to be done" (Simon, 1997, p. 3). For citizens, anger and frustration with bureaucrats are attributed to the "dehumanizing" aspects of having to seek service through bureaucracy (Hummel, 2008), which was degrading to citizens who had no citizenship rights under colonial rule, making them more submissive to the colonial apparatus, i.e., the bureaucracy.

Two particular sets of rules - *Government Servants (Conduct) Rules* (1979) and *Government Servants (Discipline and Appeal) Rules* (1985) - gave directions for the ethical behavior of the early Bangladesh Civil Service (BCS) (GoB, 1979, 1985). The *National Integrity Strategy* (NIS) 2012 calls for bureaucrats to work with strong ethics such as honesty, impartiality and empathy in serving citizens (GoB, 2012). However, these elements remained moot as power, status, and material success defined the relationship between bureaucracy and citizens in Bangladesh (Khan & Haque, 2013). Institutions, including constitutional bodies like the Anti-Corruption Commission (ACC) and Bangladesh Public Service Commission (BPSC) exist, although the extent to which these can exert their weight in the ethical infrastructure is difficult to ascertain (Haq, 2016). For example, the political leadership has not been committed to

strengthening ACC to hold bureaucrats accountable or to penalize any bureaucrat for misconduct to date, while bureaucracy has made it more difficult for constitutional bodies such as the parliamentary committees, to conduct timely investigations of public expenditures and administrative affairs, and issue arrest warrants for misbehavior.

An important factor that contributed to civil servants' behavior to deviate is the "lack of emphasis on the legal aspects of administration," which makes "activities of public agencies or the decisions they make and enforce go unchallenged, even if they are working against the public interest and inconsiderate of citizens' needs" (Zafarullah, 2016, p. 101). Administrative law in Bangladesh is about "administrative tribunals" that deal exclusively with civil service matters, with no relevance to the implications of administrative action for a citizen (Jamil, 2002). The office of the Ombudsman, originally enshrined in the constitution of 1972 and later legislated in 1980 under a military government, remains on the shelf (r16, interview, September 05, 2019). Interestingly, this pro-citizen legislation did not appeal to subsequent democratically elected governments after 1991. The incorrect interpretation of administrative law and the non-existence of an ombudsman mean that citizens are not protected from inappropriate administrative acts, and there is hardly any way for them to counter those.

Establishment of more administrative mechanisms and independent bodies will not necessarily lead to better services to citizens because the existing structures already suffer from a colonial legacy of being distanced from citizens (r24, interview, January 24, 2020). According to one of the government interviewees, there is an online grievance redress system (GRS) which was introduced by the Cabinet Division in 2015 (r5, interview, August 21, 2019). GRS has been rolled out in most government offices although its use remains low because citizens are not aware of it for redressing their concerns, as users of public information and services.

One particular policy instrument that has not been examined in connection to how the bureaucracy functions, connecting its back-end administrative paperwork and front-end public service delivery to citizens, is the *Secretariat Instructions* (MoPA, 2014). In 1963, the provincial government of East Pakistan issued its own *Secretariat Instructions* based on the central government's version. It was used to define the roles and responsibilities of bureaucrats as masters, governing slaves in a colonized society, and how their officers were to operate. After the independence of Bangladesh, the *Secretariat Instructions* were simply translated into Bengali, and remained much the same as that of the English version issued in 1963 during the colonial, military styled dictatorship rule by Pakistan. The Bengali version was used both in the Secretariat and the offices outside the secretariat and it remained in effect until 2008. It was updated in 2014 for embedding the use of ICT in government processes (see Chapter 4 for a detailed discussion on the new revisions).

Instead of undertaking a massive reorganization of the administrative apparatus of the colonial state to guarantee the supremacy of elected institutions, the Indian and Pakistani political leadership alike formed alliances of convenience with members of the civil bureaucracy (Jalal, 1995). The bureaucracy continued to develop as an institution to serve West Pakistani colonial interests after 1947, retaining fundamentals of the colonial structures and processes, for example, hierarchy and paperwork. It emulated values and behaviors which were embedded during the colonial rule. The colonial legacy, in terms of established structures and embedded values of disdainning citizens' interests, continued to influence the behavior of bureaucrats after independence. As a result, the very institution that required change, continued to deter any possibility of it and this was not difficult given that political governments reliance upon the bureaucracy.

2.3. Bureaucracy requires “full working capacity of the official” to achieve efficiency and “thorough and expert training” for decision-making

Weber’s criteria of “working capacity” is about the primacy of administration over personal and political interests. Bureaucrats are classified as organizationally rational because their behavior is oriented towards meeting organizational goals. Like the self-interested agent, administrators may be personally rational to fulfill individual goals although most actions in bureaucratic organizations reflect a personal loss, superseded by performance requirements (Simon, 1997). In other words, a bureaucrat is psychologically asked to surrender full personality to fit into the job identity; politically, they accept being managed and are taught to despise politics because it falls short of rational administration (Hummel, 2008).

A “full working capacity” requires an individual to treat bureaucracy as a way of life – in terms of setting their thinking and behavior (Hummel, 2008). Under neoclassical economics, the individual as an entrepreneur, regardless of their private and public sector functions, “makes static decisions in a fixed framework bearing little resemblance to the active innovator who launches new enterprises and explores new paths” (Simon, 1997, p. 20). There is little scope to analyze their behavior using the criteria of rational decisions made by the economic man. Simon (1997) made two alterations to transmute the rational economic man into the administrator - the person of “bounded rationality” – to demonstrate how administrative behavior in organizations is “intendedly rational, but only boundedly so” (ibid, p. 88).

First, “whereas economic man maximizes - selects the best alternative from among all those available to him - his cousin, the administrator, satisfices – looks for a course of action that is satisfactory or ‘good enough,’” (Simon, 1997, p. 118). Second, “economic man purports to deal with the “real world” in all its complexity. The

administrator recognizes that the perceived world is a drastically simplified model [...] In particular, they deal with one or a few problems at a time, because the limits on attention simply don't permit everything to be attended to at once" (ibid). Simon's (1997) bounded rationality is relevant to understand the behavior of bureaucrats, and why training programs were needed to change the colonial-Weberian bounds of bureaucratic experience, allowing for the consideration of citizens' needs.

Training provided trainees with a frame of reference for their thinking; it may teach them "approved" solutions; or it may indoctrinate them with the values in terms of which decisions are to be made (Simon, 1997, p. 221). An organization trains and indoctrinates its members which can be called the "internalization" of influence because "it injects into the very nervous systems of the organization members the criteria of decision that the organization wishes to employ" (ibid, p. 112). The bureaucrat, as an organization member, acquires knowledge, skills, and identifications or loyalties that enable him to make decisions, by himself, as the organization would like him to decide.

The political environment is key to understanding how bureaucrats were trained to deliver on the organizational goal of controlling citizens under colonial period and after independence of Bangladesh. President Ayub Khan, as the most prominent Pakistani leader, had an impact on Bangladesh's public administration structure and rules (r16, interview, September 5, 2019; r31, interview, January 22, 2020). At the same time, they pointed towards Ayub Khan's policies which disregarded East Pakistanis like his predecessors. Ayub Khan was, nevertheless, the first to voice the required shift in administrative behavior for providing public services to citizens in a post-colonial context. The following excerpt from his speech in East Pakistan, after he assumed power in 1956, demonstrates the bureaucracy-citizen gap prevailing at the time:

“The system of stereotype administration which we [East and West Pakistan] inherited was devised over a 100 years ago to suit the purpose of a colonial power. Its fundamental emphasis was [...] to create a superior class of somewhat de-nationalized individuals who could maintain proper distances and rule with awe and disdain under the cover of public service [...] but the demands of an independent society are entirely different...the role of administrators has to assume fresh techniques and attitudes [...]” (Ayub Khan, cited in Jahan, 1972, p. 101).

The British tradition of training a “guardian” created a class of “denationalized” bureaucrats, who were “distanced” from the social environment (Haque, 1997). The DC as the CSP member, was the pillar of district administration equal to member of ICS before the India Partition. A serious effort was made to change the outlook of the CSP so that the cadre would be more concerned with practical problems of a development nature at local levels of training (Braibanti, 1966). As part of their field training, probationers were sent to academies for rural development who looked down upon the “development academies with disdain” and did not get any chance to “immerse themselves in the ethos of community development work, which is essentially a shirt-sleeve, rice-roots operation, quite different in nature from the training at the academy” (ibid, p. 297).

Braibanti (1966, p. 297-98) cited one incident demonstrating the power of CSP in Pakistan in resisting the push from a military government to get more physical training such as horse riding, physical exercises which required getting their hands dirty. The 1962 batch was sent to Kabul but the group of some 25 young men abandoned the military training scheme despite being under a martial law regime. Their objections

were that they were older and better educated, and that the physical training and military discipline were not pertinent to their careers in the CSP. According to a former UNDP director, Ziaur Rahman's canal excavation initiative in 1978 was the first attempt to make bureaucrats work for citizens directly in post-independence period (r15, interview July 21, 2019). It did not require any risk-taking and creative thinking but a top-down push to make bureaucrats work at the field. This action upset many bureaucrats who were trained not to be in the field, working with their pants rolled up, getting their hands dirty, but instead, behind a desk with a high degree of discretion over state affairs at the local level.

Administration training is of particular interest to the present study because it can be both an internal and external stimulus to lead, manage and change the direction of administrative behavior, argued by Simon (1997). It has been argued that psychologically charged social training programs, aimed at changing administrative behavior, are more important than monitoring performance and allocating new budgets, to enhance bureaucrats capacity and improve organizational culture in Bangladesh (Zafarullah, 2013). The Bangladesh Public Administration Training Centre (BPATC) is the apex training institution for all BCS cadre officials and non-cadre officers belonging to various departments, autonomous and semi-autonomous organizations. It has four regional centers situated in four divisions - Dhaka, Chattogram, Rajshahi and Khulna. Training requirements of the newly recruited bureaucrats are prescribed in the *Bangladesh Civil Service Rules 1981* (GoB, 1981). The rules make it mandatory for all new recruits to the BCS to undergo the Foundation Training Course (FTC) for four consecutive months before their confirmation to a particular service. The FTC focuses on strengthening the internal dynamics of public administration for dealing with

paperwork and it trains bureaucrats on how to behave toward citizens, i.e., suppressing them as was the case under colonial.

There were three course modules under FTC in the 1980s and early 1990s which focused on increasing trainees' knowledge on rules and regulations to perform duties across all public administration settings (Aminuzzaman, 1994). For the present study, I was able to access the 64th FTC materials and modules (BPATC, 2019), and interview with BPATC a director (r7, interview, September 5, 2019). By 2018, the number of course modules increased to six focusing on both internal dynamism (e.g., entrepreneurship, empathy, creative learning, internal collaboration, etc.), and external environment (e.g., partnership with NGOs, private sector, and IDC). The FTC's objectives have shifted from exclusively focusing on constitutional, legal responsibilities and basic skills of administrative management, to fostering "esprit de corps, empathy, common perception and understanding among diverse stakeholders...identify the real needs of the backward societies and realize their problems and way out [...] internalize the real problems of the backward section of the society and take initiatives for probable solution" (ibid, p. 7).

The FTC has incorporated many concepts from projects supported by new international donor agencies such as Japan International Cooperation Agency (JICA). For example, the total quality management (TQM) or Kaizen approach by BPATC and JICA, and the time, cost, and number of visit (TCV) innovation method by a2i, have been incorporated into FTC's modules. This is a clear indication of changes in the training modality aimed at making administrative behavior more perceptive of citizens' needs as service delivery users. The bureaucratic values of discipline and efficiency are complemented with new organizational goals of public service delivery innovation under the Digital Bangladesh agenda of the government. The 64th FTC stipulated that

it was important to “share achievements as well as failures among ourselves” (BPATC, 2019, p. 6). BPATC has been also offering special training courses to focus on the development of the specific clientele from officials of cadre services, public sector departments, autonomous bodies, and NGOs, in order to execute the Digital Bangladesh agenda of the government.

One of the problems in formal training methods is to secure an attitude of receptivity (Simon, 1997, p. 221): “Every teacher recognizes – often with a great feeling of helplessness – that motivation is the key to the learning process.” The problem of motivation is very serious in re-training colonially trained bureaucrats. For example, even after independence of Bangladesh, bureaucrats were trained to distinguish themselves from ordinary citizens and were told that they had the power to arrest any citizen for 48 hours without any warrant. This made bureaucrats feel elitist and powerful, and no longer a member of the ordinary society (r15, interview, July 21, 2019; r16, interview, September 5, 2019).

2.4. Postcolonial state and bureaucracy in Bangladesh: From 1972 to 1990

This section presents an overview of the developments leading to the independence of Bangladesh and its postcolonial bureaucracy. It outlines how politicization of the bureaucracy occurred throughout the first 20 years of independence. After the collapse of Ayub Khan’s regime in 1968, Yahya Khan, then commander-in-chief of the Pakistani army, became the President. He announced that elections would be held in October 1970 to determine the political representation of the two wings. In East Pakistan, the Awami League, led by Sheikh Mujibur Rahman,

popularly known as “Bangabandhu (Friend of Bengal),” was the major contestant¹⁴. The Awami League became itself interested in administration’s autonomy. Two years earlier, Sheikh Mujibur Rahman’s Six-Point manifesto called upon the West Pakistan government to grant economic and political autonomy to East Pakistan, and this manifesto, considered a key document of Bangladesh’s independence history today, gained wide mass popularity (Jahan, 1972).

The landslide victory of the Awami League in East Pakistan, due to its anti-colonial position, further intensified the East-West confrontation. The liberation movement for an independent Bangladesh started in March 1971, when the Pakistani army tried to “reverse with bullets the gains the Bengalis had achieved through the ballot box in the election of 1970” (Jahan, 1972, p. 216). Bureaucrats became the main target of political hatred after the independence of Bangladesh in 1971 because they were the instrument of the Pakistani government, which was used to suppress political movements and uprisings. The word bureaucracy was a “much hated word in the political lexicon of Bangladesh,” and political leaders regularly attacked bureaucrats in their public speech (Ahamed, 2004, p. 106). Both politicians and ordinary citizens of Bangladesh held an anti-bureaucratic sentiment given their past experience with the CSP. The ruling political party promised to build an administration free from elite and isolated attitude (Jahan, 1972).

The end of 1971 set a new political context for bureaucrats in Bangladesh. Reformers needed to address the uncertainty surrounding the relationship between politicians and bureaucrats. Under British and Pakistani colonial rule, bureaucrats were accountable for their actions and decisions to their superiors in the civil service, a built-

¹⁴ Sheikh Mujibur Rahman was born on 17 March 1920 in “Bengal presidency” of British Raj, currently Bangladesh. He was recognized as the Father of the Nation of Bangladesh through the Fifteenth Amendment to the constitution in 2011.

in hierarchy; they were not accustomed to account themselves to politicians or constitutional bodies (Rahman, 2002). After independence in 1971, bureaucracy was divided into two groups (Jahan & Shahan, 2008) – bureaucrats who cooperated with the Pakistani regime during the Liberation War of 1971, and those who worked with the democratically elected Awami League government-in-exile, led by Sheikh Mujibur Rahman, after winning the 1970 ballot. During the first two and half years of independence, the Awami League tried to compel the bureaucracy to be obedient to the incumbent government’s political will (Haque, 1980; Riaz, 2005). However, this proved to be futile. For example, a list of 693 bureaucrats was prepared to punish them and although the government started by removing a few of them, and by early 1975, only 3 bureaucrats were demoted to the rank of “officers on special duty” (OSD) (Ahamed, 2004). The structural process made it difficult for the elected government to fire bureaucrats at free will.

Thus, instead of dismantling the pre-independence bureaucratic structure, politicization of the BCS began with the independence of Bangladesh as a way to make the bureaucratic apparatus submissive to elected leaders (Rahman, 1974). Appointments to BCS were used to reward freedom fighters and those from the government-in-exile in India during the war to enter public service as a reward for their contribution (Zafarullah & Khan, 1983). In less than five years after independence, Bangladesh succumbed to a military coup following the assassination of Sheikh Mujibur Rahman on 15 August 1975. Most of Sheikh Mujib’s family and extended family members, except two daughters – one of whom is the current Prime Minister of Bangladesh – were assassinated. Bangladesh was under military rule until 1990 and the journey towards institutionalizing parliamentary democracy was, thus, short lived.

Between 1975 and 1990, civil service and military bureaucrats wielded high influence in the political and administrative affairs (Zafarullah & Akhter, 2001).

2.4.1. Presidential and military rule from 1971 to 1990

The First Five-Year Development Plan noted that bureaucrats are “neither innovators nor catalytic agents for social change” (Planning Commission, 1973, p.4). It was prepared by academics and scholars with little or no practical knowledge of how the public administration system operated under the British and West Pakistan (r16, interview, September 5, 2019). The First Plan envisaged a change in administrative behavior and recommended bureaucrats to leave their desks (bureau) to understand how their power (cracy) was causing sufferings to citizens. The first Civil Administration Restoration Committee (CARC) was set up in less than 14 days after gaining political independence, and it submitted a report a week later focusing on the organizational setup. The CARC was entrusted with the responsibility to identify priorities and mechanisms for replacing the old, colonial administrative system (Panday, 2019).

None of the CARC’s recommendations pertaining to restructuring bureaucracy’s rules for bringing it closer to citizens, making it accountable to the legislature and other constitutional bodies, were implemented by the first government of Bangladesh (Huque & Ferdous, 2019; Mollah, 2014). Recommendations which were implemented related to the reorganization of the Secretariat and establishment of new constitutional bodies like Supreme Court, High Court, BPSC, the Election Commission and the Office of the Comptroller and Auditor General. Structure and grading of positions were kept the same as they were during the Pakistan period (Khan & Husain, 1996). CARC submitted its report detailing examination of the various issues relating

to administration to be considered by another committee - the Administrative and Service Reorganization Committee (ASRC).

The ASRC was set up in 1972 in response to pressure from reformists within the ruling party, the intellectual community, and political leaders who had long opposed the colonial-style bureaucratic system (Panday, 2019). Although initially conceived by change-agents from the academic community, private and public sectors, ASRC's recommendations were resisted by the bureaucracy and its report was shelved as a classified document (Khan, 1998). The ASRC embodied an ambition to displace the CSP-styled elite BCS administration cadre, and the democratization of administration at all levels by demarcating the jurisdiction and power of the central and subnational government bodies (Zafarullah, 1987). In this regard, the ASRC proposed that the *thana* (the administrative units under the confines of a police station) should be treated as the basic unit of administration in Bangladesh, shouldering all responsibilities of development administration at the field and local-level (Haque & Haque, 2019).

Both CARC's and ASRC's recommendations led to the creation of new public administration tier at the field-level, but this did not alter the core of bureaucracy's structure and colonial legacy. Ad hoc executive orders were used to manage the civil service which weakened the process of amalgamating existing services into a unified civil service. For example, the first BCS batch of bureaucrats was hurriedly recruited in 1973 and against the advertised 300 Class-1 vacant posts, more than 2,000 people were recruited through a viva voce examination on political, not on merit, grounds by the BPSC (Rahman, 2002).

Public administration and political science scholars have missed the ASRC's recommendation for prioritizing science and technology as a means for generating new knowledge and having a major impact on the process of administrative decision-making

(GoB, 1972). ASRC was the first government document which recommended an administrative behavioral change by establishing an organization with the mandate “for the continuous study for the simplification of the forms and procedures,” and with the objective of “removing the hardships the people have to undergo because of the cumbersome forms and complicated procedures” (ibid, p. 201). It took almost three and a half decades for such an entity to formally come into effect in 2008, in dealing directly with public service delivery change management issues, as envisaged by the ASRC at the time of independence. This entity is the Aspire to Innovate (or a2i as it is known), and an analysis of its origins, mandate, and functions are elaborated in chapters 3 and 4 by tracing the evolution of different international models influencing the discourse on e-Government, alongside the national-level political priorities and changes.

The political environment, after the assassination of Bangabandhu in August 1975, reverted to the West Pakistan’s colonial type of military rule. Army Chief of Staff Major General Ziaur Rahman first came to power in Bangladesh in November 1975 after the third bloody military coup. During the first 18 months of his regime, President Ziaur Rahman governed as a military man through a severe martial law type of administration. He retained his position as head of the army in order to restructure it, a process that took approximately two years (Franda, 1980). Once the army was reorganized, he re-drafted the constitution to legalize his own presidency which was later repealed and recognized as illegal rule by the 15th amendment to the Constitution in 2011. President Zia created the Bangladesh National Party (BNP) as a political party to counter Awami League’s political dominance.

Full-scale political activities commenced, and he got himself elected in June 1978 for a five-year term and moved a “considerable distance towards civilian rule” by 1980 (Franda, 1980, p. 357). Yet, the political regime maintained its links with the

military; the chief executive and his government still operated in an authoritarian manner; and parliament became an extension of the executive (Jahan, 2015a). The BNP was a “multidimensional” party comprised of people of diametrically opposed beliefs and interests, while the Awami League was comprised of members with a spirit from the Liberation War of 1971, especially with grassroots level links.

On the administrative reform front, the first National Pay Commission (NPC) was appointed in February 1976 to examine the pay and service structure of BCS, its method of recruitment, training, and deployment. The revision of rational and simple principles for merging civil service bodies that were performing similar duties and functions in the erstwhile East Pakistani provincial government, was also an important responsibility of the NPC (GoB, 1977). The NPC’s recommendations aimed to replace patronage with merit-based appointments through competitive civil service examinations and a national pay scale consisting of 10 grades, which was partially implemented later.

Introduction of new structures and processes took place in 1979 as important to reform the administration, but this did not lead to any behavioral change within the bureaucracy. A Senior Service Pool, comprising 625 posts with the rank of secretary, additional secretary, joint secretary, and deputy secretary, was instituted and later displaced entirely in 1987 (Rahman, 2002). Second, a new 14-cadre system and the specialized service came under the BCS. This special feature initially allowed all civil servants from all cadres to reach, through talent and efficiency, the top-most position within the Senior Service Pool, thereby eliminating the dominance of one cadre (administration) in bureaucracy’s professional hierarchy (Zafarullah & Akhter, 2001). However, bureaucrats trained under East Pakistan’s colonial ethos were unhappy with both steps, as they saw their privileged position threatened (Haque, 1980). Today, the

administration cadre still dominates key policymaking positions in ministries, and they are advisors to the prime minister on matters related to administrative, and political, decisions (r16, interview, September 5, 2019; r31, interview, January 22, 2020).

The *Government Servant Conduct Rules of 1979* was enacted to hold the bureaucracy accountable for misuse of powers, in particular for personal gains (GoB, 1979). After six years under a different military regime, the *Government Servants (Discipline and Appeal) Rule of 1985* was implemented (GoB, 1985). Together, these rules provided a new regulatory framework for personnel to conform to ethical standards in the discharge of official duties under their jurisdiction. The *Government Servants Conduct Rules of 1979* specifically forbids accepting gifts and foreign awards, lending and borrowing, engaging in private trade and employment, criticizing the government, and participating in politics and elections. Bureaucrats continued to participate in politics and engage in corruption. Thus, the accountability of the military-turned-civilian President became weak, and civil servants continued to play a supremely important role in government (Khan, 2006). The bureaucracy remained isolated from ordinary citizens although the new rules called for them to become more responsive to citizens' demands.

According to the executive director of Centre for Peace and Justice, BRAC University, the *Official Secrets Act 1923* kept (and continues to keep) a tight rein on bureaucrats from sharing information on their operations and activities with the public, press or even officials in other public organizations (r19, interview, September 9, 2019). It was reinforced by the *Government Servants Conduct Rules of 1979* which compelled public servants to honor an oath of secrecy (r19). Consequently, the decision-making process and decisions themselves remained inaccessible to those who were affected by them, i.e., citizens. In addition, bureaucrats' "obsession with rules and regulations made

them un-responsive to citizens' demands and [...] instead of being nonpartisan in making decisions or applying their discretion, they are driven by their empathy toward one or the other major [political] parties...in society" (Zafarullah & Huque, 2001, p. 1389). This behavior resulted from the colonial memory of exploiting citizens and exhibiting loyalty to the incumbent authority.

Between 1975 and 1981, bureaucracy shared power with the military and most of General Zia's advisors were either bureaucrats or technocrats (Riaz, 2005; Rahman, 2002). One author estimated that the investment board of the government, which was one of the top authorities then, consisted of 15 military members and except for one member, all were bureaucratic elites during the Zia period (Islam, 1988). Civil service bureaucrats were critical of the large number of army officers in top positions in mills, corporations, and government offices. They alleged that military-styled bureaucrats lacked administrative efficiency training and were "arrogant" (Haque, 1980, p. 226).

President Zia dismissed ministers and other lesser officials for corrupt activities, but only after detailed cases were compiled, documented, and presented to the President himself (Franda, 1980). This process was long and complicated which did not help to correct administrative misbehavior. Opposition politicians argued that most of the 40 ministers in Zia's Cabinet were engaged in corrupt activities, and Zia's reluctance stemmed from his political dependence on them (ibid). At the core of President Zia's political and economic philosophy was a "military man's belief in organizational discipline and an almost naive faith in the powers of positive thinking and hard work" (ibid, p. 358).

Ultimately, under President Zia's political rule, administrative decision-making remained confined to a very small level on some matters such as the canal-digging programme, which was privately criticized by many people in the party and

government, according to key experts (r31, interview, January 22, 2020). Though he survived as many as 21 attempted military coups, President Zia was ultimately assassinated by a group of military officers on May 30, 1981. After his assassination, Vice President Justice Sattar became the acting President, but he was ousted in a coup led by the Chief of the Army Staff Lieutenant General Hussain Mohammad Ershad on March 24, 1982.

President Ershad ruled Bangladesh for eight years (1982-1990) and imitated his predecessor in many ways (Jahan, 2015). Initially, he also installed a civilian president, later became the president in December 1983, and floated a state-sponsored political party, the Jatiya Party, composed of various factions from leftist and rightist political parties to support his regime. Like President Zia, he also engineered elections and the process of administrative militarization along with increased spending for the military, which intensified after he assumed political power (ibid).

Between 1982 and 1990, at least 294 military officers were appointed to different key positions in the government, semi-government and autonomous institutions, and public corporations (Riaz, 2005, p. 149). During President Ershad's rule, BCS examinations were held at least once in each calendar year but the standard of the test eroded and attracted average youths; status and merit started fading from the civil service (Mollah, 2013). Political connections and affinity with the ruling class appeared to be the dominant criteria of recruitment and promotion (Rahman, 2002). For example, 650 magistrates were appointed for upazilas, violating the norms and standards of the civil service (Osman, 2010). According to the 1979 civil service recruitment rules, candidates must pass a written examination with 1,600 marks to be appointed as civil servants. Violating this rule, the candidates of 'Ershad Batch' were selected as magistrates by passing the examination with only 300 marks and with an

entry level age of up to 50 while, according to the civil service recruitment rule, the entry-level age limit is 30 years (ibid).

The Committee for Administrative Reform and Reorganization (CARR) was set up in 1982 with the objective of recommending an “appropriate, sound and effective administrative system based on the spirit of devolution and the objective of taking the administration nearer to the people” (GoB, 1982, p. 4). Based on CARR’s recommendations, upazila parishad was added as a new layer at the upazila level (a field-level administrative unit below the district), under the leadership of an elected representative. The new field-level layer of bureaucracy did not lead to any qualitative change because instead of facilitating local power or participation, the upazila arrangement turned into an “extension of the central government bureaucracy” (Panday, 2019, p. 223-224).

The military government between 1982 and 1990 established record levels of venality (Maniruzzaman, 1992). Corruption prevailed in each and every sector of national life in the form of petty corruption, project corruption and programmatic corruption (Kochanek, 1996). In 1986, parliamentary election was held under Martial Law which gave President Ershad’s political party single largest majority in the 3rd Parliament, with 153 out of 300 seats (Jahan, 2015b). The Election Commission, as an electoral administrative unit, was used to serve his personal, coterie and party interests, like his predecessor President Ziaur Rahman. The control of the Election Commission was ensured through the appointment of weak and pliable persons as Chief Election Commissioner and election commissioners (Khan, 1998).

On the political front, President Ershad faced increasing mass demonstrations mobilized by both the Bangladesh Awami League led by Sheikh Hasina, daughter of Bangabandhu, and the BNP, led by Begum Khaleda Zia, widow of former President

Ziaur Rahman. On December 4, 1990, Ershad resigned handing over power to Chief Justice Shahabuddin Ahmed, who became the acting president heading a Non-party Caretaker Government (NCG). This was a key historical critical juncture in Bangladesh's political history as the NCG successfully organized parliamentary national elections on February 27, 1991, which were deemed fair and credible by all contesting parties and international observers. Chapter 3 examines the political period from 1991 onwards, until the two-year rule by a military backed NCG between 2007 and 2008.

After independence and until 1990, colonial practices led to confusion, distance, and distrust between politicians and administrators. The bureaucracy endured the first elected government's wrath followed by increased submissiveness to two military governments, both subsequently civilianized through rigged elections. It has been argued that Bangladesh's public administration is a classic example of Riggs' poly-normativism and high formalism in terms of administrative values (Khan & Haque, 2013). Poly-normativism entails the coexistence of modern and traditional norms and practices. It exposed a key gap between what was prescribed by rules such as democracy, equity, accountability, integrity, and administrative responsibility, and what was done in practice where bureaucrats exhibited a high affinity for "power, money, centralized authority, unequivocal loyalty, and submissiveness" (ibid, p. 207). Bureaucrats resisted any efforts towards structural-behavioral change initiatives which tried to make its way through neo-liberalism ideas and models.

2.4.2. New Public Management (NPM) and the Bangladesh bureaucracy

Old public administration theory advocates for hierarchical structure and centralization, strict conformity to policies and procedures, standardization, and paternalism (Weber, 1968). Governance and public sector reform efforts after Second

World War until 1970s continued to adopt the Weberian type of old model of public administration for development reforms. This was backed by the justification that quality of bureaucracy, undergirded by the Weberian characteristics, was positively associated with economic growth (Evans & Rauch, 1999). The Weberian model was successfully adopted with modifications in some East and Southeast Asian countries, popularly known as the *Asian Tigers* (Hong Kong, Singapore, South Korea and Taiwan), as they persisted with a strong state while pursuing market-oriented reforms (Turner & Hulme, 1997; Turner, Hulme, & McCourt, 2015). The success of Asian Tigers lay in embodying features, particularly impersonal rules and formal criteria of appointment, which resulted in a cultural atmosphere conducive to their bureaucracy's advancement (Haque, 2007).

However, in the postcolonial aftermath, Bangladesh experienced a decline in the quality of governance as resources and public appointments were influenced by military/political leadership (Jahan, 2006; McCourt, 2013). After independence, new resources were being diverted to non-poor claimants. An unpublished study undertaken for the Bangladesh Planning Commission in 1991, covering 25 projects related to poverty alleviation, located in 8 different ministries and funded by 15 different aid donors, indicated how such resources were diverted to set up their own bureaucracy with a budget provision for administrative overheads, buildings, office equipment, vehicles and hiring of consultants (Sarker, 2006). The Bangladesh bureaucracy saw very little change to the public administrative system, and the "state-of-the-art managerial practices, which were already feeling their way in other developing countries" (Zafarullah & Huque, 2001, p. 1386). In the 1980s, these changes in managerial practices drew ideas from a new paradigm for public management, guided by neoliberal philosophy, called New Public Management (NPM).

The shift from the old, or Weberian-colonial in case of Bangladesh, to a modern NPM philosophy, was becoming evident in developing nations starting in the 1980s and early 1990s (Sarker, 2006; Robinson, 2015; Zafarullah & Sarker, 2016). NPM embodied a major shift from the old paradigm, and combined “modern management practices with the logic of economics, while retaining the core public values” (OECD, 1998, p. 5). NPM rests on the premise of importing lessons from neoclassical economics and private-sector management, in reforming the public sector’s operational procedures (Hood, 1991; Lorenz, 2012). It sought to apply neoliberal ideas for bringing about a structural-managerial change in the public sector.

NPM succeeded in countries which had a certain level of economic development, maturity of the political system, and bureaucratic impartiality in treating citizens with fairness (Samaratunge, Alam, & Teicher, 2008; Zafarullah & Huque, 2001). Unlike NPM initiatives in other countries where there was a clear separation in the relationship between bureaucracy and political structures, in Bangladesh, “the timeworn and useless interface between the two domains” undermined NPM reform efforts and did not lead to behavioral change (Zafarullah, 2007, p. 171). The NPM model was not suitable for Bangladesh where the bureaucracy’s loyalty was divided between the two major political parties. Bureaucrats resisted implementing recommendations made by the different committees and commissions immediately after independence because veto possibilities were high in postcolonial bureaucracies, where they had established a paternalistic form of power relations (r17, interview, September 08, 2019).

At the international front, the World Bank and IMF used their strong position in the global financial system to pressure prospective borrowers to embark upon an agenda of macroeconomic stabilization, backed up by a reform agenda based on NPM

ideas, known as *Washington Consensus*. From the late 1980s onward, Structural Adjustment (SA) reform measures prescribed the Washington Consensus which added pressure on the military governments to implement service delivery reforms (Zafarullah & Huque, 2001). The adoption of NPM based SA reforms by Bangladesh and other least developed countries (LDCs) became obligatory to obtain loans and assistance from the Bretton Woods Institutions.

The SA reform included adding new and removing old institutional layers to accelerate economic growth and improve macroeconomic management. It concerned areas of import liberalization, exchange rate adjustments, deregulation, fiscal reforms, de-subsidization of public goods, and development of private enterprises (Matin, 1990; Sobhan, 1993). Privatization policies received priority from all regimes, including the military as well as later with the democratically elected governments. It featured elements of “reinventing state” with one major trend: reducing the bureaucracy’s size by cutting costs and making the public sector “do more with less” (Hood, 1991). The number of ministries was reduced from 36 to 10, while the number of departments, directorates and subordinates reduced from 243 to 181 during President Ershad’s regime (Khan, 1998).

However, the number of ministries increased from 24 in 1998 to 54 in 2019, and the number of administrative divisions have also witnessed an increase – from four divisions at the time of independence to six divisions in 1998, and to eight in 2019¹⁵. The increase in the number of ministries and divisions is an indication of how the Bangladesh government has not been able to “do more with less,” as aspired by the NPM model. Given the colonial structural legacy, the increase in the number of

¹⁵ The number of divisions is expected to increase to 10 for further decentralization of public information and services by 2022, according to the interview with a top-level government official (r1, interview, August 22, 2019).

divisions for administering local governance and delivery of key public services, became pertinent for improving public administration.

Regarding the basic problems of how the bureaucracy was to operate and provide public service delivery in new ways to citizens in the postcolonial period, no initiative was pursued under the SA program. Aminuzzaman's (1994) analysis of SA's impact on public administration pointed out that it was missing the administrative capability provisions which restricted the impact of its reforms. For example, there was a conflict between the administrative culture and the SA's spirit, and civil servants needed to be provided with relevant training to respond to the policy contents of the SA reform, which required equipping bureaucrats with new entrepreneurial tools and skills (r24, interview, January 7, 2020)¹⁶. At the same time, training programs were not implemented to include specific modules which essential to develop administrative skills for the SA reforms.

Reforms under SA spanned two different political governments – military president Ershad (ousted in December 1990), and the government of Begum Zia (elected in March 1991). SA reforms were backed by the World Bank and Asian Development Bank (ADB) as either program or sector loans (Matin, 1990). After transitioning to democracy, these loans provided more cash to the government to carry out a series of policy and institutional reforms in particular sectors of the economy such as agriculture, industry, energy, and infrastructure. A formal review of the SA reform outcomes, under a *SA Participatory Review Initiative* (SAPRI), found that reforms

¹⁶ A professor from University of Dhaka shared his personal experience and research studies examining the different initiatives under different public administration models (r24, interview, January 7, 2020). His views were important to trace a process of administrative behavioral evolution within the Bangladesh bureaucracy starting with the NPM reforms in 1990s to nudging strategies through design thinking models in 2019.

under SA did not take into account the patron-client culture, which was the result of colonial legacy (Bhattacharya & Titumir, 2001)¹⁷.

The patron-client system provided resources and other benefits to political leaders and business groups, which undermined the effectiveness of SA reforms. For example, the exercise of deregulation without simplification of bureaucratic process allowed bureaucrats to control state resources and public provisions, which they could direct to demonstrate their political loyalty with ruling regimes. Two commonly cited examples of bureaucratic control are executive orders and statutory regulatory orders (SROs) which, in effect, “encroached on the law-making authority of the supreme national institutions in Bangladesh” (Bhattacharya & Titumir, 2001, p. 130). It was not that trade liberalization through new policies did not help to improve economy growth; but, non-transparent intervention through SRO and discretionary interpretation by the implementing bureaucracy resulted in problems for citizens and small businesses (Sobhan, 2004). Politicization of the bureaucracy continued in the form of granting special access to business groups undermining the objective of NPM reform efforts, which were targeted for being carried out under the SA program.

The legal framework was the creation of the colonial power which was being used by bureaucrats to frustrate service delivery to citizens, whether they were entrepreneurs seeking a trade license or permit, or parents seeking a birth registration certificate for their newborn. Scholars cautioned that although the NPM paradigm appeared attractive, institutional constraints were not taken into consideration for its

¹⁷ The countries participating in SAPRI were Bangladesh, Ecuador, El Salvador, Ghana, Hungary, Mali, Uganda, and Zimbabwe. In addition to its work with the Bank and national governments, SAPRI Network (SAPRIN) extended to include additional exercises in a parallel initiative known as the citizens' assessment of structural adjustment (CASA) in Mexico and the Philippines. Citizens' groups in Canada were involved in a similar process. In a newer initiative that began in 1999 in Argentina and the Central America region, SAPRIN is working with civil-society organizations to facilitate cross-sectoral cooperation in the development of economic-policy proposals as broad-based alternatives to SA.

application in developing countries (Haque, 1997). There has also been a caution against the importation of most fashionable Western paradigms, and the need to reconnect society to governance structures by considering the latter's historical origins (Cheung, 2003; Samaratunge et al., 2008). Such reconnecting required reforms to be driven by top political authority which was missing in postcolonial Bangladesh. Reforms were internally driven, limited to structural changes in the civil service's functions during the 1970s and 1980s, which had no qualitative impact on the bureaucracy-citizen relationship.

The NPM type of SA reforms failed to reorient bureaucratic behavior toward political institutions and society. The presence and dominance of colonial legacies allowed no qualitative change to take place within the bureaucracy. Proponents of the NPM approach expected that it would make public managers behave like public private sector managers (Brinkerhoff & Brinkerhoff, 2015), while opponents argued that NPM ideas were difficult to reconcile with democratic accountability, which required public managers to work in the service of creating public value, not making monetary profits (Moore & Hartley, 2008). Based on the 1980s lessons and experiences, it was concluded by UNDP that NPM type of SA policies were too narrow and did not reflect the local context issues in Bangladesh and other countries (UNDP, 1993). The World Bank stepped back from its earlier position of discouraging state intervention to promote free market principles (World Bank, 1997). It was instead suggested that state capability and a set of effective institutions were necessary for "creating an enabling environment within which state officials could act in pursuit of collective interest" (ibid, p. 77).

For example, according to r15, Bangladesh was able to introduce some key innovations immediately in the postcolonial landscape, largely through a top-down

push: alternative medicine formulations (e.g. oral rehydration solution or ORS for diarrhea), new organizations (e.g. milk producers' and sugarcane producer's cooperatives), new funding mechanisms (e.g. microfinance and more recently, mobile-based banking), and better conduits for public information and service delivery through non-government organizations (such as one-stop centers and digital access) (interview July 21, 2019). The ORS was one of the first public service innovations which followed a top-down approach to respond to citizens' demand, followed by family planning programs aimed at reducing population growth, and the invention and use of a rose-petal mechanism for predicting cyclones. American and Bangladeshi doctors and scientists, based at the laboratory in Dhaka, furthered research on ORS during cholera outbreaks in Bangladesh in the late 1960s and in refugee camps following Bangladesh's war for independence in 1971 (r15, interview, July 21, 2019). While this is not an exhaustive list, it exemplifies one essential factor: innovations in Bangladesh involved using pre-existing knowledge, structures, habits, and behaviors in a new way, which started being influenced by the global discourse of the time – neoliberalism.

2.5. Historical Overview: A Summary

This chapter elaborated how the Bangladesh bureaucracy developed because of dual colonial legacy, and how the latter continued to shape the structure and power relations in the postcolonial society. Colonial beginnings perpetuated a type of elitism which embedded a master like administrative behavior in bureaucrats who were responsible for administering slaves and subjects, not serving citizens. Bangladesh is a special case as it endured dual colonial rule, making the case study on bureaucratic experience more interesting from the postcolonial, behavioral perspective of the bureaucracy. According to Cohn (1996, p. 10), “the British appear in the 19th century to have felt most comfortable surveying India from above and at a distance – from a

horse, an elephant, a boat, a carriage or a train. They were uncomfortable in the narrow confines of a city street, a bazaar, a mela – anywhere they were surrounded by their Indian subject.” The uncomfortable relation between the administrator and politicians on one hand, and citizens on the other hand, continued after the independence of Bangladesh. Bureaucracy’s relationships with citizens and politicians were shaped by the dual colonial legacy and the conditions that it created for bureaucrats to remain steadfast in achieving organizational goals. The bureaucracy was used to subdue citizens and manipulate elections, creating a further dent on electoral politics and in the way, bureaucrats were supposed to behave under a legal-rationalistic model.

The dual colonial rule created a bureaucracy which was distanced from citizens and had little understanding of how to work with political authorities. One of the crucial aspects of colonialism has been the “distancing” impact, which became more acute and politically characterized over time. Thus, the clash between politicians and administrators “came before, in some cases after, the formal transfer of power” (Tinker, 1966, p. 80), i.e., after independence. Postcolonial countries like Bangladesh were handicapped with governing institutions imposed and bureaucrats recruited by the departing colonial powers. Furthermore, the disregard for the post-independence context resulted in the newly independent state operating with institutions that were “steeped in the colonial tradition of ensuring strict control and imposing limitations as opposed to the spirit of assistance and development” (ibid, p. 81). This was paradoxical given that “the same set of [colonial] institutions and administrative machinery was expected to assist with governance that called for an entirely different mindset, approach and processes” (Huque, 2016, p. 91). Thus, bureaucratic change needed to take place within a bureaucracy that was trained to resist change.

Jalal (1995, p. 2) called the India Partition as a “defining moment that is neither beginning nor end, partition continues to influence how the peoples and states of postcolonial South Asia envisage their past, present and future.” Peters (2021, p. 24) argued that “despite their formation in the past, and development over decades and indeed centuries, traditions do have contemporary relevance and continue to influence patterns of behavior in public bureaucracies.” Traditions are also dynamic as adaptations have been made to basic patterns as they confront new challenges and integrate new ideas. The mixture of continuity and change makes tradition appealing as a mechanism for comparison and explanation of the development of Bangladesh pre- and post-independence. The postcolonial Bangladeshi bureaucrats resorted back to their East Pakistani colonial memories for survival purposes, which choked the scope for introducing structural innovations. Most of all, using the bureaucracy to suppress dissent and to extract resources rather than governing the population, shaped administrative traditions behaviors towards citizens.

The present chapter has focused on how the tradition of using the administration to suppress political activities, gain control over state, and exercise authority over citizens, was carried on by successive governments in Bangladesh after colonial rule ended in 1971, which was not different than what the British and Pakistan had done earlier. While the Awami League government (from 1972-1975) recruited bureaucrats who supported the independence of Bangladesh, military regimes (from 1975-1990) recruited bureaucrats who had little or no role during the Liberation War (Jahan & Shahan, 2008). The Awami League sought bureaucrats with party loyalty while military regimes preferred bureaucrats who could follow orders and be “efficient.” Within the civil service, there were also clear signs of behavioral change as the government resorted to recruiting party-loyal people in top-level positions who were not members

of the bureaucracy. This upset many bureaucrats who had long tenures and these older bureaucrats, trained under colonial and military traditions, started looking for patronage to re-assume their power and position. Military rulers, after the assassination of Sheikh Mujibur Rahman, turned to civil bureaucracy for support to civilianize their rule by creating political parties. This arrangement between military and bureaucracy worked well until the end of 1980s.

There are exogenous colonial and postcolonial legacies in public administration in non-Western nations, and academic initiatives have not been undertaken to explore the patterns of administrative behavior in pursuing the indigenizing of e-Governance reforms and practices (Haque et al., 2021). Some features of the structural legacy arising from the British colonial tradition included: open-entry based on academic achievement, elaborate training arrangements, permanency of tenure, responsibility, generalist posts at central and district levels reserved for members of the administration cadre, a regular graduated scale of pay with pension and benefits, and a system of promotion and frequent transfers based predominantly on seniority and partly on merit (Tinker, 1966). However, persistence of poor administrative behavior in Bangladesh after independence, alongside the absence of strong institutional mechanisms for converting Weberian-colonial bureaucratic values to fit the needs of an independent nation, resulted in a divergence between what was written on paper and what was done in practice by bureaucrats. The bureaucracy-politics relationship created both opportunities and challenges for e-Government adoption after the restoration of parliamentary democracy in 1991, and this is further elaborated in the next chapter.

**CHAPTER 3. BUREAUCRATIC CHANGE FROM 1991 TO 2008:
ROTATION BETWEEN POLITICAL PARTIES AND MILITARY
INTERVENTION (ONCE AGAIN)**

This chapter presents the governance conditions after the end of military rule in 1990. It provides an overview of the developments after the restoration of parliamentary democracy in Bangladesh in 1991. It is conceptually divided into three parts. The first part summarizes the evolution of international trends and developments in public administration reforms since the 1990s. This discussion is useful to guide the analysis on how these ideas were introduced to reform the public administration in Bangladesh, and their reception on the ground. The second part examines the political developments and discusses the successes and failures of specific reforms in shaping administrative behavior. Thirdly, it introduces specific e-Government projects and training initiatives based on the administration models, which were implemented by different governments. In doing so, it identifies their successes and failures, and how these may have created the conditions for e-Government implementation and advancement. The discussion analyzes the political environment, institutional characteristics, alongside the role of international actors, in creating room for bureaucratic change to occur in the context of e-Government implementation.

Political scientists and public administration scholars pointed out that like other postcolonial states in South Asia, Bangladesh was unsuccessful in dismantling the over-developed colonial bureaucratic structure (Chakrabarty, 1992; Haque, 2007; Khan, 2003). The rules and established structure made the bureaucracy the most powerful and anti-political state organ. Elected governments also could not put in place new structures and service delivery systems to serve citizens of an independent nation, replacing those which were established during colonial times. However, in contrast to political scientists' claims about the impact of adversarial politics on administration reforms, this chapter suggests that political parties and military regimes found it easier to introduce new layers into the pre-independence bureaucratic system. Although some

reforms were unsuccessful, some initiatives led to incremental change, and created a favorable condition for undertaking e-Government implementation in the form of projects, trainings, and reforms, which offered new scope for introducing structural-behavioral changes within the public administration.

The chapter is based on primary documents which were collected during interviews, and secondary data. It gives an overview of how the postcolonial bureaucracy in Bangladesh led to important developments in the post-democracy period after 1991. More pertinently, it demonstrates that although challenges to structural legacies through policy reforms and training programs can continue on the ground, they can create new windows of opportunities to push for innovation, such as e-Government, which can explain the conditions for changing the softer public administration aspects of behavior. The discussion sets the ground for the argument about how international factors and domestic political will in Bangladesh created soft administrative reforms through targeting codes of bureaucratic behavior toward innovations for increasing responsiveness to citizenry.

Table 2 summarizes the discussion of the projects and initiatives which are discussed in detail in this chapter (excluding the last row). The fourth column identifies only those projects and initiatives aimed at changing bureaucrats' behavior from the time of independence to 2019. The political period between 1971 and 1990 was covered in the preceding chapter 2. Beginning with a parliamentary democracy system in 1971, Bangladesh witnessed military turned civilian governments between 1975 and 1990. During the military rule, New Public Management (NPM) reforms through Structural Adjustment (SA) programs were implemented in Bangladesh. After 1991, the two major political parties – Bangladesh Awami League and Bangladesh Nationalist Party (BNP) – rotate in power, starting with the BNP which continued with the SA reforms.

Global public sector management and administration reform models evolved from the 1990s onwards, which impacted the design of training initiatives in Bangladesh. Between 1996 and 2001, the Awami League government introduced behavioral change initiatives and an e-Government project starting with the Managing at the Top (MATT) and Support to ICT Taskforce (SICT), both backed by the international donor agencies, DFID, and UNDP, respectively. The training initiative and the e-Government project borrowed ideas from NPM, digital era governance (DEG) and New Public Governance (NPG).

After the BNP government assumed office in 2001, it did not abandon the preceding regime's initiatives, a point that has been missed by scholars. Besides MATT and SICT project, the BNP government introduced the total quality management (TQM) approach with support from the Japan International Cooperation Agency (JICA). The MATT project aimed at introducing behavioral changes at the top of the hierarchy and on the other hand, TQM, inspired by the Business Process Reengineering (BPR) movement in the private sector, aimed at the re-design of public service delivery processes from a citizen relationship management perspective (Navarra & Cornford, 2008). The military intervened near the end of 2006 and ruled Bangladesh through a Non-party Caretaker Government (NCG) from 2007 to 2008. It introduced key initiatives borrowing ideas from NPG and DEG, such as the Citizens' Charters and Quick Wins, and scaled up the MATT training into MATT-II. In 2009, the Awami League assumed office and it has been ruling the country since then.

Implementation of SICT project, MATT, and TQM trainings, continued under different regimes because bureaucrats found it prestigious to be associated with the international donors community (IDC) (r16, interview, September 05, 2019). More recently, nudge theory-based design thinking (DT) strategies such as Empathy Training

Program (ETP) are being used for e-Government implementation with support from UNDP Bangladesh. The role of the IDC in supporting new ideas and practices is treated as endogenously related to administrative behavioral change in the present, and the following, chapter.

Table 2: Political context and public administration reforms in Bangladesh

Elected (year)	Type of Government / Head of Government	Public service delivery reform model	Major programs
1971-1975	Elected: Awami League Sheikh Mujibur Rahman	Reconstruction of key organizations after independence	None
1975-1981	Military turned civilian rule: Bangladesh Nationalist Party (BNP) Ziaur Rahman	New Public Management (NPM) and hands-on initiatives	None
1981-1990	Military turned civilian rule: Jatiya Party Hossain Mohammed Ershad	NPM	Structural Adjustment (SA) program
1991-1996	Elected: BNP Khaleda Zia, Prime Minister	NPM and Public Value Management (PVM)	SA program
1996-2001	Elected: Awami League Sheikh Hasina, Prime Minister	NPM, PVM, and digital era governance (DEG)	Managing at the Top (MATT-I) and Support to ICT (SICT) project for e-Government
2001-2006	Elected: BNP-led Four Party Alliance Khaleda Zia, Prime Minister	NPM, NPG and DEG	SICT taskforce for e-Government, e-Government cell, MATT-I ends and MATT-II begins,
2007-2008	Military: Caretaker government Fakhruddin Ahmed, Chief Advisor	NPG and DEG	MATT-II, Citizens Charter, Quick Wins, Total quality management (TQM) projects
2009-2020*	Awami League led Grand Alliance Sheikh Hasina, Prime Minister	NPG, DEG and design thinking (DT)	MATT-II, Improving public service (IPS) and TQM project, Quick Wins,

			Empathy Training Program (ETP),
--	--	--	---------------------------------

Note: *Discussed separately in Chapter 4

Source: Compiled from reports collected from the BPATC library, and interviews with government and IDC representatives.

An increase in the number of rules, policies and institutions did not lead to any immediate qualitative change because they could not deter bureaucrats' unwillingness and their inability to respond to a new political environment. The latter entailed implications for the way bureaucrats were recruited, promoted and the manner in which their loyalty was established to serve the ruling party's goals. A qualitative change, focusing on administrative behavioral aspects, was (a) envisaged by different commissions constituted by the government to oversee administration reforms, (b) supported by the IDC by exporting ideas and providing resources for reforms, and (c) implemented by bureaucrats through different training programs.

3.1. International context and perspectives: From New Public Management (NPM) to nudge theory-based design thinking (DT) ideas

Chapter 2 discussed how the Weberian model deviated bureaucratic behavior in Bangladesh as a result of the colonial legacy which continued in the postcolonial scenario. Based on the Washington Consensus's NPM paradigm, the SA reforms in Bangladesh (discussed in chapter 2.4) tried to implement policies to improve administrative processes and boost economy growth. Hood (1991) saw NPM as a "marriage" between two different streams of ideas. One was the new institutional economics and the other, business-type managerialism. Both doctrines were very different from the traditional, Weberian, authoritative ideas of good administration, with their emphasis on hierarchies, impartiality, meritocracy organizational goals and efficiency. New institutional economics built on the post-World War development of public choice, transactions cost theory and principal-agent theory. The business-type

managerialism movement generated a set of administrative reform doctrines based on the ideas of professional management over technical expertise, along with granting high discretionary power to managers for achieving organizational goals.

The development of a managerial/entrepreneurial culture within the public sector can be closely tied to the *Reinventing Government* (Osborne & Gaebler, 1992) movement. The term *Reinventing Government* was used to denote NPM and innovation evolving simultaneously in the last fifteen years of the previous century (Borins, 2014). It has been argued that NPM effectively misplaced public sector reforms agenda by relying on business sector and manufacturing concepts, instead of more suitable services management literature, focusing on citizens and not clients (Osborne, 2010). In its most extreme form, the NPM questioned the legitimacy of public policy as a context for public management, arguing that it imposes constraints on the management and provision of services to clients (Krause & Meier, 1999). Due to the absence of literature on service delivery, economists borrowed terms and conditions from the manufacturing industry literature, which focuses upon the product innovation processes including the six-sigma design approach, rather improvement in services to citizens.

NPM was contested by other models: Public Value Management (PVM) (Moore, 1995), DEG (Dunleavy, Margetts, Bastow, & Tinkler, 2006; Dunleavy & Hood, 1994), and NPG (Osborne, 2006). PVM offered a “better prospectus than either NPM or its “reinventing government” variant... [because it] recognizes that public services are quite different from the realm of markets, competition and choice” (Coates, 2006, p. 31). Moore (1995, p. 31) presents the following criterion of management effectiveness: “[We] should evaluate the efforts of public sector managers not in the economic marketplace of individual consumers but in the political marketplace of citizens and the collective decisions of representative democratic institutions.” In

practice sector managers deliver public value by improving efficiency, effectiveness, or fairness in service delivery, introducing new programs to respond to meet a new political aspiration or a new challenge facing the organization, recasting the mission of the organization so that its old capabilities can be used more effectively and responsively.

The advocates of DEG model argued that the legacies of the Weberian model and NPM constrained the shift to the digital era, which required bureaucrats using computers, mobile phones and internet for implementing e-Government (Dunleavy & Margetts, 2015). Under DEG, e-Government emerged as an agenda for public sector reform under liberal democratic political systems during the 1990s. The explosion of Internet use in the mid-1990s gave impetus to the idea, and countries such as the United Kingdom, Canada, Australia, and New Zealand soon followed with their own versions. In the United Kingdom, the Labour Party, elected in 1997, put electronic service delivery at the center of its program of *Modernizing Government*. Mazzucato (2013) argued that the secret of the US success in innovation lay in the government's willingness to invest in promoting the spread of Internet, starting in 1960s and originally funded by the Department of Defense, and in existing technologies such as drone, aircraft, etc.

In India, the onset of Internet is attributed to Rajiv Gandhi's political leadership (1984-1989) who hired Sam Pitroda, a former vice president of Rockwell International, as his adviser on public information infrastructure and innovation (Agur, 2018; Bhat, 2020). Internet in India began in 1986 and it was available only to the educational and research community but became publicly available nine years later in 1995. It was also in 1995 that *Digicom*, an entrepreneurial Internet venture, launched Internet services in Karachi, heralding the beginning of Internet in Pakistan. Bangladesh connected with

the Internet in June 1996 after the Bangladesh Telegraph and Telephone Board (BTTB) granted licenses to two Internet Service Providers (ISPs). In all these South Asian economies, the onset of Internet and its impact on creating the conditions for DEG type of changes resulted from state-backed investments.

DEG changes within the bureaucracy using the Internet are related to a management agenda of service delivery, which are more consistent with NPM ideas. The DEG model focused on the process elements for introducing electronic service delivery. It recommended “design principles” for bureaucrats as users of ICT, which would enable them to consider experiences of citizens through experiential learning, or a “build-and-learn” approach. The design principles were fundamental in shifting operations from “government’s own organizational experience” to “society’s experience of government” (Dunleavy & Margetts, 2015, p. 23). Hummel (2008) termed organizational experience as “bureaucratic experience” and Simon (1997, p. 130) argued that a design approach can help administrators to “evaluate alternatives better” and “experience the world in more and richer ways.”

Osborne and Brown (2006) argued that the time of NPM was “a relatively brief and transitory one between the statist and bureaucratic tradition” of public administration and “the embryonic plural and pluralist tradition” of NPG. The strength of NPM was in its ability to address precisely the complexities associated with the implementation of new processes and policies, now recodified as the management of change and innovation (Osborne, 2006), or public sector entrepreneurship. Emphasis on entrepreneurship can also be observed in recently emerging post-NPM approaches such as networked and collaborative governance, both of which fall under the tenets of NPG (Haque, 2020).

The NPG model focused on the citizens, and tried to correct the theoretical and practical shortcomings of NPM (Osborne & Brown, 2011). It encompassed the contemporary complexities and realities of governing by drawing on organizational sociology and network theory. The NPG model called for a collaborative and pluralistic, not a prescriptive state. It drew attention to the role of public managers in delivering services and encouraged them to collaborate, network and communicate for service delivery innovation (Edelenbos & Klijn, 2007; Klijn, 2010). Further, it has been argued that traditional approaches to public policy implementation and public services delivery failed to provide substantive guidance to public managers struggling to cope with this level of complexity (Hughes, 2010).

At the same time as NPM's transition to NPG in the dawn of twenty-first century, nudge theory based design thinking (DT) ideas were being applied to leverage behavioral science in order to improve programs and services for citizens, and generate better public value outcomes (Sunstein, 2014). Nudge theory borrowed from behavioral psychology and economics, and it called for implementing DT strategies as a way to reinforce positive behavior and encourage uptake of programs and services. DT strategies consider the behavioral heuristics and cognitive biases that impact human decision-making, and it can be used by policymakers to design the environments and "choice architectures" that steer decisions and behavior towards desired outcomes (Thaler & Sunstein, 2008), which have high public value.

3.1.1. International reforms in the 1990s and early 2000s, and their reception in Bangladesh

This section demonstrates how the ideas from different reform models travelled to Bangladesh and were grafted on the ground. For example, in older democracies, the e-Government agenda is about undertaking large investments in procuring the hardware

and software, setting up secured infrastructure system for protecting citizens' privacy and confidentiality, and more recently, on using robotics and artificial intelligence to further speed up online services to citizens. The older democracies such as the UK, the US and Canada, are advanced in e-Government relative to newer democracies such as Bangladesh which resisted e-Government adoption in the 1990s. The bureaucratic context is sharply different in Bangladesh than what is prevailing today in today's older democracies (i.e., high-income countries), and even in other developing countries which did not have to endure dual colonial legacy.

Despite the high failure rates, over the past few years the interest in e-Government adoption has increased considerably from the West to Africa (Heeks, 2008; Nkohkwo & Islam, 2013). However, scholars have exclusively studied the non-impact of NPM reforms in Bangladesh, ignoring the e-Government aspects. Besides a separation between political and administrative spheres, it is argued that reform style and capacity to implement are influenced by different political, economic, and social contexts. Support of top-level political leadership and a national vision are two primary ingredients contributing to the success of reforms, which were present for Singapore but absent in case of Bangladesh (Samaratunge et al., 2008), until most recently. The dissertation illustrates how behavioral change initiatives were supported by successive governments, which laid the foundations for a newly elected government in 2009 to implement reforms in support of its Digital Bangladesh agenda (see Chapter 4).

Transformation of online service delivery requires bureaucrats to behave in new ways, by shedding their previous role as colonial masters and taking on a more entrepreneurial or change role in the design and implementation of public service delivery innovations. For example, in the context of e-Government, challenges range from low-level of internet penetration and digital literacy (UNDESA, 2018; World

Bank, 2016), to structural issues such as policies, authority and hierarchy (Osman, 2016), and behavioral issues such as lack of skills and competencies (Jamil, 2002). Altogether, these challenges hamper the implementation of ICT initiatives under e-Government in developing countries (ITU, 2016). Training programs for promoting e-Governance by DT institutions are thus important to nudge bureaucrats to become more entrepreneurial towards e-Government implementation. Section 3.3 and chapter 4 further elaborate on the rationale of DT institutions, and the role of an innovation unit – a2i – in the introduction of e-Governance reforms, and implementation of e-Government in Bangladesh.

Institutional or bureaucratic change between 1991 and 2008 took place in the form of new policies, institutions, training programs and initiatives. Such endogenous processes of change altered institutions in incremental but significant ways, through self-reflexive actors who were able to “gradually adjust their institutions in ways that are constrained by already-given institutional practices, rules, routines, and cognitive schema” (Campbell, 2004, p. 34). For example, the launch of “Citizens’ Charters” added a new citizen-centric public administration mechanism in 2008 but failed to change the administrative behavior given the bureaucratic resistance at the ministry and field levels (further elaborated in section 3.3).

The experience of the 1970s to 1980s (chapter 2), and 1990s to late 2000s (chapter 3), suggests that the political leadership was not serious to overhaul the Weberian-colonial administrative system. While campaigning for electoral victory, the two major political parties have always emphasized reforming the administrative system (r16, interview, September 05, 2019). However, after assuming power, they failed to translate their intentions into reality in the 1990s and early 2000s (r16). With elections every five years, short-run political gains dominated decision making, as the

political leadership perceived the immediate political costs of administrative reforms to outweigh the longer-run benefits. Therefore, in the Bangladesh context, political commitment was circumscribed by clientelist politics, which distracted political leadership from embarking on comprehensive reform programs (Sarker, 2006; Sobhan, 2004; World Bank, 1996).

As the ensuing discussion shows, administrative behavioral change envisaged by the different commissions was not achieved after the restoration of democracy in 1991. The political environment remained unstable as a result of rotation between successive democratically elected governments and the rivalry between political parties. Institutional characteristics were molded according to the ruling party's preference and bureaucratic loyalty. Being an aid-dependent country, Bangladesh remained susceptible to the pressures of the international donor agencies in formulating and reformulating its reform agenda in the 1990s and early 2000s (Sarker, 2006). Although ideas from international experiences and trends travelled to Bangladesh through donor funded reform programs, little change took place in terms of realigning bureaucratic behavior to serve citizens within a democratic context. For example, a World Bank study in 1996 proposed comprehensive reform e-Government programs along the NPM and DEG models. However, it received little appreciation from the national political leadership and bureaucratic support (Khan, 1998).

3.2. 1991-2008: Political context and implications for reforms

The Bangladesh state inherited a steel frame which was already in place long before the emergence of political parties and independent institutions. This section discusses the domestic political developments that have implications for creating the conditions in implementing reforms, starting from 1991. It indicates the shifts in the

internal factors which took place because of politicization and patrimonial support. As discussed in the previous chapter, between 1971 and 1990, governments created a nexus with bureaucracy that generated a cadre of bureaucrats who could easily be made subservient to their whims. At that time, it was ensured that all the Bangladesh Public Service Commission (BPSC) members were loyal to the party in power, and recruitment took place based on approved lists provided by the political party in power. According to r24, “the three elected governments from 1991 to 2006, each prepared a list of public officials with links to their student wings, undermining the morale of public servants (interview, January 07, 2020).”

Politicization of the bureaucracy can be viewed as having two dimensions (Rashid, 2014). The first involves politicization of its personnel by populating the top-level decision-making with party loyalists and transferring bureaucrats who are assumed to be loyal to the preceding regime to less important posts and to remote rural areas. The second dimension involves making bureaucrats as officers-on-special duty (or OSDs)¹⁸. These appointments not only drain public resources, but bureaucrats also become highly demoralized and suffer from social humiliation and psychological stress (Aminuzzaman & Khair, 2014).

The first dimension of politicization involves providing special services and benefits in the form of paternalism and patronage to party activists. Paternalism, in the form of centralized authority and hierarchy, has been the dominant mechanism in Bangladesh (Aminuzzaman, 2013; Jamil et al., 2013). It has a long tradition, starting with colonial powers, and it is now deeply rooted within the political landscape. For

¹⁸ Officer on Special Duty (OSD) – an administrative provision to engage public officials to carry out extraordinary and exceptional kind of jobs withdrawing him/her from regular duties. It has been observed by scholars that after assuming office, the ruling political party started accusing a section of civil servants to be of their opposite camps and invoked the provision of OSD as the first measure against them.

example, during elections, deputy commissioners (DCs) play a crucial role at the district-level, and the ruling regime takes “special care” in appointing party loyalists to the post (Osman, 2010). A politically “fit list” of DCs is prepared to identify 64 loyal officials (for each of 64 districts) out of 4,500 administration cadre officials, which is often influenced by the ruling party. If the ruling party is not fully convinced about the loyalty of an official, the Prime Minister’s Office (PMO) asks the intelligence agencies to submit a negative report about the official concerned to declare him ‘unfit’ for the post of DC (ibid). Additionally, in case of important transfers, political choice is the criteria. Officials disloyal to the party in power are also usually punished through bad postings, meaning transfers to underdeveloped areas. On the other hand, ‘juicy desks’ (having scope for earning extra income) are offered to the officials loyal to the ruling party. Making the officials having links with the opposition OSDs has become another practice common to each party. This is a position that is used as a punishment; in essence it means being a civil servant without a post.

While the IDC’s influence remained dormant in the 1980s for bringing about structural-behavioral changes, the beginning of the democratic era in Bangladesh in 1991 allowed for more support towards administrative change in Bangladesh. The democratic era marked an expansion in the political and other constitutional bodies’ roles in controlling the bureaucracy and enforcing accountability, and it was expected to improve citizens awareness about their constitutional rights, and access to public information and services. From the IDC’s perspective, which included the World Bank, the United Nations Development Program (UNDP), DFID, and Asian Development Bank (ADB), there was a lack of political commitment and low level of bureaucratic willingness to implement administrative reforms in Bangladesh (Zafarullah, 2002). This view was substantiated and supported by representatives from UNDP (r28,

interview, July 30, 2019), DFID (r30, interview, January 17, 2020), Islamic Development Bank (IsDB) (r29, interview, January 15, 2020), and a former director general of ADB (r16, interview, September 05, 2019). According to r16, there was hope in the early 1990s for changing bureaucratic behavior, but this eventually was eclipsed by the political parties continued practice of patronage and politicization (interview, September 05, 2019). The IsDB representative (r29) indicated to the changing role of IDC in terms of providing new forms of organizational support to bureaucrats, to engage in institutional change efforts (interview, January 15, 2020).

The bureaucracy was only focused on adjusting to the political goals of different regimes, which was more about political preservation and getting re-elected using the administrative machinery (r16, interview, September 5, 2019). It was distrustful of political authority which choked the possibility of top-down administration. In January 2007, the military intervened to setup an NCG. This was a critical juncture for Bangladesh's bureaucracy as it had to work with the military and non-elected officials once again, as it did between 1975-1990. The military backed NCG attempted to carry out political and administrative reforms, some of which created favorable conditions for the next elected government to carry out its Digital Bangladesh reforms, after it assumed office in 2009. The present Section 3.2 provides an analysis of the political environment and bureaucratic behavioral characteristics, prior to discussing some key initiatives in Section 3.3 which were influenced by the international ideas in creating the scope for incremental bureaucratic change opportunities.

3.2.1. 1991-1996: Bangladesh Nationalist Party (BNP) government

As a result of the new political context beginning in 1991, the entire bureaucracy – from top to the field-level – witnessed massive politicization. The BNP started recruiting bureaucrats who had previous affiliation with the party and did not require

academic or professional qualification to meet the criteria for being employed as a bureaucrat (Jahan, 2006). Besides manipulating the recruitment process, politicization appeared in the placement of party loyalists in important top-level civil service positions (ibid)¹⁹.

Politicization of the bureaucracy pushed bureaucrats to exhibit political loyalty towards the incumbent government – a behavior which was embedded as a result of the dual colonial legacy, followed by its replication by successive governments after independence. For example, the BNP government implemented a decentralization scheme to make the public service delivery process less cumbersome for citizens residing in rural areas. The scheme allowed national level bureaucrats to retain control over local affairs, and in collusion with local politicians and elites, field-level bureaucrats engaged in corruption and unethical practices (Hossain, 2009; Lewis & Hossain, 2019). The elected chairpersons of the Upazila Parishad (subdistrict council) were replaced by government officials, where they consolidated more administrative authority at the local field-level governance affairs. Later, the BNP government introduced two new layers: a union parishad at the union level and zila Parishad (district council) at the district level, where the upazila level field-officers, known as Upazila Nirbahi Officers (UNOs), exercised both fiscal and administrative authority (Rahman, 2002). This process stalled bureaucratic reform and indeed was a setback for it led to a more inward change in behavior, granting it more authority to control local administration affairs, as it had during the colonial time.

The direct election of mayors and commissioners of four city corporations was held for the first time in Bangladesh. The Administrative Reorganization Committee

¹⁹ The BNP government promoted as many as 654 officials and issued orders of forced retirement to at least 51 civil servants, most of whom were never shown any reason for this order.

(ARC), a bureaucracy-laden committee comprising of top-level bureaucrats, was appointed to recommend public administration reforms. It was suspicious of the politicians and other partners of institutional change (Zafarullah & Khan, 2001). The ARC deliberately spent a long time, nearly three years, in preparing a detailed report which was shelved when the BNP lost the parliamentary election in 1996. What is of interest here is that during a brief political uncertainty period in 1996, when BNP rejected the demand for organizing election under a NCG, a few senior bureaucrats played a partisan role in mobilizing the administration against the incumbent government by publicly supporting the main opposition party, i.e., the Awami League (Rashid, 2014).

For example, Mohiuddin Khan Alamgir, a bureaucrat trained in CSP ethos and a member of the Planning Commission in 1996, staged a mass uprising that considered the tenure of the BNP government illegitimate. He eventually led civil servants to withhold cooperation. Alamgir's role in that movement was controversial and opened new windows for bureaucrats to further solidify their position with the political system. Alamgir's loyalty toward Awami League encouraged other bureaucrats to break their traditional neutral role and engage in political activities and ambitions (r16, interview, September 05, 2019). Alamgir contravened the rules of conduct that prevent BCS bureaucrats from getting directly involved in politics, and this practice of demonstrating explicit political loyalty continues to date. The backlash from a powerful bureaucracy objecting to continue operating under a non-elected political party demonstrated the strong influence of public administrators in the political context of Bangladesh. By explicitly demonstrating political partisanship, after returning to democratic rule in 1991, the bureaucracy found a new way of preserving their functions in the political system by resisting efforts aimed institutional change. This incident demonstrated the

overdeveloped bureaucracy in Bangladesh which succeeded to overthrow a government without requiring any form of military intervention.

3.2.2. 1996-2001: Awami League government

The Awami League (1996-2000) continued the process of politicization. This new political loyalty further deviated the bureaucracy from its focus on serving citizens, making it take a more inward look into consolidating its own autonomy for self-preservation and career development purposes. Political parties rewarded politically loyal civil servants by promoting them into higher positions which frustrated other bureaucrats who were in line for promotion (Huque & Rahman, 2003)²⁰. Political loyalty trumped merit in recruitment, transfer, and promotion processes.

After assuming office in 1996, Prime Minister Sheikh Hasina, on advice from her son, Sajeeb Wazed Joy, decided to connect the country with the Information Superhighway through the Bangladesh Submarine Cable Network project. According to (r9), “Joy was eager to connect Bangladesh to the Internet mainly for the reason that he, like millions of expatriates as myself working abroad, could keep in touch with his mother and family (interview, July 21, 2019).” The intervention of Sajzeeb Wazed Joy, the current ICT Advisor to the Prime Minister (his mother), was a turning point in the history of e-Government as the offer to connect to the Information Superhighway was rejected twice – once in 1988 by the then military dictator, Lieutenant General H.M. Ershad, and later in 1994, by the BNP government (r1, interview, August 22, 2019). The rationale for this rejection rose from the fear of free flow of information, and under the pretext of protecting classified state information (Hasan, 2003). Ambiguity,

²⁰ For instance, in 2000, the government promoted 355 officials, depriving many competent officials of promotion, as the government was not sure about their political loyalty, which was a violation of rank and seniority (Jahan, 2006).

ignorance, and doubts expressed by the bureaucrats concerning the utility of the Internet and ICT influenced this decision.

After 1996, bureaucrats found it rational to align their interest with the political objectives of the government. They found it difficult to resist the changes which were happening around the South Asia region (r1, interview, August 22, 2019). The government's commitment to e-Government was expressed when ICT was designated as a thrust sector in 1997, backed by a block allocation of US\$ 6 million in the 1997–1998 annual budget for its development (Taifur & Chowdhury, 2003). In 1998, the National Telecommunication Policy was formulated ensuring the role of private sectors to facilitate universal telephone services, for example, cellular mobile telephones, paging, data services, access to the Internet, voice mail and video conferencing, etc., throughout the country.

A National ICT Task force was formed in 2000 and headed by Prime Minister Sheikh Hasina. The ICT Task Force was housed in the Planning Commission and the Support to ICT (SICT) Task Force Project was launched by UNDP in 2000 with the objective of exploring ways of how to make bureaucrats use technology for changing the paperwork-based routines and serving citizens in new ways (r15, interview, July 21, 2019). The Awami League government also set up the Public Administration Reforms Commission (PARC) in 1996 which made recommendations borrowing ideas from NPM, NPG and DEG models of the time. PARC envisaged improving bureaucratic efficiency, and for bureaucrats to adopt new managerial techniques in discharging responsibilities towards citizens, e.g., by using e-Government (GoB, 2000). One reform proposed by PARC was to enable customers to pay all their utility bills at one place, at the same time. This proposal echoed DEG elements and required bureaucrats to use technology in organizational and procedural aspects of public service

delivery processes. PARC's recommendation was not implemented until later in 2010 when the one-stop utility bill payment system was operationalized (see chapter 4.3). PARC failed to articulate "learning by doing" mechanisms which would allow bureaucrats to engage in new managerial, entrepreneurial type of experiential learning for designing e-Government related strategies toward service delivery simplification (r16, interview, September 05, 2019).

Another recommendation by the PARC was the introduction of e-Government for improving service delivery processes, and for combating corruption (GoB, 2000). PARC's report called for organizing all "information, procedures, list of services of a particular department, and requirement for the services to be preserved in the computer at the reception from where a customer can easily get information on the status of the services, he/she has sought" (GoB, 2000, p. 91). This was similar to what the ASRC had recommended in 1972, in terms of simplifying service delivery processes using technology. Nevertheless, PARC did not recommend for an entity to drive e-Government as the ASRC had done earlier after the independence of Bangladesh. PARC recommended increased budgetary allocation and comprehensive training programs. The latter would equip bureaucrats with new managerial skills required for using technology in their offices and collaborate with other offices in becoming more responsive to citizens' needs. Such recommendations were tailored to provide tools and protection for bureaucrats to experiment with new ideas in using e-Government. Although there was no immediate change in bureaucratic behavior, Awami League's commitment to ICT spilled over into electoral politics.

The issue of e-Government and usage of ICT across the society became a central issue in the October 2001 general election in Bangladesh (Hasan, 2003). Both major parties pledged to advance the ICT sector. The BNP's manifesto pledged to establish

an Internet village with skilled IT experts (Daily Star, 2001a). It also pledged to make telecommunication, including Internet facilities, easier to use and less expensive. The Awami League countered with its own election manifesto pledging to encourage the growth of the ICT sector. Its manifesto also supported the establishment of an IT park for improving the performance of ICT industry, as well as the expansion of IT industry and e-Commerce in Bangladesh (Daily Star, 2001b). However, a national vision for digital transformation was not under any political radar in the early 2000s which would allow bureaucrats to understand the urgency and value of using technology.

3.2.3. 2001-2006: BNP government

The e-Government related initiatives continued – a point which has been missed in current public administration and governance literature – under Begum Zia’s second term. Bangladesh adopted the first ICT policy in October 2002 after BNP assumed office in 2001. The ICT policy aimed at building an ICT-driven nation comprised of a knowledge-based society by 2006. The ICT policy relied on 103 policy directives in 16 policy sectors, for example, human resource development, ICT infrastructure, research and development, e-Commerce, e-Government, agriculture, transportation and judiciary (GoB, 2002). The policy also highlighted taking the Internet facility up to upazila (sub-district) level and recommended guidelines for funds and resources and institutional arrangements for ICT policy updating, standardizing, implementation, and monitoring. However, the policy failed to achieve its goals within the stipulated time as it was too ambitious, and the weak implementation capacity of the concerned agencies, along with increased politicization of the bureaucracy, deterred focus of the public administration from ICT related priorities (r16, interview, September 05, 2019).

Despite adopting new measures aimed at improving governance, Begum Zia's second term as the Prime Minister (2001-2006) was plagued by corruption, religious militancy, and terrorism and Bangladesh was identified as one of the top five corrupt countries in the world (successive reports by Transparency International). Politicization of administration continued in numerous modes: mass in-service promotion of officers submissive to BNP; punishment of bureaucrats who had demonstrated an affiliation with Awami League; placement of party loyalists in crucial positions in the civil service; and appointment of loyal supporters as chairman and members of the BPSC (Zafarullah, 2002).

Politicization of the bureaucracy through promotion and appointment of OSDs continued but to a new party in power²¹. With the consent of PMO, an unofficial cell was created to make sure that no civil servant sympathetic to Awami League was promoted (Khan, 2003). Although both the Awami League and BNP engaged in politicization activities, the former was more willing to undertake citizen-centric changes given its role in the Liberation War of 1971 (r31, interview, January 22, 2020). On the other hand, BNP relied on religious parties and had members who had opposed the Liberation War. The Awami League comprised members who believed in the postcolonial ethos of making the bureaucracy more subservient to citizens' needs, which was repeatedly echoed by Sheikh Mujibur Rahman after the independence of Bangladesh during his public speeches, and later by Prime Minister Sheikh Hasina, after she assumed office in 2009 (see Chapter 4).

The rivalry between the two parties has been well documented by scholars (Hasanuzzaman, 1998; Jahan, 2015a; Osman, 2010), supporting the argument how each party dismantled each other's initiatives when they assumed office, starting with halting

²¹ The BNP government appointed 978 officials as OSDs (Jahan, 2006).

large-scale construction projects to making changes in ongoing projects to undermine the preceding government's credibility. However, studies are missing on why both the political parties' interests to invest in Voice Over Internet Protocol (VoIP) commercial activities. Under the Awami League's political protection, VoIP licenses were granted to particularly businesses which were loyalty to the party, and this trend continued after 2001, when the business expanded further and led to corruption at the top-level political leadership (Noman, 2014).

While commercial interests led to further private sector investments in ICT, the BNP government also faced pressure from the IDC, particularly UNDP, USAID, and World Bank, to invest in e-Government (r15, interview, July 21, 2019; r31, interview, January 22, 2020). Consequently, this resulted in the implementation of some new training initiatives aimed at administrative behavioral change for the adoption of e-Government. This political linkage is important to show how political rivalry and opposition did not lead to the dismantling of the e-Government project. For example, besides the ICT policy which extended and formalized e-Government commitment on paper, an e-Government cell was established in late 2006 at the PMO with the responsibility to initiate, coordinate and monitor SICT project's activities across the government agencies (Hasan, 2003). The SICT project was relocated to the PMO with a new name – Access to Information (a2i). The a2i project was initiated in September 2006 with support from UNDP and USAID, and it started operating formally in March 2007, given the political uncertainty which surrounded the eighth parliamentary elections near the end of 2006, according to a former UNDP country director (r15, interview, July 21, 2019).

Besides the SICT and a2i projects, the MATT initiative was implemented with support from the UK's DFID in 1999, and later implemented as MATT-II between

2006 and 2013. The Total Quality Management (TQM) project was implemented with support from JICA in 2007 and scaled up in 2013. Therefore, despite the overt politicization of the bureaucracy under governments of different political parties, these administrative behavioral and e-Government initiatives flew under the political radar and managed to persist and survive. Politicization mattered in thwarting reforms which were proposed by the different national commissions, but it was less influential on the ones supported by an external donor agency. The linkages between the different initiatives have been ignored by the mainstream literature and a closer examination of SICT, MATT and a2i in section 3.3, reveals how behavioral change related initiatives were implemented initially and later tailored to reorient bureaucratic behavior for e-Government implementation.

The IDC played a key role in the 1990s as Bangladesh looked for external support to implement public sector reforms. After the restoration of parliamentary democracy in 1991, successive governments appointed many commissions and committees to recommend new layers and remove old rules, for making the bureaucracy less colonial and more citizen-centric in its efforts to meet society's expectations. In particular, scholars have focused on examining the impact of PARC in being the first of its kind to envisage modern reforms, based on NPM model (Mollah, 2014; Zafarullah, 2002; Zafarullah & Sarker, 2016), but not its links with the DEG and NPG models, which is done in this present study. The political environment between 1996 and 2006 allowed for some changes to take place, through connecting Bangladesh to the Information Superhighway, declaration of ICT as a thrust sector, establishment of the ICT Taskforce and creation of the first ICT project to embed the use of ICT at the administrative level. Reforms failed mainly because all the committees were headed by bureaucrats who were not willing to adopt the new ways of serving citizens, and

instead, focused on consolidating more power and autonomy through displaying political loyalty. On the other hand, the success of political patronage motivated bureaucrats to also express loyalty explicitly which started to change incrementally after the emergence of e-Government based, broad ICT reform agendas which are discussed in section 3.3.

3.2.4. 2007-08: Non-party Caretaker Government (NCG) by the military

Near the end of the BNP's rule in 2006, a controversy over the head of NCG fomented nationwide protests and shutdowns. In January 2007, the head of the BNP appointed NCG was forced to step down under pressure from the military and Fakhruddin Ahmed, a former World Bank economist, was selected by the army to lead the NCG. The involvement of army officers in administration was a consequence of the general involvement of the military in politics since the 1975 coup and this intervention was no surprise. The main agenda of the NCG was to organize a free and fair election in 2007.

Emergency law was declared and a massive campaign to crack down on corruption began with the arrest of political leaders and a "minus two" formula to exclude the leaders of Awami League and BNP, Sheikh Hasina and Begum Khaleda Zia, respectively, from further contesting in parliamentary election (Jahan, 2015b). However, this move backfired as protests for election grew nationwide and the NCG was forced to organize national election on 29 December 2008. The Awami League led *Grand Alliance* won with an overwhelming, absolute majority with a political manifesto, largely owing to its Vision 2021 or the Digital Bangladesh change agenda.

Between 2007 and 2008, the military backed NCG took several new initiatives which were a success: credible and reliable voter lists, Citizens Charter, Right to Information (RTI) Act, establishment of the Regulatory Reforms Commission (RRC)

to simplify business and commercial service-related procedures, and revising the *Secretariat Instructions, 1976*. An initiative was implemented between 2007-2008 for the preparation of a credible voter list using ICT, with technical assistance from UNDP. In the course of the project, common citizens of the country at the rural and semi-urban level, most of them for the first time in their lives, saw a computer connected to a camera, and appreciated ICT's immense potential (Kalimullah, Hassan, & Sarkar, 2013). Although formally launched in 2006 to support the e-Government cell, the a2i started its work by providing key support to the Bangladesh Election Commission, with the preparation of the election.

The NCG, comprising senior-level bureaucrats who had prepared the PARC report, recommended implementing Citizens Charter in a few public agencies. Such charters are ubiquitous across the world in various forms as boards outside offices in poorer countries as opposed to digital versions in more developed countries. These are aimed at informing citizens about the service delivery mandates and processes so that they are informed about the waiting time, and how they could use grievance redressal measures in case they face problems in the process (Thomassen, Ahaus, Van de Walle, & Nabitz, 2014). Starting the process of implementing Citizens' Charters in 2008 across Bangladesh, backed by UNDP and DFID funding, was a success of the NCG. However, its impact on increasing citizens' understanding about services and simplifying bureaucratic processes was futile. A study carried out by Civil Service Change Management Program (CSCMP) pointed out that the charters initiative was formulated without taking into consideration the capacity of the local field administration to actually deliver the services (CSCMP, 2009). The CSCMP report further pointed out that field-level administration was not made aware of the Citizens Charter initiative. The Charter were designed to instill transparency, accountability and responsiveness in

service delivery process and trigger a collaboration process between different bureaus in serving citizens better. This collaboration was envisaged by the Charter, but the initiative was not designed taking into consideration the administration challenges in collaborative arrangements, which caused a lack of enthusiasm to uphold and practice the charters' values and ethos at the field-level (r24, interview, January 7, 2020). Members of the BCS also needed to have relevant training on how to internalize the values of citizens charter which called for increased accountability, responsiveness, transparency, and participation.

Thus, the type of administrative behavioral change envisaged by Citizens Charter did not yield the desired end, but it created conditions for getting the attention of political parties and bureaucrats, for focusing on citizens' needs. For instance, it led to an institutional memory that one of the major reasons for its failure was the non-involvement of the field-level office. The RTI initiative was also implemented at the same time as the charters, with the ambition of creating a demand-driven service delivery process. However, RTI shared a similar fate as the charters, and did not yield the desired results because it did not consider the ability of field-level bureaucrats for implementation, while bureaucrats were more concerned with establishing new loyalty with the military government.

The NCG created the RRC in October 2007 to undertake research into regulatory issues and making recommendations about how the paperwork system could be improved. The RRC reviewed and reported on the stock of existing regulations, proposed certain new regulations and regulatory reform programs and tools, such as regulatory impact assessments. According to a former member of RRC, out of the total 135 recommended reforms, 46 were implemented and 9 were partially implemented (r19, interview September 09, 2019). Some key recommendations included

streamlining of administrative procedures for reducing approval times, and digitization of land records given that an overwhelming majority of cases in courts are related to land disputes²². More than half of RRC's recommendations were not implemented because of the prevailing attitude of non-cooperation from different government organizations (). The RRC was disbanded after 2008, unlike the RTI Act and Citizens Charter which were continued to promote the Digital Bangladesh. Although most of RRC's members had no political affiliation, it was seen as a military tool by the Awami League (r16, interview, September 05, 2019).

The NCG took a key step and revisited the colonial *Secretariat Instructions* - a manual for the government officers to be followed in administrative operations. The new *Secretariat Instruction 2008* recognized various tools of ICT but did not articulate the way technology was to be used in the offices. The *Secretariat Instructions 2008* provided a general guideline to ensure the maximum use of ICT in all possible functions of all divisions/departments at the Secretariat. It was further revised in 2014 and Chapter 4 presents a detailed analysis of the new changes, based on interviews with the committee members who were appointed to revise the *Secretariat Instructions 2008*, for implementing e-Government across the government (r7, interview, September 5, 2019; r9, interview, July 21, 2019).

The military government introduced new rules to correct some of the Weberian-colonial features of the public administration system. During its rule, BPATC and JICA started implementing TQM projects at the field-level, which embodied NPG and DT perspectives. In the same year, the a2i launched a series of Quick Wins exercise to motivate top-level bureaucrats at the ministry level to identify services which could be

²² An editorial noted that the 60 per cent of the recommendations put forward by the RRC could not be implemented because of the prevailing attitude of non-cooperation from different government organizations (Daily Star, 2008).

improved using e-Governance means, as had been done earlier through MATT. In the following section, these different projects and initiatives are discussed to demonstrate how the conditions were created for administrative behavioral in driving forward the e-Government implementation process. The incremental administrative behavioral change started to take a firmer standing within the bureaucracy after the onset of Digital Bangladesh in 2009 (r15, interview, July 21, 2019; r16, interview, September 5, 2019). Many of the initiatives which started during the NCG period were institutionalized after the restoration of parliamentary democracy in 2009.

The RTI Act, Citizens Charter and Quick Wins training, started by the NCG were successful as opposed to RRC and other initiatives such as the Bangladesh Better Business Forum. The successful changes involved service delivery reforms using ICT, which generated interest in top-level bureaucrats working at the PMO and Cabinet Division to adopt e-Government. At the same time, the work of a2i was intertwined with NCG's public service delivery reforms and this ensured their continuity after the NCG handed over power to a democratically elected government in 2009. Building capacity of bureaucrats for e-Government implementation gained new momentum after the Awami League government assumed office in 2009, having launched the vision of Digital Bangladesh as part of its election manifesto in 2008. The importance of Digital Bangladesh as a political vision is further examined in Chapter 4 which demonstrates that despite politicization, e-Governance reforms continued on the ground for the implementation of e-Government service delivery to citizens.

3.3. Reforms: Projects and capacity building initiatives

The following discussion demonstrates how some reforms continued to take place, despite political rivalry and massive politicization of the bureaucracy. Although

the success of training initiatives in bringing about a behavioral change was incremental, such initiatives demonstrated the gradual willingness of the bureaucrats to accept reforms and change their ways of thinking of how the bureaucracy was supposed to work. The many reforms introduced by the NCG were implemented and most were taken forward by the newly elected government which assumed office in 2009. Such changes resulted from different rules, policies, and initiatives, which were influenced by public administration reform models of the previous political regimes, mixed with the prevailing global discourse of the time.

Table 3 summarizes the discussion in terms of the different administrative behavioral and e-Government projects. The analysis begins with the MATT initiative in 1999 which trained 1,649 top-level bureaucrats and started an incremental behavioral change process at the top of the administrative hierarchy through the introduction of performance improvement projects (PIPs). The SICT project was implemented between 2000 and 2005, and it was the first to prepare a roadmap for e-Government implementation. The SICT project was renamed to a2i in 2006 and shifted to the PMO. The a2i has the longest project history in Bangladesh and it has been in operation to date (2021). More than 40,000 government officers have received training for using technology in their workplace and for implementing innovation in service delivery process. The a2i introduced a method of innovation to complement the service delivery simplification process. It carried out SICT's recommendation for setting e-Governance focal points across all ministries and extended it to the field-level administration through the creation of innovation teams. In 2015, the a2i implemented the Empathy Training Program (ETP) embodying a whole-of-government approach in training bureaucrats to implement e-Government. The ETP drew upon lessons from JICA's

TQM and Kaizen projects which were implemented between 2007 and 2010, and then scaled up for implementation between 2013 and 2018.

The subsequent analysis demonstrates that SICT and MATT informed the design of capacity development programs aimed at public service delivery innovation under the Digital Bangladesh agenda. This analysis, based on interviews with a former MATT project director, DFID, UNDP, BPATC and a2i representatives, sheds light into how organizational learning can take place and be transformed within the appropriate context by the people in-charge. A key finding is that IDC agencies played an important role in introducing training programs and creating learning opportunities for bureaucrats to engage in service delivery improvement efforts using technology. However, respondents from DFID and BPATC, who were involved in the MATT, SICT, TQM and a2i projects, were not aware that their efforts had laid down such deep roots (r5, interview, August 21, 2019; r9, interview, July 21, 2019; r15, interview July 21, 2019; r30, interview, January 17, 2020). The JICA project focused on the local level and provided training to more than 2,000 field-level bureaucrats for improving service delivery processes through small improvement projects (SIPs). The MATT and Kaizen approach started to mold the bureaucratic experience in a way that it led to bureaucratic entrepreneurship type of efforts within the public sector, with the launch of Quick Wins exercise in 2008 (r15 & r30). Such efforts are seen as creating the endogenous conditions for carrying out e-Government, and these are discussed in this section.

Table 3: Summarizing major capacity building initiatives aimed at changing bureaucratic behavior

Year	Projects and initiatives	Activities and achievements	Total number of trainees (female)	Behavior change
1999-2002	Managing at the Top (MATT-I) by DFID	<ul style="list-style-type: none"> • Performance improvement projects (PIPs) for top-level bureaucrats • Creation of PIP teams across the top-level bureaucracy 	326 (34)	<ul style="list-style-type: none"> • Incremental change at the top-hierarchy, some exposure to citizens' needs
2006-2013	MATT-II by DFID	<ul style="list-style-type: none"> • PIPs and field-visits • Creation of a coalition of reform-minded top-level bureaucrats 	1,323 (147)	<ul style="list-style-type: none"> • Scaling of MATT demonstrated bureaucrats' interest in behavioral change programs
2000-2005	SICT by UNDP	<ul style="list-style-type: none"> • Preparation of e-Governance roadmap • Outlining key areas for the implementation of technology use by top-level and mid-level bureaucrats in the ministries 	276 (26)	<ul style="list-style-type: none"> • Change in bureaucratic behavior by generating interest in using ICT and creation of e-Governance focal points at the ministry level
2006 to date	Access to Information or Aspire to Innovate (a2i)	<ul style="list-style-type: none"> • Training workshops, forums, and seminars for all bureaucrat through Quick Wins initially • Creation of Innovation Teams across the public administration structure 	40,000+ (8,946) (incremental change across the government)	<ul style="list-style-type: none"> • Back-end citizen-centric innovations starting with the creation of Union Digital Centers (UDCs), national portal of Bangladesh, business process simplification
2008-2012	Quick Wins by a2i	<ul style="list-style-type: none"> • Time, cost, and number of visit (TCV) led Service Process Simplification (SPS) 	3,786 (234) (incremental change at the top-level)	<ul style="list-style-type: none"> • Behavioral change through back-end process simplification
2007-2010	Total quality management (TQM) by JICA	<ul style="list-style-type: none"> • Small improvement projects (SIPs), or one-year-one-project (OYOP), • Work Improvement Teams (WITs) at the field-level in rural areas 	476 (82)	<ul style="list-style-type: none"> • Step toward field-level service delivery improvements through TQM methods
2013-2018	IPS-TQM by JICA	<ul style="list-style-type: none"> • SIPs at the field-level • Merging WITs with Innovation Teams 	1,876 (246) (incremental)	<ul style="list-style-type: none"> • Work Improvement Teams (WITs) in the field-level created

			change at the bottom)	leading to more internal collaborative behavior
2015 to 2018	Empathy Training Program (ETP) by a2i	<ul style="list-style-type: none"> • TCV based innovation implementation through innovation plans for all members of bureaucracy starting with field-level to ministry-level bureaucrats 	3,786 (436) (incremental change at the bottom)	<ul style="list-style-type: none"> • CIOs, field-level bureaucrats engaged in experimentation activities to become more entrepreneurial and empathic

Source: Compiled from reports collected from the BPATC library, and interviews with government and IDC representatives

3.3.1. SICT Project: Dawning of e-Government in Bangladesh²³

The seeds of e-Government were sown in 1996, but only in a haphazard manner. There was a clear political willingness by the Awami League (1996-2001) led government to connect Bangladesh with the information superhighway. However, there was no clear guidance on how the PARC's recommendations for using technology would be implemented for improving public service delivery to citizens. PARC's recommendations on e-Government with the design of SICT became clear later after the project's implementation during the BNP (2001-2006) government. "The tasks of the SICT project were to mainly connect government offices with Internet and train bureaucrats to use it for improved performance (r15, interview, July 21, 2019)." The SICT project had specific goals which combined NPM and DEG ideas:

- Videoconferencing: Establishing an alternate communication network to enhance the speed and efficiency of decision-making and follow-up actions. This has become a reality today where the prime minister is regularly attending virtual meetings and conferences, for example, when inaugurating projects which are far from the Capital. Given the outbreak of Covid-19, all government agencies are using online video conferencing platforms for holding their regular day-to-day meetings. The process was started by SICT in 2003 but it did not have much impact given the low level of internet connectivity and its usage by citizens and government alike.
- Digital towns: SICT, drawing upon PARC's recommendation on digital towns, tried to explore ways for creating service delivery access points, so that citizens could get access to the Internet and to public information and services. The

²³ Information on SICT was collected during an interview with a former country director of UNDP Bangladesh, (r15, interview, July 21, 2019).

SICT report noted that “without such facilities, G2C [government-to-citizen] and G2B [government-to-business] services may not be able to reach target population easily” (Taifur & Chowdhury, 2003, p. 18). Today, there are thousands of Union Digital Centers (UDCs), which are working all over Bangladesh at the rural level and providing services to nearly 4 million citizens per month (BBS, 2014).

- Web portals: Government agencies had websites which were not unified under a common system (Taifur & Chowdhury, 2003). This caused problems for citizens to navigate their websites. A common interoperability framework was required for ensuring the harmonization of the structure and software, with the aim of ensuring that contents can be monitored easily by the Cabinet Division, and they are updated by the respective bureaus. The national portal of Bangladesh was launched 12 years after SICT’s initial works, and it is discussed in Section 3.2.2.
- e-Governance reforms: Improve the effectiveness, efficiency, transparency, and accountability of government through ICT application. However, the problem was translating the value of using technology to bureaucrats so they could adopt e-Government for improving service delivery processes to citizens. The SICT project tried to introduce concepts such as business process re-engineering (BPR) for serving citizens in new ways using technology, but these were strongly resisted by bureaucrats who were not keen on learning private sector’s techniques with innovation.

The SICT project prepared the first roadmap for e-Governance which included directions for government process re-engineering from the infrastructure perspective (number of computers, operators, internet connectivity), and promoted the pioneering

initiative to build leadership for ICT enabled change in civil administration (Taifur & Chowdhury, 2003). Appointment of a senior officer as ICT or e-Governance “focal point” for each ministry started in 2008 by a2i, but little awareness and a lack of interest within the administration challenged e-Government progress in public service delivery. For the use of Bengali font in electronic format, the roadmap argued there should be standardization of fonts that maintain international UNICODE standards. According to the project director of a2i, an additional secretary of MoPA, “without the use of Bengali font in paperwork, it was impossible for the government to seriously start using computers (r4, interview August 20, 2019).”

Since communication and official documents in the government were done in Bangla, this standardization was a very urgent need without which, integration of ICTs with government activities would have to face major, operational (paperwork) hurdles. To enhance and facilitate use of Bangla alphabet in all computer-generated government works, the Cabinet Division issued a circular in 2011 stating the government order to use a specific Bangla Unicode in all official works. To observe the implementation status of Unicode, a small scale survey was done by Cabinet Division in 2019 across different offices in district level and in the ministries (Rahman, Harun, Chowdhury, Haque, & Kabir, 2019). The survey showed that 65 per cent officers from district level and all officers from the ministry/directorate level were using Unicode while preparing documents (ibid). The key challenge at the field-level is the lack of training for government officers to use Unicode font while no official instruction has been issued banning the use of other fonts.

The SICT project functioned as an internal facilitator in conceptualizing, planning and prioritizing e-Government related projects, and provided funding and technical assistance to line ministries for implementation. It lacked political patronage

and could not undertake any significant training initiatives which would allow bureaucrats to engage in a “learning by doing” design approach. It led to some positive change such as creation of websites in ministries of finance and planning but did not lead to positive qualitative change in bureaucratic behavior. It was concluded by a former UNDP director, who oversaw the funding and implementation of both SICT and a2i projects, that the former remained largely inactive due to its Awami League affiliation. However, “the SICT project became the *de facto* implementation wing of the executive committee in 2006 under a new project call the a2i” (r15, interview, July 21, 2019). The e-Governance roadmap prepared by the SICT project was instrumental for a2i to kick-off its e-Government works initially in 2007, and later, to attract political and top-level administrative support for the implementation of e-Government projects under Digital Bangladesh after a new government assumed office in 2009 (r9, interview, July 21, 2019).

3.3.2. Managing at the Top (MATT): The first behavioral change initiative²⁴

Besides SICT, the MATT training initiative (1999–2002, and 2006 to 2013) was pushed by successive governments. MATT-I was financially supported and launched in 1999 by DFID during the Awami League rule and it ended in 2002, at the time of BNP government. MATT-I aimed at creating a group or coalition of reform-minded civil service bureaucrats (Hossain, Kumasey, Eldridge, Kravariti, & Bawole, 2018). These civil servants were at the top-tier of the hierarchy (Class-I). Unlike SICT, it aimed at stimulating behavioral changes through the creation of a reform minded group of bureaucrats who were at the top layer of the government.

²⁴ Information and insights on MATT’s impact, and its broader implications, were provided by a former project director of MATT-II (r5, interview, August 21, 2019), a BPATC director (r7, interview, September 5, 2019), and a DFID representative (r30, interview, January 17, 2020).

MATT set the precedent for bureaucrats to leave their bureaus, and to visit areas of their choice to better understand the service delivery challenges encountered by citizens. This behavioral change initiative aimed at generating empathy of top-level bureaucrats by exposing them to citizens' problems through a self-organized visit. MATT participants chose urban slums, tea plantations, brickfields, squatter settlements and rural community projects to investigate conditions and interview people who were located at their convenience (Ullah, 2018). This particular step was important as it was assumed that such exposure would change the behavioral norms of top-level bureaucrats, and enable them to better manage their units for better performance and service delivery to citizens (Majeed, 2011).

For government officers, MATT was a new experience which was initially “shocking” and confirmed the way in which the BCS was isolated from the needs of the people” (Jacobs, 2009, p. 224). Under MATT-I, one Deputy Secretary was able to dispose of pension cases among teachers by devolving decision making to the district level. In six months, he had cleared a backlog of 108 cases and previously, an individual case would have taken up to 2 years. There is good evidence that top-level bureaucrats in Dhaka gained insight into many areas including public service, good governance (free and fair elections), anti-corruption measures and the importance of innovation in a knowledge based economy (Jacobs, 2009). However, politicization of the bureaucracy meant that such understanding needed to be aligned with political goals, which was often not the case. The behavior of senior level bureaucrats changed only to allow for incremental improvements, without transforming the structures and processes, which were established during the colonial time.

Once MATT-I was completed, the trained civil servants requested that the government and DFID scale up the initiative. MATT-II was launched four years later

in 2006 after MATT-I ended in 2002. MATT-II was introduced during the BNP rule and the training program lasted until 2013, covering the NCG (2007-08) and the Awami League government (2009 to date). Given that MATT focused on top-level bureaucrats most of whom had financial authority, it led to changes in budgetary provisions which aimed at broad changes – such as gender empowerment, building better shelter homes for the poor, better water supply to remote areas. “MATT-II aimed at big changes in the bureaucracy, but it lacked the tools to change the perception of bureaucrats. Thus, it resulted some 200 projects which were broad in their results, and not at all specific to changing bureaucratic behavior in a way to improve service delivery processes to citizens (r5, interview, August 21, 2019).”

MATT-II followed a two-staged training process and the knowledge from stage I was particularly useful for the government to design training programs for the implementation of e-Government after 2009 (see chapter 4). The first stage included training up to 300 officers per year by exposing them to a learning-by-doing training process. MATT participants focused on work-based reform through the development and implementation of PIPs on different reform topics, led by teams of five to six participants (Jacobs, 2009). These teams were designed as Work Improvement Teams (WITs), following the Singapore model where bureaucrats had freedom and autonomy to introduce new technology for changing the existing service delivery processes. Participants, or the WITs, were expected to implement the PIP in their line of work in the subsequent months²⁵. The idea of bureaucratic autonomy and responsibility of each member to engage in change management projects was first introduced under MATT,

²⁵ These WITs undertook a two-week regional exposure visit to Singapore, Malaysia, or Thailand to learn about best practices for service delivery improvement for their PIPs.

which resulted in incremental behavioral change of bureaucrats when implementing PIPs (r5, interview, August 21, 2019).

In stage II, the best officers from stage I were selected for the next level training at the UK universities. Officers usually worked in four “Super” PIP (S-PIP) teams which were involved in a six-week placement courses. This was then followed by a six-month S-PIP project implementation period conducted at more regional and national level. It was expected the training in the UK would provide S-PIP teams with the skills required for implementing their projects when they returned to Bangladesh.

Overall, the MATT-II program was successful in terms of the number of graduates who had been trained to undertake a learning-by-doing approach in their day-to-day works. By mid-2011, thirty of the fifty Ministries’ secretaries had been trained and, between 2006 and 2011, a total of 1,323 civil servants received MATT-II’s stage 1 training (Ullah, 2018). The former project director of the MATT-II project, who assumed the responsibility of Team Leader for a2i’s Capacity Development unit between 2012 and 2015, opined that MATT-II had mixed results (r5, interview, August 21, 2019). MATT’s enabled top-level bureaucrats to understand the rationale and purpose of PIPs in addressing public service delivery challenges, by leaving their bureaus for gaining exposure to ground-level conditions and for training abroad.

“Lessons from MATT were used to design Quick Wins exercises which were conducted for the first time in 2007 under the military backed NCG government. While DFID’s MATT focused ‘at the top,’ UNDP’s a2i focused on imparting training ‘at the bottom’ of the public administration hierarchy from 2015 onward through an Empathy Training Program (ETP) (r5, interview, August 21, 2019).”

The major rationale guiding the decision “at the bottom” was that innovations needed to be implemented at the field-level administration, a point also noted by public administration scholars (Lipsky, 2010; Simon, 1997). There was a lack of both the governments and donor’s willingness to implement MATT-III (r5, interview, August 21, 2019; r30, interview, January 17, 2020). Administrative and political factors contributed to the implementation of the first behavioral change program for public administration in Bangladesh. While DFID was not satisfied with the training by BPATC (r30), BPATC saw DFID’s recommendations as unsuitable for bringing about behavioral change in Bangladesh public administration (r5). “When one of the local universities took over the field-visit activities during the second phase, it did not help to make MATT feel unique in terms of learning and getting a new behavioral perspective from a more developed economy like Singapore or the UK (r5, interview, August 21, 2019).”

A few scholars have analyzed MATT-I and MATT-II, but they have not explored their spillover effects into other training programs, which are supporting the implementation of e-Government under Digital Bangladesh. The discussion on the evolution of a2i – from a donor sponsored project to becoming the innovation unit of the Bangladesh government – demonstrates how these learnings were applied in relation to the Quick-Wins exercise in section 3.3.4, and Chapter 4 relates to how MATT’s learnings were applied to the design of the ETP. While the SICT’s project e-Governance roadmap provided for the implementation of e-Government by outlining the technological and infrastructural challenges, MATT set the precedent for training bureaucrats in a new way to motivate them for addressing specific public service delivery problems. MATT succeeded in bringing top-level bureaucrats outside their

offices and making them undertake visits to understand potential of process improvements.

3.3.3. Improving Public Service and Total Quality Management (IPS-TQM): Targeting field-level administration officers for service delivery improvement²⁶

One training initiative which helped to merge the idea of e-Government with citizen-centric issues at field-level was the “Enhancing the Capacity of Public Service Training” project, which started operating at the time of military rule in 2007. This project was funded by the JICA and implemented by BPATC from January 2007 to January 2010. One of the key learnings was the necessity of practical field training program for improving frontline public services through TQM tools and methods (BPATC & JICA, 2017). BPATC piloted TQM trainings in upazilas and introduced the concept of small improvement projects (SIPs) built around the “Kaizen” idea, also known as one-year-one-project (OYOP)²⁷. MATT’s SIPs and JICA’s OYOP aimed to enhance the quality of service to citizens. However, OYOP’s had built-in TQM methods and focused on the field-level service delivery improvement, rather than broader policy and budgetary issues as was the case under MATT.

The Kaizen concept has been incorporated in the Foundation Training Course (FTC) modules for entry-level bureaucrats (see chapter 2). There is also a motivational occasion for upazila officers in the field to present their Kaizen experience in FTC in front of new recruits which is an opportunity to reflect the voice of field-level officers engaged in the actual implementation of public services. Implementation of TQM type of service delivery improvement projects was carried out by JICA working with one or more ministries, having no central coordination, lacking budgetary resources and

²⁶ Information of IPS-TQM project and its impact was provided by a director at BPATC (r7, interview, September 5, 2019), and a Dhaka University professor, a regular speaker at BPATC’s training sessions for new bureaucrats (r24, interview, January 7, 2020).

²⁷ Kaizen is a Japanese term meaning “change for the better” or “continuous improvement.”

organizational-level support. The Kaizen approach, nevertheless, showed how the NPG ideas were influencing the government to engage in public service improvement with a focus on citizens. The JICA project aimed to change the service delivery processes targeting citizens in sub-district areas, which called for adopting a more behavioral approach to change bureaucratic behavior. The project was particularly different in the way that it shifted from a top-down to a bottom-up approach, which required training the field-level officers, unlike MATT (r7, interview, September 5, 2019).

A follow-up of the Kaizen initiative was launched during the Awami League government in 2013 – the “Improving Public Services through Total Quality Management” (IPS-TQM) – for five years (2013-2018). A collaborative arrangement for project implementation was set up between BPATC and JICA through WITs at the field-level, connecting them with their ministries. The underlying objective of IPS-TQM training was to improve the quality of public services in the upazila level offices. One of the successful examples of SIPs is a citizen-friendly police service using Facebook page.

An assistant commissioner of police received Kaizen training in 2013. He opened a Facebook page where citizens under his jurisdiction could contact him directly for any law and enforcement matter. In less than 2 months, the page had had close to 20,000 followers who were regularly following the updates and asking for help using language which helped them to express their sufferings. A quick response team was created to quickly respond to online posts such as dirty roads, street hawkers in roads, traffic, etc. The Facebook page prompted software engineers to develop a mobile app which provided citizens with the contacts of their nearest police station. Another idea has been “Digital Safe Zone” which allowed the police to install surveillance cameras

in crime hotspots. The idea was tested out and implemented with a2i's support but only to a limited scale, as it has not been scaled up to other areas beyond Dhaka.

An evaluation of the IPS-TQM project underlined the motivation factor focusing on self-efficacy and fulfilment of desire for recognition, instead of economic or monetary incentives (BPATC & JICA, 2017). Motivation was an inherent element under the Kaizen approach, which was achieved through interaction between training and experimentation, to achieve quality improvement at the field-level service delivery process. The BPATC and JICA evaluation report argued that such interaction not only enhances training quality but also “links training and implementation as a strategic human resource management” (ibid, p. 59).

One of the major reasons for Kaizen's success, unlike MATT-I and MATT-II, can be attributed to the way it was planned and implemented, considering the key characteristics of the two-layered structure of the public administration system (r5, interview, August 21, 2019). There is the BCS *Administration Cadre* which has traditionally played the leading role as an integral public administration through inter-sectional personnel changes, and departments, focused on coordinated development work. On the other hand, there is the BCS *Professional Cadre* which implemented development work and delivered public services in the field. The TQM trainings targeted a mix of these two cadres which proved effective to simplifying service delivery for citizens in upazilas (BPATC & JICA, 2017).

3.3.4. a2i: From “Access to Information” to “Aspire to Innovate”

The Administrative Services and Reforms Commission (ASRC) after independence in 1972 had called for the establishment of a permanent organization to design and implement behavior-changing mechanisms for simplifying service delivery

processes. The purpose of the organization was to modernize the public administration system and eradicating the colonial ways of serving citizens. It was in 2006 that such an entity came into existence and in 2009, it received political backing to have the authority to deal directly with the structural-behavioral public service delivery issues, as envisaged by the ASRC. This organization is the a2i.

The a2i was known as *Access to Information* between 2006 and 2019, and it was rebranded to *Aspire to Innovate*, keeping the same acronym a2i, in 2020. Unlike other public administration reform projects, a2i started operations under the auspices of the PMO and branched out to two ministries – the Cabinet Division and ICT Division in 2018. The location of a2i at the PMO was important for one major reason – drawing upon top-level political leadership, which was missing in the case of reforms which took place under NPM in the 1990s and early 2000s. The political willingness to host a UNDP and USAID supported project at the PMO also indicated the government’s willingness to engage in e-Government activities. However, the a2i was lacking a political vision to support its e-Government objectives until 2009, when the Digital Bangladesh agenda was introduced by the incumbent Awami League government.

The a2i was initially supported by UNDP and USAID in 2006 and over time, these donor agencies have assumed a more administrative role in terms of recruiting a2i personnel, with more decisions being made by the government and majority of the funding coming from its budget. Although it started initially with UNDP funding, it has become a major Bangladesh government program and the most substantial contributions to a2i come in the form of parallel contributions (USD 31.7 million) from the Bangladesh government (Rahman, Aminuzzaman, & Ahmed, 2019). The a2i is different from two perspectives: first, because of its location at the PMO, it could formally mobilize bureaucracy’s support without facing challenges as encountered by

other projects; and secondly, it focused on using technology to increase citizens' access to information and started with the motto – Services at Citizens' Doorsteps – which aligned well with the Awami League government's Digital Bangladesh agenda of using technology for improving citizens' access to public information and services.

A top-level bureaucrat highlighted the role of a2i in driving forward the e-Government agenda within the public administration system, from the inside of the bureaucracy (r2, interview, August 29, 2019). He mentioned that a2i was successful in orchestrating a series of "Quick Wins" workshop by combining the NCG's willingness for adopting e-Government in late 2008, and beginning of 2009, with the ruling party's Digital Bangladesh political manifesto. Being located at the PMO connected a2i with the top-level administrative authority of the government, the Cabinet Division, which is the bureaucratic nerve center (r9, interview, July 21, 2019). Thus, on one hand a2i embodied the top-level political will for e-Government under Digital Bangladesh, and on the other hand, it had the top-level administrative backing which created favorable governance conditions to kick-off its training activities. The a2i started with the process of Quick Wins trainings which included a series of workshops in 2008, and these workshops gained a new e-Government utility after 2009 when the trainings were tailored to achieve the e-Government related objectives of the Digital Bangladesh.

The a2i introduced a service process simplification (SPS) mapping process to help bureaucrats understand their "own organizational experience." Similar to the business process re-engineering (BPR) technique in the private sector (Boyer, Cook, & Steinberg, 2011), SPS aimed at aiding bureaucrats in visualizing the flow of a service, from the start of a citizen's application to its final discharge by the concerned bureau. This mapping enabled bureaucrats to understand the lines of responsibility and

the delays caused by different bureau and explore new ways of using technology in improving service delivery processes.

Second, the a2i introduced a framework for process improvement from citizens' perspectives termed "TCV". The TCV denotes time, cost, and number of visits that citizens undertake to access government information and public services. The TCV parameters facilitated efficiency in the implementation of human-centered design innovation process by making bureaucrats acquire the "society's experience of government." Although the TCV definition of innovation by the Bangladesh government has its limitations, e.g., TCV type of administrative process innovations cannot be applied to deal with complicated medical and judicial cases and issues of national security, it helped to demonstrate the public value of using technology to bureaucrats, without having to resort to large-scale e-Government infrastructural investments.

Chapter 4 describes the Quick Wins trainings and presents some key examples of SPS-TCV innovation to argue how it may have led to behavioral changes within the bureaucracy for the implementation of e-Government under the Digital Bangladesh agenda. An analysis of the ETP, as a DT-led strategy embodying the two design principles of SPS and TCV, is further examined in chapter 5.

3.4. Political context and institutional change from 1991 to 2008

From late 1990s and to late 2000s, Bangladesh saw the introduction of new policies such as the ICT Policy, RTI Act, Citizens Charters alongside different projects and training initiatives. These aimed at converting and updating the old, colonial institutions and making it more citizen centric. The IDC played a key role in supporting the government to design and implement training programs by combining different

public administration reform models. This included importing private sector lessons and practices under NPM; focusing on citizens and increasing organizational collaboration under NPG; transforming traditional services using electronic means under the DEG. The MATT, SICT to a2i project, and TQM embodied a mix of NPM, DEG and DT ideas. The behavior-changing trainings and initiatives were largely external to the organization and the individual and aimed at promoting a “learning-by-doing” culture in bureaucracy (r10, interview, August 8, 2019). Being external, these mechanisms were impersonal and designed by an organization or entity other than the person they were intended to influence.

The momentum of NPM created new opportunities for implementing top-down initiatives to alter the Weberian bureaucracy. The chapter analyzed how successive governments addressed some of the Weberian-colonial bureaucratic experience, for reducing the bureaucratic barriers to organizational change through training programs. The analysis has considered the impact of non-NPM public administration reform models in reshaping different initiatives aimed at administrative behavioral change. Public administration and governance scholars have generally argued how change in political regimes led to discontinuation of projects and initiatives implemented by the outgoing government. The present chapter took the opposite direction and demonstrated how some of the e-Governance initiatives and administrative training programs received strong bureaucratic backing for e-Government implementation, and such initiatives and programs were continued despite politicization of bureaucracy.

A gradual, incremental process of bureaucratic change started to take place with different initiatives – MATT-I to MATT-II, TQM to IPS-TQM, and SICT to a2i. A review of the projects with their links to public administration reform models shows how they may have created a stock of knowledge, and thereby created conditions for

bureaucratic change. Implementation of e-Government under Digital Bangladesh called for a change in the traditional governance processes, and for using technology in serving citizens. This is further examined in the Chapter 4 using both examples of key policy reforms and behavioral change, with some real-life examples from the field.

**CHAPTER 4. BUREAUCRATIC ENTREPRENEURSHIP:
IMPLEMENTATION OF E-GOVERNMENT BETWEEN 2009 AND 2020**

This chapter presents an overview of the e-Governance conditions and e-Government implementation after the restoration of parliamentary democracy (once again), in 2009. It is conceptually divided into four parts. The first part combines Design Thinking (DT) ideas with the literature on Public Value Management (PVM). The advantage of this combination is that these models capture the notion of deliberative governance – the idea that citizens are more than consumers and understanding their needs can influence the design and delivery of services (Coates, 2006; Allio, 2014). The notion of deliberative governance is useful to understand the “e” type of conditions which were required to make bureaucrats understand citizens’ needs. The second part examines the domestic political developments and discusses how the onset of “Digital Bangladesh” or “Vision 2021” in 2009 triggered a momentum for e-Governance conditions for bureaucratic change and the execution of e-Government type of innovations in the public service delivery processes. The political context has been studied using specific policy examples to demonstrate the type of governance problems which needed to be overcome for e-Government implementation. The third part examines specific e-Government projects and specific examples of Quick Wins. The fourth part is a description of a unique behavioral change training program – the Empathy Training Program (ETP) – which aimed at changing bureaucratic behavior through a structured process, facilitating public service delivery innovation under e-Government. The ETP drew lessons from the Quick Wins and the discussion illustrates how interactions of bureaucrats with citizens during the ideas generation stage can allow them to work on targets that the public genuinely value, e.g., reduction

in time, cost, and number of visits or TCV, through service process simplification (SPS), as briefly discussed in the preceding chapter²⁸.

The chapter is based on primary documents, interviews, and secondary literature. It takes a new approach to examine the conditions which created the scope for e-Government related initiatives to be implemented in Bangladesh. In contrast to claims by political scientists and economists about the negative impact of New Public Management (NPM) reforms on Bangladesh's public administration (Aminuzzaman, 1994; Bhattacharya & Titumir, 2001), the present chapter continues to build the argument of how e-Government related behavioral change initiatives converged and created favorable conditions, for redirecting bureaucratic behavior and creating new public value for e-Government implementation. The inauguration of Digital Bangladesh was a critical turning point for the bureaucracy of Bangladesh, as it was first time that the public administration had to comply with a national vision, regardless of their loyalty to the regime. Politicization and paternalistic support geared towards implementation of Digital Bangladesh e-Government policy goals attempted to engineer a change in bureaucratic behavior through various policies, strategies, and training initiatives. These e-Government aspects are related to the policy instruments which were designed to redirect bureaucratic behavior by incorporating citizens' perspectives and illustrating the potential of improving service delivery processes through e-Government implementation.

While most interviewees found the research topic of bureaucratic entrepreneurship interesting from the perspective of investigating e-Government advancement from a behavioral change perspective, one of the top-level bureaucrats

²⁸ The SPS-TCV is a prescribed method of innovation which the bureaucrats of Bangladesh must follow in adopting e-Government for accelerating the delivery of information and services to citizens.

was offended with the title of the dissertation (r2, interview, August 29, 2019). He inquired about the rationale of using entrepreneurship theory or themes, in studying governance and public administration. He opined that the research was not focusing on the actual, or Weberian legal-rational aspects of civil servants as maintaining discipline, law and order. Here, it became important to inform him about how the present study conceived entrepreneurship in public sector as a public value creation process by leveraging the use technology for becoming more responsive to citizens' needs. R2 found the link interesting given the colonial legacy of the bureaucracy and shared his insights about how a2i's Quick Wins training exercise was able to bring about an incremental behavioral change within the top-level mindset of the bureaucracy.

Under what conditions can bureaucrats' behaviors, working under a public administration system with a colonial legacy perpetuated by non-responsive structures, improve to implement e-Government type of innovation? How can innovation as a process be structured and facilitated to increase a bureaucrat's ability and desire to innovate, engage in creative learning activities, willingness to take risks and deal with ambiguities associated with the implementation of innovation, without any fear of penalty or reprimand? The key argument is that "institutions contain within them the possibility of change and what animates change" (Mahoney & Thelen, 2010, p. 21). The point of departure for the present analysis rests on the premise that generating insights about bureaucratic behavior, particularly in relation to how conditions influence both individual behaviors and organizational environment, can help to enrich understanding about the implementation process of innovations (Sørensen, 2007).

Implementation of e-Government activities under Digital Bangladesh is analyzed using the DT and PVM models, to explain how different strategies were deployed to make bureaucrats think and act like public sector entrepreneurs. Such

change-agents or entrepreneurs are public sector employees who do not let bureaucratic barriers stop them from driving bureaucratic change. They need innovation toolkits, risk-free spaces, organizational support to engage creatively for driving forward e-Government implementation by expanding the support coalition. The two models are used to highlight how such ideas and practices emerged from a global perspective and received support in Bangladesh. The chapter shows how political will created the ground conditions for applying these models for changing administrative behavior to support e-Government implementation through Quick Wins and ETP.

4.1. Public value management (PVM) and Design Thinking (DT)

The global evidence on bureaucratic entrepreneurship converges around a rather simplified single-organization explanation: innovations in public sector are driven by Weberian, legal-rational organizations (Mazzucato, 2013) where the importance of motivating bureaucrats to innovate is the key driving factor for successful innovation implementation (de Waal, 2008). While the market is an institutional structure of incentives and deterrents to enable private entrepreneurs, the political system fixes capacity of public entrepreneurs to engage in entrepreneurship (Ostrom, 1965). The political environment, as discussed in chapters 2 and 3, represented a complex and contradictory situation with respect to the implementation of earlier reform models.

Mazzucato (2013) saw the “entrepreneurial state” doing far more than correcting market failures by investing in new technologies, such as aircraft or the Internet which allows the private sector to flourish and innovate. She argued that:

“There is nothing in the DNA of the public sector that makes it less innovative than the private sector [and] by dismissing [its] ability to be an innovative force from within, most thinkers on strategic management and organizational change

have focused more on the private sector, leaving the public sector to simply focus on ‘creating the conditions’ for innovation to happen in the ‘revolutionary’ private sector associated myths” (ibid, p. 36).

The study of public administration innovation is consequently an examination of institutional reform processes and how these may have had behavioral implications in driving forward e-Government implementation process (Brinkerhoff & Brinkerhoff, 2015; Pollitt & Bouckaert, 2017). Innovations can be carried out and managed using existing institutions assuming that officials have both knowledge and authority, as in the case of developed economies, and “does not require new offices or significant additional funding but only attention to the relevant issues and a focus on the right appointments” (Sunstein, 2014, p. 587). Unlike developed democracies, the colonial legacy in Bangladesh created a knowledge base and exercise of administrative authority which made the public administration hostile towards citizens and treat politicians as rabblers. On the other hand, after independence, their training in being submissive to the incumbent government was sustained through politicization and patrimonial support. In such a political context, innovation in service delivery was choked by the colonial legacy which diluted the focus of citizens’ rights to basic public provisions.

An approach to change bureaucratic behavior has been through the creation of innovation labs or entities (McGann, Blomkamp, & Lewis, 2018; Mintrom & Luetjens, 2016). This second approach is more popular with governments in developing countries who are managing innovation process and value conflicts by establishing DT institutions. DT strategies implemented by DT institutions have the potential for “promoting greater understanding of how citizens experience government services” (Mintrom & Luetjen, 2016, p.1), and these strategies and institutions support public managers who have a desire and willingness to drive forward particular policy agendas

of the government. Bureaucratic changes at the behavioral and organizational level are driven by DT institutions which focus on specific innovation agendas. DT ideas, as part of the public value creation reform agenda, migrated into the political and governance fields typically as part of innovation agendas, and as specialized innovation labs and hubs (Allio, 2014; Howlett, 2014).

4.1.1. DT ideas, strategies, and institutions

Chapter 3 elaborated on the emergence of NPM and digital-enhanced/era governance (DEG) models. These models are built upon design principles which called for establishing “learning-by-doing” mechanisms in order to increase the capacity of bureaucrats to implement reforms (Dunleavy & Margetts, 2015). DEG advocated for experimentation and creative learning through a learning-by-doing process to embed e-Government within the public administration system, but did not specify the strategies for motivating or nudging bureaucrats to implement new ideas. The onset of DT institutions provided physical spaces for civil servants, stakeholders, and users to engage freely in open discussion and in thinking in terms of a design construct focusing on particular problems facing citizens (Tönurist, Kattel, & Lember, 2017).

DT processes and labs respond to the cross-cutting structure and interdisciplinary nature of innovation, and attempt to change the legal-rational bounds of the bureaucracy by creating the scope for entrepreneurial opportunities and organizational power to enable bureaucrats to innovate (OECD, 2017). DT institutions enable public sector managers to engage with citizens within approved parameters. DT has been more recently used by government, businesses and universities with a unique set of qualities: it is a human-centered design (HCD), iterative approach for driving change within an organization (Liedtka & Salzman, 2018). The HCD distinguishes the

DT approach from other public administration reform models, as it deals with real people, in real time. The HCD approach emphasizes the importance of deep exploration into the lives and problems of the people, and requires developing an understanding of their needs and experience before implementing new solutions (Milkowska, 2018). As a result of the Weberian-colonial legacy which distanced citizens from bureaucrats and made them more submissive towards the bureaucracy, there was a recognition in Bangladesh that the DT model needed to be tweaked to consider some ground situations.

While on the one hand public service delivery is a people-to-people model of human interaction invoking elements such as empathy, caring, and responsibility (Allio, 2014), on the other hand, service was delivered through a colonial styled bureaucracy, invoking a model of detachment and distance, rendering empathy, care and responsibility irrelevant in Bangladesh (r16, interview, September 5, 2019; r24, interview, January 7, 2020). Thus, bureaucrats in Bangladesh needed tools which could aid them to overcome the structural-behavioral elements perpetuating a hostile and unresponsive service delivery system, and at the same time, to reframe service delivery challenges by exploring the potential of using technology (r9, interview, July 21, 2019).

The present chapter hones on the TCV definition and SPS tool for public service delivery innovation, as adopted by the Bangladesh government through the *Innovation Team* gazette in 2013 (Cabinet Division, 2013). One of the common definitions of innovation is “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (Rogers, 1995, p. 14). Scholars have termed innovation as a method to implement new ideas (Fagerberg., Mowery and Nelson, 2005), improve service delivery (Moore & Hartley, 2008) and apply creativity and entrepreneurship (Denhardt & Denhardt, 2015; Mulgan, 2007). The SPS-TCV framework is helping

bureaucrats in Bangladesh to “carry out a new idea into practice” (Fagerberg, Mowery, and Nelson, 2005, p.5). While some scholars have proposed classifying innovations according to their types in order to arrive at a more specific definition (Fagerberg, J., Mowery, D.C. & Nelson, 2005; Garcia & Calantone, 2002), others have argued for characterizing service delivery innovation in a multidimensional way (Hartley, 2013; Miles, 2013; den Hertog et al., 2010). For example, a new mobile application for fishermen (a type of product innovation) may also entail new methods for providing services to them (process innovation).

The SPS-TCV innovations can be categorized under the administrative technological process innovation categories, although they also overlap with governance and conceptual types of innovation (see Vries et al., 2016 for a typology of innovations). TCV and SPS aim at the creation of new organizational forms through the introduction of new management methods and techniques and new working methods to render services to citizens, i.e., administrative innovation. With regard to governance and conceptual types of innovation, TCV and SPS introduce new frames of reference to help bureaucrats re-conceptualize the nature of specific problems, as well as experiment with new ideas as possible solutions within the permitted bounds of bureaucracy, respectively.

The TCV method of innovation and SPS mapping exercises together form the innovation toolkit pioneered by the government’s innovation hub, Aspire to Innovate or a2i. The innovation toolkit can be conceptualized as a means to allow bureaucrats to understand the legal or permitted bounds, for implementing e-Government type of innovation. The need for an innovation toolkit arose from the objective of shifting bureaucrats’ behavior toward problem representation metrics, given the colonial traditions of the bureaucrats being non-responsive to citizens’ needs. In shifting

attention to problem representation, TCV helped to enhance the understanding of the psychological environment of the administrative organization, while SPS maps pinpointed specific areas where e-Government innovation could be implemented. The psychological environment is influenced by two types of mechanisms (Simon, 1997): (a) those that cause behavior to persist in a particular direction once it has been set in that direction (e.g., colonial legacy and post-independence politicization of the bureaucracy) and (b) those external mechanisms that initiate behavior in particular direction (e.g., externally supported behavioral change trainings and e-Government projects). The former is for the most part internal to the organization while in case of the latter, external nudge or DT institutions are playing a catalyzing role today in nudging bureaucrats to design policies improving citizens' welfare.

By 2014, nudge theory-based DT strategies were being experimented in 135 countries, including 51 developing economies which reported to have “central state-led policy initiatives that have been influenced by behavioral sciences” (Whitehead, Jones, Howell, Lilley, & Pykett, 2014, p.9). Interest in DT strategies propelled the creation of DT institutions or public sector innovation hubs (see Box 1 for some examples). The a2i, as a DT institution of the Bangladesh government, is working to motivate bureaucrats to use ICT for serving citizens in new ways. This is strikingly different than developed countries' DT institutions like the UK's Behavioral Insights Team (BIT), focused on budgetary efficiency and nudging citizens' behavior towards making more healthy, financially informed decisions. State-led nudge initiatives are supported by nudge units like a2i which provide a fertile ground for reorienting bureaucrats behavior, to enable them to reframe problems in new ways, experiment with new ideas and implement new processes towards service delivery innovation. The challenge with such

approaches is that traditional lines of accountability persist, although technology shifts the conversation in important ways²⁹.

Box 1: Design Thinking (DT) institutions in Canada and Europe

Denmark's Mind Lab is a cross-government unit that claims itself as the world's first innovation lab. Some other examples of DT institutions include US's Public Policy Lab, Australia's Australian Public Sector Innovation, Denmark's MindLab, Sweden's VINNOVA, India's National Innovation Council, South Korea's Korean Institute of Design Promotion and Singapore's Human Experience Lab (Kumpf & Schnurr, 2016; McGann et al., 2018). The UK has the highest number of DT type of institutions (six in total) and one of the most popular one – Behavioral Insights Team (BIT) - operated by NESTA with the Cabinet Office (see UNDESA, 2018 for a case study on BIT). The UK's BIT was among the earliest and strongest proponent of the DT approach. The Government of Canada has introduced a series of innovation and design labs, in both central agencies (the Central Innovation Hub in Privy Council Office) and line departments (Innovation, Science and Economic Development Canada, Employment and Social Development Canada, and Natural Resources Canada). The Ontario's Behavioral Insights Unit was created in 2015 to design methodologies for the improvement in policy and program design. It has been successful in nudging and increasing organ donation consent rates by 143 percent (Government of Ontario, 2018). Alberta CoLab in Canada and the Policy Lab in the UK are working towards promoting and developing experimental approaches in government for generating, establishing and validating hypotheses (Brookfield Institute, 2019). Other governments like Finland have set the priority of experimentation through the Prime Minister's office and created an Experimental Finland team. Organizations like the Alberta CoLab and MaRS Solutions Lab are using an approach to policy innovation that blends systems thinking and human-centered design. The "systemic design" allows policy practitioners to get a bird's-eye view of processes within a system and to examine inter- and intra-organizational relationships between them, helping to reveal areas for design intervention.

Source: Authors' compilation from various sources

4.1.2. Innovation process: Bureaucrat versus the manager

Innovation processes have some common principles which enable policymakers or bureaucrats to find intelligent ways to encourage, support and enable citizens to make better choices for themselves (Service et al., 2015). The DT strategies are built around five stages: empathize, define, ideate, prototype and implement (d.school, 2010)³⁰. The DT approach requires bureaucrats to acquire a deeper understanding of problems through empathy. Without empathy, the DT model assumes, policymakers and

²⁹ This view was shared by a discussant during the *Faculty of Public Affairs Conference* in March 2020, organized by Faculty of Public Affairs, Carleton University.

³⁰ More recently, another component, "share the story" or showcasing has been added to the DT model to help inspire other bureaucrats to innovate.

bureaucrats will not be able to develop an understanding of the problems encountered by citizens while accessing public services.

The organizational and behavioral characteristics of public and private sector entrepreneur can be contrasted through an analysis of the innovation process. It is widely accepted that public sector innovation begins by generating new ideas for addressing a social or public problem, followed by testing or implementation of a new idea, and finally, its diffusion or scaling (Hartley, 2013). The differences between a public and private sector entrepreneur show how ability, motivation and opportunities, arise from circumstances specific to organizational contexts (Borins, 1998). The first stage of ideas generation is the most difficult because entrepreneurs in public sector face greater degree of formalization and centralization than those working in private sector (Kattel et al., 2014; Kelman, 2008). TCV and SPS, or the innovation toolkit, provided a sense of what is to be solved through e-Government implementation³¹. The innovation toolkit was designed to suit the specific political and organizational circumstances, and to enable bureaucrats to generate ideas toward solving public service delivery problems using ICT.

At the second implementation (or execution) stage, the difference between private and public sector organizations lie in the latter's legal-rational structure which embeds values of discipline and achieving goals without considering the human dimensions of the problem (Feldman, 2005). One of the major cornerstones of Simon's (1997) work on bounded rationality was how routines, established by bounds with origins in organizational culture and past practices, influenced decision-making process of bureaucrats. The implementation stage of innovation is thus challenged by

³¹ It is, nevertheless, difficult to motivate bureaucrats to engage in innovation activities which require them to think and make decision like an entrepreneur, not a rational agent.

organizational routines (Levitt & March, 1988), which means that decisions obey a *logic of appropriateness* or *legitimacy*, rather than a logic of *consequentiality* or *intention*. Bureaucrats decisions were based on interpretations of the past rather than on anticipations of the future, and adherence to colonial routines in being non-responsive to citizens, has been a common theme documented by governance scholars studying the Bangladesh public administration (Haque & Haque, 2019; Huque, 1997). Thus, there is a need for more experiential training programs for bureaucrats (Feldman, 2005), to enable them to take bold decisions in implementing innovation.

The final stage is diffusion or scaling up of a successful innovation (Halvorsen et al., 2005). In the private sector, innovation can be restricted for profit-making purposes, but bureaucrats cannot restrict their ideas once they are implemented. Public sector managers cannot enjoy the same level of patency rights as private sector innovators because their ideas are open for replication and modification by other government offices for public value creation. Private sector managers and entrepreneurs can shop around for potential buyers of new ideas having little or no accountability to any authority. However, this is impossible for a bureaucrat – whether at ministry-level or street-level – as they are expected to apply the approved innovation toolkit of the Bangladesh government for the implementation of e-Government.

Implementation of e-Government type of innovation requires bureaucrats in developing countries like Bangladesh to adopt new ways of understanding problems that are to be addressed using ICT. The Eighth Five-Year Plan (2021-25) has acknowledged the value of TCV and SPS as an innovation framework, demonstrating the public value of e-Government implementation (GED, 2020b). The Plan has articulated for the implementation of structured innovation processes building upon past experiences with training processes such as the Quick Wins and ETP, which are

discussed later in this chapter. These trainings served as a mechanism to reduce value conflicts as they try to orient bureaucratic behavior towards new values, for example, public service entrepreneurship and empathy. There has not been a methodical conceptualization of administrative behavioral change in relation to the e-Government innovation process. The survey data presented in the next Chapter 5 addresses this research gap by identifying determinants of administrative behavior, which may be associated with successful e-Government implementation.

4.1.3. Creative adaptation of DT strategies

The discussion so far on DT strategies creating public value through innovation highlights a centralized approach toward building capacity of bureaucrats using behavioral insights such as empathy. In Bangladesh, the a2i started its operation with the Quick Wins initiative as discussed in Chapter 3. The a2i aimed to nudge bureaucrats through Quick Wins in terms of using ICT to become more responsive to citizens' needs. The bureaucracy in Bangladesh did not see any rationale for adopting new methods and ideas from NPM, NPG or DEG models. On the other hand, these models could not have motivated bureaucrats to prioritize understanding citizens' problems without political backing.

Thus, in contrast to advanced democracies, nudging through Quick Wins was used to introduce new thinking and entrepreneurial attitude, creative learning for e-Government adoption, and empathy in focused workspaces, within traditional lines of authority. According to the policy advisor of a2i, DT strategies in Bangladesh works quite differently than what is the current practice in developed economies (r9,

interview, July 21, 2019)³². One of the interviewees of the present study was the project director of the second Managing at the Top (MATT-II) project and he was also familiar with the JICA's Kaizen project (r5, interview, August 21, 2019). This enabled him to design Quick Wins by combining lessons from MATT's performance improvement projects (PIPs), and from Kaizen's small improvement projects (SIPs). Quick Wins focused on steering bureaucrats' choices to use technology for increasing responsiveness to citizens' needs. He indicated to how the learnings from different training initiatives were applied through Quick Wins and later with the ETP, in order to change the colonial bureaucratic experience by building new perspectives of using technology in becoming more perceptive of citizens' needs (r5, interview, August 21, 2019).

Quick Wins implementation provided a risk space for top-level bureaucrats to see the value of using technology at the field-level and not in their offices, which helped to motivate these bureaucrats to generate new ideas without any fear of penalty or reprimand (r9, interview, July 21, 2019). As discussed in this section, there are significant differences in terms of how bureaucrats in the public sector and managers in the private sector engage in the innovation process. The individual capacity and organizational constraints are useful to distinguish between the two types of entrepreneurs and it becomes evident that public sector bureaucrats lack the organizational enablers such as risk-free spaces and citizen-centric toolkits which would equip them to better utilize their knowledge, expertise and experience by engaging meaningfully in policy matters that have a direct impact on citizens (Rashid, 2014).

³² The TCV method of innovation shaped bureaucrat's choices in making decisions about how to serve, and not control, citizens. It provided them with more information to understand citizens' problems from three specific parameters – the time spent, the formal and informal costs incurred, and the number of visits required, to access simple public information and services.

In equipping bureaucrats to take a more outward view of the public service delivery processes, the Bangladesh government setup the Governance Innovation Unit (GIU) to help bureaucrats understand the value of online transformation of service delivery processes. The GIU arranged several workshops and seminars for bureaucrats to empower them with new ideas for creating public value through innovation. The GIU has largely piggybacked on a2i's e-Government activities and the ambition of GIU lay in re-inventing the public sector, but it could not directly encourage bureaucrats to put citizens before bureaucratic processes, as it had no experience in this area (r6, interview, August 20, 2019).

The present chapter provides new evidence on a2i's Quick Wins and analyzes its wider impact which led to the implementation of ETP across the government (see Section 4.3). Nudge has been provided through organizational backing and allocating resources for experimenting with new ideas under Quick Wins, which created the ground conditions for e-Government innovations to take place later. While Quick Wins laid the foundations for the utilization of the innovation toolkit by bureaucrats, workshops and seminars at the field-level tried has been about engendering empathy and entrepreneurship for experiential training. The Bangladesh government has seen the adoption of DT strategies and international models to the postcolonial legacies as a way of creating a creative learning process. The postcolonial legacies created an unresponsive public administration process controlling, and not serving, citizens' interests and DT led training initiatives allowed bureaucrats to take on a more outward view and become more understanding of citizens' needs.

4.2. Political context and e-Government

Transparency International Bangladesh (TIB) research findings reported a 30 per cent reduction in corruption in service delivery processes at the rural level, due to the introduction of Union Digital Centers (UDCs) under the Digital Bangladesh agenda (TIB, 2012). These rural-level Services were introduced by the government bureaucrats through a series of Quick Win training workshops. At the time of Bangladesh's independence, the First Five-Year Plan (1972-76) of the first government saw bureaucrats as neither innovators nor catalytic agents for starting a social change process, which was urgently required to transform the colonial structures (Planning Commission, 1973). The First Five-Year Plan emphasized building new structures and training bureaucrats to become more citizen centric. The *Innovation Team* gazette appointed Chief Innovation Officers (CIOs) at the ministry level who were supported by Innovation Officers from the field-level administration (Cabinet Division, 2013).

After the launch of Digital Bangladesh agenda, the five-year national development plans prioritized digitizing service delivery processes which required building new public administration capacity and leadership (GED, 2010b, 2015). The Seventh (2016-2020) and Eighth (2021-2025) national five-year development plans called for CIOs to lead the innovation teams for implementing service delivery innovation under Digital Bangladesh and Vision 2041 (GED, 2015, 2020a). The Seventh Five-Year Plan articulated ways for implementing the e-Government agendas in support of the Digital Bangladesh political vision. It outlined challenges for the achievement of Digital Bangladesh objectives by embedding the use of ICTs across the government, to serve citizens better. These challenges have been addressed by the upcoming Eighth Five-Year Plan (2021-2025) of Bangladesh (GED, 2020a). By taking a cue from the Vision 2041 political manifesto introduced by the Awami League in the 2018 parliamentary election, the Eighth Five-Year Plan envisages the adoption of e-

Government under a whole-of-government approach, in preparing the country to reach the middle-income-country status by 2025, and high-income status by 2041 (GED, 2020b). The Eighth Five-Year Plan was designed to invest in particular policies such as the *Innovation Team* gazette, and initiatives such as Quick Wins and empathy training, which have demonstrated high public value in driving forward e-Government within the public administration (r16, interview, September 5, 2019).

4.2.1. National political context: 2009 to 2020

The 2008 national parliamentary election produced a landmark victory for the Awami League led by Sheikh Hasina, with a political mandate built upon the foundations of Vision 2021. The agenda of Digital Bangladesh was integral to Vision 2021 which envisaged a society where citizens would access simple public information and services such as birth registration certificates, land records, registration for cooperatives or small businesses, information for agriculture, fisheries, education, and employment opportunities, through computers, mobile phones, and Internet, without having to undertake long travels and incurring high formal and informal costs. The launch of Digital Bangladesh in 2009 was the first national vision for Bangladesh, and it endorsed new e-Government policies, rules and training initiatives. Digital Bangladesh created a sense of urgency for improving public service delivery through e-Government.

The new government rejected many of the initiatives that were undertaken by the non-party caretaker government (NCG) between 2007 and 2008 on political rather than substantive grounds. However, the Citizens Charter, Right to Information (RTI) Act and a2i continued under the newly elected regime. The a2i's objectives aligned with the political goals of Digital Bangladesh – using e-Government as a means for

simplifying service delivery processes and making the government more responsive to citizens' needs. The a2i has been driving the e-Government agenda under Digital Bangladesh and it has adopted strategies to operate within the traditional governance structure established during colonial times. The policy advisor of the a2i had presented a keynote paper to the prime minister in January 2009, where he described the role of a2i in helping achieve the goals of the Digital Bangladesh political manifesto (r9, interview, July 21, 2019).

One year after assuming office, during the annual Deputy Commissioners (DCs) Conference³³ in 2010 which takes place at the PMO, Prime Minister Sheikh Hasina stated that:

“There is no Pakistani or British colonial rule in Bangladesh now. DCs are now citizens of an independent country, and they must remember that. They must provide services and take it to citizens' doorsteps. Although the title [DC] indicates a district ruler, but in reality, they are not rulers; they are civil servants. Bureaucrats must keep this in when providing services to all people from all background. DCs will have to work as a development administrator by changing their traditional approach by using technology” (BTV, 2010).

Political patronage was visibly being directed towards the achievement of Digital Bangladesh goals after 2010. A couple of academic respondents indicated to how administrative behavior was incrementally changing from authoritarian and formalistic, towards becoming responsive to understand citizens' needs (r23, interview,

³³ Deputy Commissioners' (DCs) Conference is an annual meeting of the heads of districts with policymakers of the national government. It is aimed at discussing policy matters and development strategies to improve field-level administration. The conference plays an active role in discussing and addressing the problems for uninterrupted and smooth implementation of government policies and programs at the grassroots level.

January 2, 2020; r24, interview, January 7, 2020). On the other hand, international donor agencies underlined the importance of Digital Bangladesh as the key source of political commitment toward administrative change for e-Government implementation. The district-level administration offices were encouraged to experiment with new ideas to change the traditional administration system which was distanced from citizens starting from 2012 onward. Reform of institutions requires strong and sustained political support and government ownership over a long period, which was largely missing in Bangladesh until the inauguration of the Digital Bangladesh agenda. Without this primary ingredient of ownership and support, e-Governance reform was unlikely to succeed. Khan (2013, p. 76) argued that bringing change in the Bangladesh public administration was easy after 2008, because “it was anchored in a political purpose.” This is expected because public service delivery innovation can stem from introduction of new political positions and policy proposals (Klein, Mahoney, McGahan, & Pitelis, 2010). The Digital Bangladesh agenda was a new political position and policy proposal introduced, which did not require massive investments for dismantling the old institutions and setting up new ones. Instead, it sought to introduce new forms of entrepreneurial and empathic behaviors to increase the scope for reducing the citizen-bureaucracy gap, through e-Government implementation (r9, interview, July 21, 2019).

A study by KPMG noted that the “‘Digital Bangladesh’ initiative of the government helped setup infrastructure for enhanced connectivity, ICT based citizen service delivery and ICT based education system” (KPMG, 2012, p. 4). Nevertheless, the trend of politicization continued under the regime. After the parliamentary election in 2009, an estimated 434 senior officials were made into officer-on-special duty (OSDs), with a majority of them being on political grounds (Alam & Teicher, 2012).

Politicization of the bureaucracy has continued through massive in-service promotion rewarding party loyalists over the last few years (Bhattacharjee, 2019; Daily Star, 2015; Tusher, 2016). Although such politicization is seen as a way of punishing anti-incumbent bureaucrats, it is not necessary that it always led to negative change (e.g., state-sponsored development in Singapore and China). Digital Bangladesh agenda was used as a form of soft patronage and politicization to identify bureaucrats who were expressively demonstrating loyalty to adopt new governance processes for e-Government implementation. For example, the secretary of the Ministry of Land indicated that after the inauguration of Digital Bangladesh, he wanted to introduce technology in his office works in Jessore (r3, interview, August 20, 2019). As the additional deputy commissioner, he was backed by a top-level bureaucrat, Mr. Nazrul Islam Khan, who came from that area and who worked as the private secretary to the prime minister and retired as a secretary of Ministry of Education in 2020.

In principle, Digital Bangladesh provided political patronage for the formation of new coalitions and institutional innovators to work within the existing system. It created a politicization process whereby bureaucrats exhibiting an appetite for the implementation of Digital Bangladesh received a boost in their career from the Cabinet Division and PMO. The political agenda of Digital Bangladesh was translated into a national ten-year perspective plan in 2010 which set an organizational vision for the entire bureaucracy to be achieved by 2021 (GED, 2010a). The objectives for achieving Digital Bangladesh helped to align e-Government priorities within bureaucracy's legal-rational framework for decision-making, starting with an introduction of new training programs and policies, supported by an innovation unit, i.e., a2i.

Under colonial rule, district level bureaucrats or DCs were trained and provided political patronage to meet revenue and production targets, exploit citizens by making

them suffer, which was efficient from the British and Pakistani viewpoint. Under the Digital Bangladesh agenda, bureaucrats were expected to use technology and adopt a modern approach toward serving citizens. This political momentum was a critical juncture which created new expectations of the bureaucracy to become more responsive, and increased public administration's confidence in political leadership for undertaking reforms in the area of service delivery process improvements (r1, interview, August 22, 2019; r2, interview, August 29, 2019). Key examples of policy initiatives are identified in the ensuing discussion which shows how the international models shaped the e-Government implementation in Bangladesh. The discussion highlights the contribution of particular policies and strategies which set the background for a whole-of-government approach towards e-Government transformation of traditional public service delivery processes.

4.2.2. Enabling environment for e-Government adoption

In early 2010, the National ICT Task Force, which was originally setup in 2000, was reorganized and renamed as the Digital Bangladesh Task Force. The Task Force has been entrusted with the responsibility to monitor and advise various ministries on challenges to achieve the objectives of Digital Bangladesh (r9, interview July 21, 2019; r15, interview, July 21, 2019). The execution of Digital Bangladesh required designing policy instruments to achieve certain targets which required creating an organizational environment to support service delivery innovation. For example, the *Innovation Team* gazette in 2013 called for embedding the use of TCV and SPS across the government for the implementation of e-Government by CIOs and innovation officers. The gazette was necessary, however, not sufficient to address the organizational constraints which required broader policy reforms and strategic policy interventions.

The process of shifting the organizational culture of the Bangladesh bureaucracy in a more citizen-focused direction included the RTI Act 2009, ICT Policy 2009 (amended in 2018), the ICT Act 2009 (amended to Digital Security Act 2018), the *National Integrity Strategy (NIS) 2012*, *Secretariat Instructions 2014*, *Annual Performance Agreements (APAs)* in 2015 with their mandatory strategic objectives (MSOs), and the *e-Governance Master Plan* in 2019. These policy instruments are resetting the organizational goals for both the implementation and evaluation of e-Government, TCV based innovations³⁴. For example, the MSOs are mandatory, to be achieved by every government office to strengthen administration reform tools such as the RTI Act, NIS, Citizens Charter, and grievance redressal system (GRS).

Although the initiative was taken by the NCG to review and modify the ICT Policy 2002, the Awami League government in 2009 approved the policy “bringing philosophical change in the policy to accommodate the vision of Digital Bangladesh” (Hasan, 2014, p. 368). The ICT Policy 2009 was updated in 2015 and in 2018, to address the shortcoming in the implementation of Vision 2021 and to incorporate new objectives of Visions 2041, respectively. The ICT Division formulated the ICT Policy 2018 focusing on digital security, leveraging emerging technologies like artificial intelligence (AI), robotics, ICT in education, skill development, employment generation and business promotion. The vision of the ICT Policy expanded and diversified the use of ICTs to establish a transparent, responsive, and accountable government. The ICT Policy has been instrumental in providing an environment for expanding the use of technology across the government, business, and society.

³⁴ Information on APAs relevance in promoting Digital Bangladesh initiatives has been collected through interviews and a document prepared by Cabinet Division for internal scrutiny of its activities. This document is a review of APA and how it is being used to track progress in achieving Vision 2021.

Regarding the ICT Act, it was enacted hurriedly in October 2006 to build the legal structure for ICT utilization by the government. However, it coincided with the last month of handing over power to a non-party caretaker government (NCG), and it was enacted without taking the ICT Policy 2002 into consideration. The Awami League government amended the ICT Act 2006 in 2009. While drawing up the *ICT (Amendment) Bill* in 2013, the name of the law was changed to *Digital Security Act*. The ICT Act has been successful in promoting cooperation and coordination between government agencies and encouraging the implementation of e-Government through a whole-of-government approach. The latest Digital Security Act includes provisions regarding defamation and human rights violations using electronic and social media and mandating for the adoption of e-Government. The agendas related to e-Government adoption continued to receive top-level political endorsement, and the Digital Security Act envisaged establishment of a National Digital Security Council, headed by the prime minister, to discuss digital security issues pertaining to public welfare. It was described as a “draconian” law by a legal-governance expert, because of the way it is being used by the political regime to not only suppress the opposition, but also to curb freedom of expression of citizens who may be criticizing the government (r19, September 9, 2019).

Like the ICT Act, the process for implementing a RTI Act started under the military-backed NCG regime in mid-2008 (r2, interview, August 29, 2019). The RTI Act was formally enacted in 2009 by the democratically elected government led by the Awami League. A world Bank study noted that there is a lack of positive attitude of the bureaucracy for properly implementing the RTI Act, and the shortcomings can be attributed to the old colonial habits of bureaucrats in being authoritative and secretive over public affairs (Khaled Ahsan, Hasan, & Imran, 2020). The implementation of RTI

Act required bureaucrats to embrace a change in their cognitive stance, which contradicted their earlier colonial, master-like practices. The RTI Act was a new rule, but it did not lead to administrative behavioral change (r16, interview, September 5, 2019). This was because “most of the civil servants failed to adjust in their new roles due to their [colonial] mental makeup” (ibid, p.36). Although RTI was aimed to making instill transparency by empowering citizens to demand for public service-related information, most applications faced rejections due to procedural errors simple errors, such as wrong name of the designated officer. A participant of the World Bank study stated (ibid, p. 25): “...it seems the Commission focuses more on bureaucratic process than to ensure access to information to the requesters.” An example provided by a legal-governance expert was that contrary to the spirit of the RTI Act, the *Official Secrets Act* of 1923 remains operative, which compels the civil servants to an oath of secrecy (r19, interview, September 9, 2019). This has been a major debacle for the free flow of information from government to citizens.

After the launch of *Innovation Team* gazette in 2013, the NIS in 2013 recommended undertaking a coordinated strategy to promote values such as empathy for increasing the bureaucracy’s responsiveness to implement e-Government (GoB, 2012). Since 2015, almost all ministries/divisions and their respective subordinate offices have been preparing NIS work plans every year. Implementation of NIS work plans have been included as a performance indicator in the MSOs for all APAs. The MoPA piloted a second generation of Citizens Charter with the GIU in 2015 which incorporated the NIS provisions for more empathic and citizen-centric behavior. As part of a motivational factor, the government introduced “Integrity Award” through its *Integrity Awards Giving Policy* in 2015. These policy instruments were aimed at the changing the Weberian-colonial bureaucratic culture. APAs with their MSOs have been

instrumental for promoting bureaucrats' values of collaborative and empathic behavioral. The awards, on the other hand, are aimed at creating a sense of urgency and competition among civil servants from different field-level agencies to reach out to citizens, in understanding the problems that they face in accessing public services. The awards are directed toward incentivizing successful institutional entrepreneurs. These bureaucrats have skills and understanding of the need to how to improve public service delivery process through leadership, focusing on citizens' interests, and legitimation through coherent organisational vision and success stories, to navigate through the public sector institutional arrangements and organizational forms (r9, interview, July 21, 2019). An analysis of whether awards are associated with successful innovation implementation has been done in Chapter 5.

Between 2013 and 2014, the a2i led the process for revising the *Secretariat Instruction*, which is the manual for government officers to be followed in administrative operations (MoPA, 2014). It was updated in 2014 to embed the use of ICT in all functions of all government offices. According to Instruction 15(5) of the *Secretariat Instructions 2014*, introducing e-file system is mandatory for all government offices. After the introduction of e-filing system, it was expected that hard files would decrease. However, this has not been the case as number of hard copies did not see any decrease in the offices (r7, interview, September 5, 2019). According to the same Instruction, it has been made mandatory for every ministry, division, and subordinate offices to upload relevant information to respective websites of the organization and update regularly to uphold the principles of RTI Act 2009. Website update was introduced as a performance indicator in both the MSOs for ministry/division and field level offices in 2016-17 financial year.

A separate Chapter 8 in *Secretariat Instructions 2014* mandated using TCV and SPS, the innovation toolkit pioneered by a2i, for introducing e-Government in public service delivery processes. It described how manual services were to be transformed into online and mobile based services using the innovation toolkit (an analysis of whether the innovation toolkit can be associated with successful e-Government innovation implementation has been done in Chapter 5). Chapter 8 also requires uploading Citizens Charter on the website of respective government offices. In 2012, it was found that the Charter had some positive impact on the demand-side of public service delivery, with little effect on supply-side due to a lack of compassion of public servants to serve citizens' needs (Razzaque, 2012). The Citizens Charter and the innovation toolkit have not yet been combined in a way that would allow updating TCV related information on whether citizens' sufferings, as service delivery recipients, are being reduced through e-Government implementation.

Nevertheless, there has been some progress in addressing complaints of citizen through the GRS. The Cabinet Division combined Citizens Charter and GRS and included these initiatives in the APA as an MSO to increase transparency and accountability at the field-level administration. In order to strengthen the GRS, performance indicators such as addressing citizen complaint and disclosure of information on GRS were introduced in the MSOs for both ministry/division, and field-level offices. Lack of skilled manpower, awareness, and willingness to use these tools were the common challenges identified by an academic respondent and a World Bank representative (r24, interview, January 7, 2020; r26, interview, July 23, 2019).

The revised *Secretariat Instructions 2014* introduced technology for functions of calculation, reporting, collection and records of customs clearance data. The number of signatures required was reduced from 22 to 6, while the time required for clearing

goods has reduced from 45 days to 21 days at these ports (a2i, 2018). As a result of the Automated System for Customs Data (ASYCUDA++) starting operations in 2010, Bangladesh recorded one of the strongest improvements under the latest World Bank's *Doing Business Index* (World Bank, 2020). There is, however, scope for more digital transformation as cargo information and other necessary works are being conducted manually, which indicates current customs clearance system has interoperability issue. The *e-Government Master Plan for Digital Bangladesh*, introduced in 2019, expects to build a fast clearance system with required time for exports as 1.5 minutes and import as 1.5 hours, reducing logistics cost for both import and export (BCC, 2019). The trade sector's e-Government advancement has resulted from a top-down administrative behavioral shift.

The *e-Government Master Plan for Digital Bangladesh* has provided a more strategic and directed guideline in encouraging a culture of innovation across the government. It calls for systematic management of various e-Government related projects being implemented by different ministries. The Master Plan aims to expand and diversify the use of ICTs to establish a transparent, responsive, and accountable government and support the national goal of becoming a middle-income country within 2021 and join the ranks of the developed countries by 2041. The use of TCV and SPS for e-Government implementation has been prioritized by the Master Plan, although it falls short in articulating how the innovation toolkit will be used (e.g., through training programs and workshops), by the drivers of innovation, i.e., bureaucrats.

The discussion so far shows that while policy reforms and new policy and legal instruments were necessary to create the enabling conditions for e-Government change, it was not sufficient to nudge bureaucrats to innovate. There was a need to train bureaucrats to use technology and capacity building training initiatives needed to shift

bureaucratic behavior towards entrepreneurship, encouraging them to get creative and experiment with new ways of serving citizens by leveraging the use of ICT. For example, training bureaucrats is necessary to build compassion, raise awareness and willingness of bureaucrats to innovate within the permitted bounds of the bureaucracy. Although some authors have argued that Weber's characteristics of a legal-rational bureaucracy does not help when the issue at hand involves resolving a conflict between two values (Meijer & De Jong, 2019), the present analysis argues the opposite: innovation can be led by bureaucrats within the permitted bounds of the bureaucracy, using approved guidelines, policies and strategies. The following discussion draws upon the Quick Wins training at the ministry level, which was extended informally at the field-level through empathy trainings in 2014, and formally as a program in 2015.

4.3. Digital Bangladesh (2009-2020): e-Governance reforms, e-Government outcomes

The digital transformation journey of Bangladesh was set by the Vision 2021/Digital Bangladesh agenda, which has earned global recognition for its success. Over the last eight consecutive years since 2013, Bangladesh government has been receiving the World Summit on the Information Society (WSIS) award from the International Telecommunication Union (ITU) for introducing ICT-backed, e-Government reforms in public service delivery. In 2020, the government of Bangladesh also received the UN's Public Service Award for the online transformation of the land records management system, which used to be fraught with delays and disputes.

As noted in Chapter 1, between 2010 and 2020, the percentage of population using the Internet increased from 3.7 per cent to 38 per cent, and mobile penetration witnessed a sharp increase from 45 per cent to 101.3 per cent. While such e-Government access and availability improvements have pushed up Bangladesh's

ranking in online transformation of service delivery (UNDESA, 2020), the country continues to perform poorly in indicators measuring good governance, as demonstrated by the government effectiveness dimension under the Worldwide Governance Indicators (WGI), and Transparency International reports on Corruption Perception Index (CPI).

This has given rise to an e-Government paradox. For generating administrative behavioral insights, the e-Government paradox can be examined by combining DT and DEG models through an analysis of different e-Governance reforms. While the DEG saw the importance of institutional entrepreneurship for the adoption of e-Government technologies (Tassabehji et al., 2016), the value of using DT strategies lay in adding the stakeholders' and citizens' perspectives in the implementation process, and developing an iterative process and continuous dialogue within the organizational environment. Iterative interactions through DT strategies can allow bureaucrats to develop targets that relate to good governance outcomes, such as increased government effectiveness.

After a brief description of some large-scale e-Government related projects, the following discussion demonstrates how e-Governance reforms were designed to nudge bureaucrats through a2i's Quick Wins to implement public service delivery innovation, through a process of creative learning and adaptation of DT strategies.

4.3.1. Large-scale e-Government projects

The political vision of Digital Bangladesh set the ground for the introduction of projects focused on making the use of ICT, and it considered projects which were of particular interest to donor agencies like World Bank, UNDP, and USAID (r1, interview, August 22, 2019). One of the largest digital public sector reforms has been

the introduction of an electronic government procurement (or e-GP) system. The traditional paper-based procurement process used to be fraught by labor-intensive, time-consuming manual processes which were prone to errors. Bureaucrats engaged in corrupt practices like collusive behavior, where they helped politically affiliated ruling party bidders in winning a high bidding price (r16, interview, September 5, 2019). The idea of digitizing the public procurement system was proposed by World Bank in 2002, but it did not receive any political attention until the launch of Digital Bangladesh, according to a World Bank official (r27, interview, July 24, 2019). With support from World Bank, Planning Commission launched the e-GP system in 2011 in four major procuring agencies³⁵.

In 2019, 55 per cent of all public procurement was being conducted under the e-GP, and the lack of willingness to implement the online system by some procuring agencies has been attributed as the factor hindering the wide-scale adoption (GED, 2020a). Nevertheless, even with its current status of implementation, recent cost-benefit research on e-GP indicates that it is generating phenomenal benefits for the Bangladesh economy, as a result of increased bidders participation and elimination of administrative manipulation at the bidding process (Lomborg & Chowdhury, 2017; Lomborg & Rahman, 2017).

The World Bank has always had an interest in building the e-Government infrastructure in the public procurement sector and in promoting the Information Technology-enabled Service (ITES) industry in Bangladesh (r26, interview, July 23, 2019; r27, interview, July 24, 2019). The World Bank attempted to introduce earlier projects in late 1990s and early 2000s for strengthening the foundations of the ICT

³⁵ The four procuring agencies are: Local Government Engineering Department (LGED), Rural Electrification Board (REB), Roads and Highways Division (RHD) and Bangladesh Water Development Board (BWDB)

industry, so that it could cater to the needs of the government and citizens (r27). However, there was little interest at the political and administrative level for supporting this change (r26 & r27). In collaboration with the ICT Division, the World Bank launched the “Leveraging ICT for Growth, Employment and the Governance” (or LICT project) in 2013. It started with the objective of create a vibrant ITES industry for generating new employment and private sector entrepreneurship opportunities, and ultimately, for diversifying the export basket. According to the policy advisor of the LICT project, the project is today catering to the needs of public sector modernization through development of policies, guidelines, e-Government Interoperability Framework (e-GIF) and technology related capacity development of the government officials (r13, interview, September 3, 2019). The ICT Division has entrusted the LICT project with responsibility of implementing the national *e-Government Master Plan* with financial and technical support from the Korean International Cooperation Agency (KOICA) (BCC, 2019).

The UNDP Bangladesh has traditionally had a dominant interest toward implementing governance and public administration related reform programs in Bangladesh (r15, interview, July 21, 2019; r28, interview, July 30, 2019). It has invested in police reform programs, creating service delivery points in rural and urban areas, increasing transparency, and modernizing the public administration (r28). To support the a2i’s project of implementing e-Government, UNDP launched a Service Innovation Fund (SIF) in March 2013. The SIF provides financial support to CIOs and to non-state, private sector actors. According to an evaluation report by UNDP, SIF has contributed significantly to the public administration innovation ecosystem (Rahman et al., 2019). Out of 53 projects funded by the SIF, 17 projects have been scaled up at the national level. It is estimated that cumulatively, about 0.9 million people have been

benefited from the SIF prototypes till June 2018. The evaluation report, however, noted that “there is an absence of evidence-based research on the overall impact and implications of the SIF generated innovation” (ibid., p. 49). This makes it difficult to analyze whether and how SIF may have influenced administrative behavior for driving public service delivery innovation.

A report by UNDP’s Independent Evaluation Office (IEO), analyzing investments of UNDP between 2012 and 2018, singled out the role of a2i in providing significant leverage to the government’s Digital Bangladesh efforts, and to modernize public service delivery system using e-Government (UNDP, 2019). The a2i embraced DT strategies starting from 2009 onward for building capacity of bureaucrats in becoming responsive to citizens’ needs using ICT. The a2i was able to design and introduce an innovation toolkit for enabling bureaucrats to adopt a more *outside-in* view, which allowed them to take on a new direction using the same premise that agents can be nudged to behave and think in certain ways, to implement e-Government for public service delivery process innovation.

4.3.2. Citizen-centric e-Governance reforms

Quick Wins, or small wins as it is known in the private sector, aimed to increase bureaucratic capacity and for engagement to design solutions addressing citizens’ problems (Amabile & Kramer, 2011). In 2007 and 2008, the PMO sent out a letter inviting senior bureaucrats, i.e., additional secretaries, from all the ministries to attend business process re-engineering (BPR) training exercises. Although this was recommended by the earlier SICT project, it could not be implemented given the lack of top-level ownership over the e-Government agendas. The policy advisor of a2i was experienced in preparing BPR maps for big US firms and he found it important to get

a “bird’s eye-view” of how things moved within bureaucracy (r9, interview, July 21, 2019). However, the BPR concept was offensive to bureaucrats as they were neither businessmen, nor were most of them engineers. The idea of e-Government implementation using private sector techniques thus met with high resistance from the bureaucrats (r9 & r15, interview, July 21, 2019). The term BPR was rebranded to SPS or service process simplification, using the same process map techniques in the private sector. According to the capacity development team’s director of a2i, “SPS resonated better with the bureaucratic values of serving citizens, not making business profits or engineering products (r10, interview, August 8, 2019).”

The SPS approach guided the participants to use sketches of their existing service delivery processes, which were very useful to understand the structural delays, for example, the time it took from one bureau (desk) to another in completing the back-end paperwork of a particular service. The SPS exercise served as a visual aid in terms of problem identification (Boyer et al., 2011), and problem representation (Simon, 1997), in a new way. The SPS sketching exercise identified existing service delivery processes involving different bureaus, where new ICT-backed changes could be applied for introducing e-Government change. To add citizens’ perspectives to the SPS led e-Government changes, in 2009, the a2i defined service delivery improvement or innovation as TCV, a method that reduces time, cost and number of visits. The TCV added new public value to the SPS exercise. By measuring service delivery improvement from a citizen’s perspective, TCV aimed to instil empathy in bureaucrats for leading SPS type of e-Government changes.

The SPS-TCV innovation toolkit was formalized through the *Innovation Team* gazette in 2013 (GoB, 2013). The SPS-TCV type of innovation has its limitations. For example, it cannot be applied for reducing doctor-patient times, dealing with

complicated medical and judiciary cases, and issues of national security (r5, interview, August 21, 2019). However, SPS-TCV helped to demonstrate the value of applying ICT-backed service delivery process changes, and it indicated a way to bypass undertaking large investments in procuring computer and hardware (r5). It helped bureaucrats to identify service-related problems from three parameters concerning citizens' perspectives, and to implement e-Government for service delivery innovation (r9, interview, July 21, 2019).

The SPS-TCV innovation toolkit connects means with objectives or e-Government implementation. Data on Quick Wins collected from a2i show how these PMO backed workshops (estimated to be 38 in total between end of 2008 to mid-2012), transferred the end-value of serving citizens better through TCV, to the *means* of using technology in the SPS exercise (r9, interview, July 21, 2019). In other words, e-Government implementation depended on the public administration's willingness and capacity to use ICT, and not being afraid of failure and risks when experimenting with new ideas. Quick Wins significance as an e-Governance reform, leading to a top-down e-Government innovation approach, is explored in the following discussion with five examples.

These examples illustrate how the Quick Win workshops aimed for a behavioral change at the ministry level, by equipping bureaucrats with the ICT skills and tools for using the SPS-TCV innovation toolkit. Quick Wins created a risk-free space for bureaucrats to experiment with new ideas, adopt a creative approach and explore new ways of simplifying service delivery processes; and, at the same time, a2i provided organizational level support (financial and administrative) for bureaucrats to collaborate and to implement e-Government. Most importantly, Quick Wins enabled

top-level bureaucrats to see the value of using technology from a citizen's perspective for the first time (r9, interview, July 21, 2019; r10, interview, August 8, 2019).

4.3.2(a) Reducing TCV for sugarcane farmers

The first example relates to how an age-old paper-based purchase order system for sugarcane farmers (known as *purjee*), was transformed in 2012. The purchase order used to be sent out to sugarcane farmers on paper from the sugar mills since the British colonial era, dating back to 1932. These farmers regularly fell prey to the unscrupulous practices of better politically connected farmers and the field-level bureaucrats working at the state-owned sugar mills, who were responsible for issuing the paper order. In addition, delays in issuing *purjee* resulted in state-owned sugar mills operating at below capacity, causing significant wastage of public resources. During the Quick Wins training workshop at the PMO in 2012, an additional secretary from the Ministry of Industries proposed the idea of “e-Purjee Information Service” (r10, interview, August 8, 2019). Given his ministry-level seniority, he was able to oversee the online transformation of the paper-based purchase system with an instant SMS notification, by the Bangladesh Sugar and Food Industries Corporation. For using the e-Purjee system, training to the field-level bureaucrats working at the 15 state-owned sugar mills were provided by the a2i. The e-Purjee has resulted in reducing corruption and increasing transparency in the administrative processes of sending purchase orders to 200,000 sugarcane (Rahman et al., 2019).

4.3.2(b) Reducing TCV for students

Students seeking university admissions faced great difficulties in accessing forms and other information related to the application requirements. Rural-based

students who wanted to apply at the universities in the division level or in the Capital, faced great difficulties. They had to undertake long travel and bear the costs for having to physically visit the university premises, which was more challenging for female students who needed to be accompanied by a male guardian (r24, interview, January 7, 2020). On the other hand, rural-based students needed to access their examination results in-person, after they had left the urban city following their graduation. In 2009, three additional secretaries from the Ministry of Education proposed the idea of transforming the paper-based public examination results, and applications for admission registration across all public universities (r10, interview, August 8, 2019). Through the Quick Wins workshop, they discussed the ways in which the processes could be simplified, and they realized that they needed the endorsement from the public university chancellors. All the forms for admissions related registration and paperwork for examination results needed to be made available online, and a2i, with backing from PMO, provided the administrative and technological support to the Ministry of Education. The Ministry of Education was successful in introducing the online public examination results and admission registration system in late 2009. It is reported that between 2010 and 2017, 23.1 million applications for admission were processed, and 138.1 million results were delivered through SMS (a2i, 2018).

4.3.2(c) Online government forms

Accessing simple forms for applying for licenses, jobs, social benefits, birth registration used to be fraught with challenges, particularly relying on middlemen, who acted as the agent between a citizen and the bureau. A top-level bureaucrat from MoPA, proposed the idea of converting all paper-based forms online in 2011 (r4, interview, August 20, 2019). He faced high resistance from some departments who were engaged

in issuing licenses and trade permits, because these services served as havens for petty corruption. R4 was able to get support from the principal secretary to the prime minister (the top-most bureaucrat in the civil service), whose leadership and interest in this SPS work prompted other departments to supply the information required for the e-Government change. R4 mentioned that without the support of the principal secretary, it would have not been possible to collect and bring all the forms physically under one roof, let alone an online site. Groundwork started in 2012 and the Cabinet Division launched a Forms Portal in 2015, in both Bengali and English version. All public service delivery related forms are today available in one web platform which has reduced the TCV faced by citizens in collecting such documents and papers from government offices. However, challenges remain in transforming the system to enable citizens to submit applications online, which would streamline citizen-to-government interactions (r9, interview, July 21, 2019). The a2i has been working to develop a provision for enabling citizens to submit these forms online by 2022.

4.3.2(d) Reducing TCV for rural citizens

Union Digital Centers (UDCs) was initially proposed as Union Information Service Center (UISCs) in 2007 by a secretary from the Local Government Division (r10, interview, August 8, 2019). However, it was piloted only in two unions with no success, given the lack of willingness of field-level bureaucrats and politically elected representatives to cooperate with the military-backed NCG (r10). In 2009, Nazrul Islam Khan, who had served as a personal secretary to the prime minister during 1996-2000, became the ICT secretary and the national project director (2009-2015) of a2i. He was aware of the UDC proposal, and he was keen on creating a whole new set of UDCs with support from UNDP and USAID. According to the policy advisor of a2i, Khan's

enthusiasm was not shared by the donor agencies and instead of undertaking large amounts of investment for creating UDCs, he decided for all UDCs to be set up in the Union Parishads (or councils)³⁶ (r9, interview, July 21, 2019). Between 2009 and 2010, Khan visited all 64-district headquarters for mobilizing financial support from the field-level administration offices toward supporting the initial costs for setting up UDCs (e.g., buying a computer, connecting to Internet, printer, etc.). “It was Mr. Nazrul Islam Khan who led the Digital Bangladesh efforts at the rural level, and without his willingness to take the risk, the 4,545 UDCs could not have come into existence in less than a year (r9, interview, July 21, 2019).”

UDCs are one-stop public information and service delivery shops serving rural citizens, which is a hallmark achievement of the government’s Digital Bangladesh vision – taking services to citizens’ doorsteps (Bhatnagar, 2014). UDCs are serving nearly 4 million citizens per month and the most popular public services in UDCs today are birth registration, citizen certificates, and registration for migrant workers (BBS, 2014). As a result of UDCs, travel distance reduced from an average of 35 km to reach the district headquarters, to only 3 km to reach the center and waiting time has been reduced from “uncertainty” to a few hours or a couple of days maximum, unless more complex matters such as land rights are concerned. For example, a birth registration certificate took a minimum of 10 days and required at least 4 trips. In the new system, a certificate is processed online, and made available within 5 hours, requiring 1 visit only (Zaman, 2015). A Transparency International Bangladesh (TIB) report in 2017 found that corruption in the public service delivery process at the rural-level has

³⁶ The Union Parishads are run by the politically elected representatives with administrative support from sub-district level officers, or Upazila Nirbahi Officers (UNOs).

reduced as a result of UDCs, because rural citizens reliance on middlemen for accessing simple services have been minimized, and eliminated, in some cases (TIB, 2017).

4.3.2(e) National Portal of Bangladesh

Ordinary citizens and business organizations faced challenges in finding reliable information on government services, personnel, documents, policies and programs (Osman, 2016). Although SICT project recommended for the creation of a national portal, no action was taken by the Cabinet and MoPA given that it required disclosing their information to the public. The national portal of Bangladesh started as a Quick Wins exercise in one district in 2009, and r4 began to lead its implementation starting in 2010 (r4, interview, August 20, 2019). Given his seniority level at the MoPA, he was able to mobilize support for the implementation of the National Portal at the field-level administration system. Under his leadership, trainings were organized at the PMO for building the ICT capacity of district-level bureaucrats to connect to the portal. A total of 130 bureaucrats from all 64 districts were trained, and once they returned to their offices, they were supported by a2i in setting up their own websites according to the portal's standards. By 2012, all 64 districts were connected under a single domain. Between 2013 and 2014, a series of capacity building trainings were organized by a2i for training the remaining field-level departments and offices, and for the ministry-level bureaucrats.

By 2015, all 40,000 government offices were connected to the national portal. It is considered as a success of the government's effort in implementing one of the largest e-Government capacity building initiatives (see UNDESA, 2020 for a case study on Bangladesh's National Portal). The national portal was created by the government officials themselves, without relying on any external vendors, because of their

willingness to adopt ICT-backed reforms in becoming more transparent and citizen-centric. It is mandatory for bureaucrats to maintain and update information about their offices and works in the national portal. By harmonizing all websites of all public offices, the portal is helping citizens to easily navigate the information pertaining to bureaucratic personnel and the services that they are seeking from a particular office or location.

4.4. Empathy Training Program (ETP): Building empathy and entrepreneurial mindset

Given the success of Quick Wins workshops at the ministry level, the a2i initiated a series of innovation forums and workshops to disseminate successful e-Government projects and programs from around the globe at the field-level and engaging other national-level offices and departments (r9, interview, July 21, 2019). These forums brought mid-level bureaucrats together to the forefront of service delivery innovation and they were introduced to Quick Wins and the innovation toolkit. Quick Wins trainings were extended to the department-level in 2014 through “Workshops in Public Service Innovation” which was informally known as empathy training (a2i, 2018). The Empathy Training Program (ETP) started formally with field-level officers in 2015, and it was gradually scaled up to cover ministry-level officials from mid-2017 onwards.

The ETP was implemented by a2i in collaboration with the Cabinet Division and MoPA from 2015 to 2018. The a2i, in partnership with the BIT, has been working to develop the behavioral insights capacity of bureaucrats in Bangladesh (Carmody, Hosain, & Shams, 2018). The BIT’s methodology adds a social anthropology perspective through DT strategies, whose exponents seek to understand the context of a problem prior to designing solutions (Service et al., 2015). Besides, DT, the ETP

draws lessons from the MATT and Kaizen training programs. MATT showed the possibility of training the bureaucrats to go beyond the organizational experience, and Kaizen introduced TQM concepts and different stages through SIPs. Like Quick Wins, the ETP aimed to teach bureaucrats on how to use the approved innovation toolkit, i.e., estimating TCV parameters and innovation implementation through SPS mapping process. It indoctrinated the values (e.g., entrepreneurial thinking, creativity, empathy, etc.) in terms of which decisions were to be made during and after the training. The innovation toolkit was particularly noteworthy given that past e-Government efforts had failed or remained dormant to political and administrative dominance.

The trainee selection process for the ETP depends on the ministries and their divisions. The a2i has several predetermined criteria that it uses to select the most appropriate bureaucrats for training (a2i, 2015). These criteria include (a) Class-I officers (from both ministry and field-level), (b) who are below the age of 50, (c) who have not participated in earlier five-day training, (d) who are directly engaged with service delivery to citizens, and (e) who have a ‘knack,’ for experimenting with new ideas without being afraid to fail. The first four criteria are relatively easy to identify compared to the last one, because it requires identifying public sector entrepreneurs: namely, those who exhibit a willingness to use ICT for simplification of service delivery processes (r10, interview, August 8, 2019). The link between theorizing bureaucratic entrepreneurship and innovation lies in how the empathy training required bureaucrats to leave their offices and interact with citizens to adopt an outside-in view of the world. During the training, “bureaucrats are encouraged to step into the shoes of the people they serve, and in the process come up with powerful new ideas to deliver more effective public services” (Carmody, Shams & Hosain, 2019), by e-Government implementation.

4.4.1. Stage I: Empathy based ideas generation and innovation plan

The ETP begins with five-days of training (stage 1) at the Divisional Commissioner's office (there are eight administrative divisions in Bangladesh). During the first day of the training program, bureaucrats are introduced to empathy, TCV, SPS and perspective-difference concepts. They prepare SPS maps and estimate TCV without having any prior outside-in understanding of citizens' needs. Participants are divided into groups which are further divided to undertake different activities. Out of a group of 5-6 participants, a two-member group observes the activities within the visiting office, one group observes the environment outside the office (citizens and civil servants), and the last group reaches out to citizens, pretending to be seeking similar services, and asking about their experience while waiting for services.

Building empathy under ETP requires field-level bureaucrats responsible for service delivery to assume a "secret-shopper" role and spend time with citizens in gaining a genuine understanding of their sufferings. The empathy component is integral to ETP's objective of generating ideas which enables bureaucrats to gain an outside-in understanding of citizens' needs. This takes place on the second and third days of the ETP's first stage.

During the second day, participants visit the offices of another department to observe the real scenario of the service delivery process. The process of anonymity as a secret-shopper is crucial for bureaucrats to have a genuine experience as citizens and understand the organizational environment. Participants from the same ministries and divisions are put into small groups of 4-5 members and visit other participants' offices. By assuming the role of an ordinary citizen, they gain insights through both ingroup (within bureaucracy) and outgroup (with citizens) experiences. After their visit as a

secret-shopper in their peers' offices, they report back to the training officials and present their findings and receive feedback on their own offices which have been visited by other groups.

On the third day, participants visit their own department but in a different location, where the posted officers are not familiar with the participants. The latter are instructed not to communicate with any officials during their visit, and to simply observe how the interaction between the bureaucrats and citizens takes place. This allows them to get into citizens' shoes and experience the service as they are unable to disclose their real identity or occupation.

Over the last two days, participants revise the SPS maps which they had drafted on the first day. Their new ideas are turned into prototypes using sketches which allow flexibility in interpreting problems based on TCV parameters. These SPS sketches are useful in locking-in progress at least in terms of problem identification (Boyer, Cook, & Steinberg, 2011). The 5-day training ends with a SPS innovation plan designed on the TCV criteria. These SPS plans pinpoint specific areas for digital transformation of service delivery processes.

4.4.2. Stage II: Implementation of innovation plan

The ETP's second stage begins with the implementation process of the SPS plan in the offices by the participants. ETP participants are instructed by the Cabinet Division and PMO to organize cascading workshops at their offices. This is a crucial step for public sector entrepreneurs to build internal collaboration momentum. They receive feedback from stakeholders, including their supervisors, colleagues and citizens, and garner organizational support for the implementation of their innovation plan.

4.4.3. Stage III: Replication, diffusion and sharing the story of innovation

Successful public sector entrepreneurs are invited to Dhaka for a 3-day workshop (stage III), organized by the Cabinet Division, PMO and relevant ministries. Over three days, these entrepreneurs are trained on how to best capture their learning experience and innovation journey. This is the third stage of the cycle – sharing the story. For field-level bureaucrats, this is a once in a blue moon opportunity to connect with ministerial higher-ups. Innovations which can be replicated or diffused are also discussed here although the results are uneven.

4.4.4. Outcomes of ETP

As Table 4 presents, out of 1,425 participants who underwent the ETP training in 2015 and 2016, only 14 and 18 per cent of bureaucrats could implement a TCV based innovation in their own offices. No replication or diffusion took place during the first two years. One of the possible explanations is that replication and diffusion require scaling up those services which are common to citizens in more than one area. In addition, these numbers should be interpreted carefully because there is significant time that elapses between implementation and replication, and between replication and national-level diffusion. The next two stages require strong top-level institutional oversight from the concerned ministries, Cabinet Division, and the Ministry of Finance to provide the policy, regulatory and financial support.

Table 4: Empathy Training Program (ETP): Indicators

Year	Training	Innovation Process		
	Five-day empathy training (participants)	Implementation success (percentage)	Replication in other offices (percentage)	National-level diffusion (percentage)
2015	568	78 (13.73)	None	None

2016	857	151 (17.62)	None	None
2017	1,051	268 (25.50)	25 (9.00)	6 (24.00)
2018	1,178	320 (27.16)	34 (10.62)	8 (23.52)
Total	3,654	817 (22.36)	59 (7.22)	14 (23.73)

Source: Information collected from a2i in December 2019

In 2018, implementation success peaked to 27 per cent. The success rate of participants moving to the implementation phase is 22 percent, which poses a contradiction: on one hand, not all bureaucrats are able and motivated to undertake experiments and on the other hand, even when they succeed in implementing an innovation, they may not succeed in overcoming resistance for scaling up due to the risk-averse bureaucratic environment. Thus, public sector entrepreneurs have a hunger to experiment with new ideas which originate from their cognitive experiences, and they must also be skilled to garner collaborative support from their colleagues and supervisors to implement SPS led TCV based innovations. Three cases of service delivery innovation are presented in Box 2 to shed light on the type of innovations being implemented by public sector entrepreneurs. One case relates to the problems faced by fish farmers in accessing information on diseases, fish culture methods and fish production related issues. A field-level bureaucrat has developed a “Fish Advice” mobile app which is now being accessed by fish farmers to overcome these challenges. In the other case, a bureaucrat transformed the paper-based registration system for cooperatives by introducing an online platform. This has significantly reduced dependence on middlemen and sped up the registration process. In the third case, a field-level bureaucrat designed a VIP card for the poor to encourage them to visit the sub-district health complexes.

Box 2: ETP cases of TCV based public service delivery innovation

Case 1: Fish Advice App

Public sector entrepreneur: Sadhan Chandra Sarker

Designation: Senior Sub-district Fisheries Officer

Problem: Bangladesh represents around 7 per cent of the world's inland fish production. However, a lack of awareness and availability of accessible government fishery information, makes it difficult for fish farmers to find solutions to issues like diseases, fish culture methods and other problems relating to fish production.

TCV Innovation: As part of the ETP, Sadhan brainstormed various ideas and designed a mobile app as a solution. The goal was to create an easily accessible centralized solution hub for the fish-farmers with visual guidelines. Initially, the project was piloted through 1,200 farmers in 2015. The a2i and Department of Fisheries played a significant role from training to providing the necessary funding and technical support, enabling the project to be scaled up across Bangladesh. The Android app, 'Fish Advice', has already been downloaded approximately 27,892 times.

Case 2: Online registration for cooperatives

Public sector entrepreneur: Mamun Kabir

Designation: Sub-district Cooperatives Officer

Problem: The mission of the Department of Cooperatives is to reduce poverty and improve socio-economic conditions of citizens by promoting through cooperative based activities. However, cooperative society registration process is complex and requires help of middlemen for information and services, that is free of charge.

TCV Innovation: Mamun designed an online application to streamline the registration for establishing a cooperative. The ETP enabled him to use SPS as a tool and TCV as a method to intervene and provide citizen-centric solution. Following the successful piloting in 2015, the process was replicated with financial support from the Department in 7 sub-districts. Due to this intervention, the steps needed to receive the cooperative registration certificate dropped by 50 per cent, and required paperwork fell by over 75 per cent. According to Mamun, the TCV based innovation has led to a 74 per cent reduction in time, 74 per cent reduction in cost, and 58 per cent reduction in visits.

Case 3: VIP cards for the poor

Public sector entrepreneur: Abdullah Al Mamun

Designation: Sub-district health officer

Problem: Although health facilities are available at the sub-district all over Bangladesh, the poor are reluctant to access health services. This is because the rural poor are not comfortable in conversing with the health officers who are well-dressed and groomed, and this makes them feel nervous and uneasy at the health complex.

TCV Innovation: This innovation did not reduce TCV, but it nudged rural citizens to visit the health complex. A VIP card was designed and distributed to the poor, and it was told that if they visited the health complex with the VIP card, they would be given VIP treatment. This made the rural poor very eager to visit the health complex and seek medical help. As a result of this VIP card, number of patients visiting the upazila health complex increased from 12 to 40 per day.

Source: BIT (2018) for case 1, and information based on interviews for case 2 and 3.

A direct outcome of ETP has been a new structure for bureaucrats to innovate within the administrative bounds. The ETP allows bureaucrats to represent the problem situation in new ways, and then to problem-solving using TCV and SPS. The SPS-TCV innovation toolkit aims to enable bureaucrats to think like system and act like entrepreneurs (Conway et al., 2017), with high levels of cognitive empathy for

addressing public service delivery challenges (Allio, 2014). The ETP is an experiential, structured learning program aimed at creating opportunities for administrators to experiment with new ideas and implement an innovation.

The exercise of TCV and SPS under ETP is unique from a bureaucrat's perspective: it demonstrates the value of implementing good enough improvements in service delivery processes by simplifying the problem within the specified time, costs and visit parameters. The association of TCV and SPS with successful innovation can be captured by using survey statements to assess the usefulness of these tools. Both TCV and SPS aid bureaucrats to work within a bounded rationality framework and take a procedural view on decision-making, leading them to "satisfice" not "maximize" their goals (Simon, 1997). SPS-TCV are the e-Governance means to accelerate service delivery to citizens and by itself, it is also the ultimate value or objectives to be achieved by bureaucrats in terms of e-Government implementation. The TCV rests on a HDC approach, and it is used to shape bureaucrats' decisions about what type of technologies should be used to reduce service delivery process time, from citizens' perspectives. The SPS has the inside-out perspective which aids bureaucrats to understand what processes are to be changed through the deployment of new ICTs.

4.5. Entrepreneurship and innovation under Digital Bangladesh

The managerialist conception of the role of the public servant is becoming more widely diffused than in the past (Peters, 2021). Digital Bangladesh allowed formation of new coalitions and institutional entrepreneurs to work within the existing public administration system. Thus, despite politicization, Digital Bangladesh set an organizational vision for the entire bureaucracy, which extended its bounds to incorporate new ways of serving citizens by using technology. The objectives for

achieving the e-Government policy goals of Digital Bangladesh helped to align e-Government priorities within bureaucracy's legal-rational framework for decision-making. For example, under colonial rule, district-level bureaucrats were trained and provided political patronage to meet revenue and production targets, exploit citizens by making them suffer. Under the Digital Bangladesh agenda, bureaucrats are expected to use technology and adopt a modern approach toward serving citizens. The momentum created by the Digital Bangladesh was the most critical factor in terms of increasing public administration's confidence in political leadership for reforming service delivery processes, according to a former principal secretary of the government (r1, interview, August 22, 2019).

The present chapter examined administrative process innovation and contextualized it within the e-Government implementation process. The onset of DT ideas and strategies (i.e., the ETP) expanded the scope for the implementation of e-Government innovation from a behavioral perspective. The success of DT is dependent upon (a) propensity of political factors to appreciate the nature and benefits of bureaucratic change, (b) degree of self-awareness of bureaucrats to understand citizens' needs, (c) the power distance between the public sector entrepreneur and supervisors, and (d) the distance between bureaucrats and citizens (Allio, 2014). DT is not an exclusive prerogative for developed countries' governance systems; it has been leveraged by the developing countries through UNDP sponsored accelerator labs, and by the government of Bangladesh to implement the e-Government policy goals under Digital Bangladesh.

While Quick Wins helped to increase the uptake of technology by bureaucrats, there are still challenges which have been hindering the complete online transformation of traditional public services. For example, UDCs and the national portal have yet to

reach a level which would enable citizens to conduct online transactions without having to visit any offices in any location, which is a common practice across developed countries. Under the Eighth Five Year Plan, it has been proposed that a new census on UDCs should be carried out to assess its performance, identifying key gaps and successes, so that more services can be delivered at the bottom-of-the-administrative hierarchy (GED, 2020a). The behavior of bureaucrats because of Quick Wins have been changing incrementally to adopt e-Government for implementing SPS-TCV type of innovations in public service delivery. The series of Quick Wins workshops created the scope for bureaucrats to engage in creative learning, by not being afraid to fail when experimenting with new ideas and provided them with both financial and administrative safeguard.

For the deployment of e-Governance tools, the DT model recommended creating innovation hubs or institutions outside the government, but with the authority to implement strategies and trainings, for bringing bureaucrats outside their offices, making them interact with citizens, and use ICT in solving real-life problems. The DT institution of Bangladesh, a2i, pioneered the SPS-TCV innovation toolkit through a trial-and-error process of learning, through the Quick Wins workshops. DT strategies was applied through ETP in creating scope for bureaucrats to understand citizens' problems in new ways and implement e-Government through entrepreneurial efforts. However, such solutions created by the innovation toolkit focus on immediately solving a particular problem, and often cannot fully consider the quality-of-service delivery, which often undermines the public value creation of innovation. For example, SPS-TCV may lead to reduction in waiting times and costs formally, but if bureaucrats' behavior remains hostile and domineering, such innovations will have little value for the public. The SPS-TCV is limited to incremental changes in service delivery

processes while it is also targeted at improving public administrative behavior through empathy. TCV is meant for motivating bureaucrats through empathy. In order to maximize the utility of TCV as a human-centered approach to innovation, the APAs with their MSOs need to be monitored regularly to ensure that bureaucrats are continuously improving and simplifying service delivery processes.

The present chapter's analysis shows how different initiatives undertaken by both government and donor agencies, may have created a road for carving out a learning reconciliation process through Quick Wins and the ETP. By leveraging the use of SPS-TCV innovation toolkit, the ETP aimed at equipping the field-level trainees with a new frame of reference for their thinking. Bureaucrats' lack of willingness to engage in the ETP may challenge the process of SPS-TCV e-Government innovation. Quick Wins and ETP trained bureaucrats in how to use the approved innovation toolkit and indoctrinated them in values such as entrepreneurial thinking, creativity, empathy, etc. These values then drive decisions that must subsequently be made. A quantitative analysis of ETP has been done in Chapter 5 by applying behavioral economics using a positive approach to study the behavior of bureaucrats, in relation to successful e-Government implementation.

**CHAPTER 5. ANALYZING THE EMPATHY TRAINING PROGRAM (ETP):
A WHOLE-OF-GOVERNMENT APPROACH TOWARD EMBEDDING
E-GOVERNMENT**

The postcolonial bureaucracy in Bangladesh developed in a distinct Weberian form inheriting key characteristics of the colonial legacy, such as centralization of power, irregular political appointments in the bureaucracy, the non-separation of executive and judicial functions. Preceding chapters examined the construction of bureaucratic experience (chapter 2) and bureaucratic changes (chapters 3 and 4), particularly regarding relationships within the bureaucracy, and between bureaucrats and citizens. There is evidence to indicate a serious level of “incongruity” with the bureaucracy and between bureaucracy and citizens due to the former’s lack of understanding about local context and service needs. Nevertheless, international donor agencies provided support in bringing ideas from different global public administration reform models into different training programs.

The idea of Empathy Training Program (ETP) followed a behavioral change process which started with the Managing at the Top (MATT) training for top-level executives in the bureaucracy in 1999, and by MATT-II in 2006. Although it did not provide for a specific method or tool to improve public service delivery processes and lacked mechanisms to enable bureaucrats to become perceptive of citizens’ needs, it was the first program which brought bureaucrats outside their offices. Then, in 2007, the Kaizen tool for service delivery improvement was introduced through training for field-level bureaucrats. A series of capacity building trainings, known as Quick Wins, drew lessons from MATT and Kaizen, and the TQM concepts were translated into understanding service delivery improvements from a citizen’s perspective, i.e., the time, cost, and visit (TCV) parameters (r5, interview, August 21, 2019). While Quick Wins focused on building capacity of top-level bureaucrats to use technology for becoming more responsive to citizens’ needs, it was gradually decentralized through a series of innovation forums and workshops for mid-level and field-level officers. In

2015, the ETP was formally inaugurated by a2i, drawing on insights from MATT, Kaizen and Quick Wins, and it was tailored to empower field-level officers to lead the digital transformation process of paper-based services.

The ETP established a structured process by following the design thinking (DT) model. Like the DT model, ETP aims at facilitating interactions between field-level bureaucrats and citizens, and the implementation of e-Government for accelerating service delivery to citizens. By further analyzing the ETP, this chapter investigates the e-Government paradox from the bureaucrats' behavioral perspective in relation to e-Government advancement in Bangladesh. It is conceptually divided into three parts and based on a ETP survey and interviews. The first part of the chapter presents a brief description of the Bangladesh public administration. This is useful to conceptualize the structure and hierarchy, alongside the different roles and responsibilities of the bureaucracy with the implementation of ETP. The second part presents the ETP survey design and findings from the descriptive statistics. The third part presents a multivariate logit regression analysis and analyzes whether the ETP created a new momentum for behavioral and organizational change to take place, in driving forward e-Government implementation. An examination of ETP can help to identify the behavioral and organizational level determinants of successful e-Government innovation outcomes. An impact assessment of the ETP explored some of the programmatic implications (Kalimullah, Rashid & Chowdhury, 2019), and the present study uses a framework used by scholars in private sector, alongside other variables, to assess its impact from a structural-behavioral perspective.

A survey was carried out to study the impact of ETP on changing Weberian-colonial bureaucrats' behavior – from inside-out to outside-in – to that of a public sector entrepreneur. Surveying bureaucrats who participated in the ETP is a first step to

enhance the understanding about the culture of e-Government innovation, and to identify areas of strength, weakness, and inconsistency particularly from a developing country's context. The survey instrument is a combination of three works – a culture of innovation framework developed by Rao and Weintraub (2013) for assessing the corporate sector's culture of innovation, administrative culture framework by Jamil (2002), and research by Norman, Banerjee, Prabhu & Yunus (2020) on the impact of empathy on land records related service delivery in Bangladesh. The present chapter argues that e-Government implementation, through experiential programs like the ETP, can be attributed to an incremental change in bureaucratic behavior. These experiential programs have well-defined goals and are structured for allowing bureaucrats to think and act like public sector entrepreneurs, for driving digital transformation of public service delivery processes.

Data shows that public sector bureaucrats exhibit entrepreneurial traits as risk-takers, not afraid to fail and hungry to implement innovation, and they are perceptive of citizens' needs. Successful public sector entrepreneurs are collaborative and creative within the permitted administrative bounds, comprising approved guidelines and policies such as the time, cost, and visit (TCV) method and the *Innovation Team* gazette. The results support the argument regarding the importance of training bureaucrats through a structured innovation process in developing their entrepreneurial abilities for e-Government implementation. The analysis points to the idea that bureaucratic entrepreneurship, in relation to public service delivery innovation, is a management phenomenon. Public entrepreneurship involves implementation of innovation in the public sector through generation, translation, and implementation of new ideas and innovations (Roberts & King, 1991). Entrepreneurial ideas are framed, developed, pursued, institutionalized, and enacted through processes that are both

analogous to, and intertwined with, political priorities, e.g., implementation of Digital Bangladesh. Pursuing the implementation of new ideas also requires budgetary support, internal collaboration, and organizational support. These are important structural-behavioral factors which have been considered by the present study.

5.1. Public administration structure in Bangladesh

Before proceeding with the statistical and regression analyses on ETP, it is important to describe the public administration hierarchy, structure, and functions. The size of the Bangladesh Civil Service (BCS) has grown at a faster pace since independence. The civil service started with 0.4 million workforce in 1972 and increased to 1.3 million in 2018 (Jamil et al., 2019). The size of BCS dramatically increased between 1980 and 1992. This was caused by the introduction of the upazila (sub-district) system by the Ershad regime, and by the government's special emphasis on primary education and health after 1990 that required the recruitment of a large number of primary school teachers and doctors (Maniruzzaman, 1992). According to convention, development functions have remained under the jurisdiction of local government, while the control of the regular administration has remained under the purview of central government officials stationed at the local level, known as upazila nirbahi officers (UNOs) (Panday, 2019).

Bangladesh has a two-tiered public administration system: secretariat (national-level) and the field administration (field-level) (see Figure 2) Their operational modalities are outlined under the *Secretariat Instructions* policy gazette, and the latest version was examined in detail in the preceding chapter. According to the latest *Secretariat Instructions 2014*, the secretariat “collects, collates, analyzes and evaluates data, facts, evidence,” in order to facilitate policy and legislative process, and help ministers discharge their functions” (MoPA, 2014, p. 32). Due to its administrative

supervisory role, the secretariat is influenced by political consideration of the ruling regime, to exercise *de jure* (parliamentary majority) and *de facto* (executive) powers (Khan & Haque, 2013).

The Cabinet Division is headed by the prime minister, and it formulates policies. Ministries and divisions oversee the implementation of policies and programs by their subordinate offices located in district and upazila offices at the field-level. Field agencies implement policies and programs of the government and the administrative set up slightly varies between urban and rural areas. As of 2021, there are eight administrative divisions: Dhaka, Chattogram, Khulna, Rajshahi, Barisal, Sylhet, Rangpur and Mymensingh. These divisions are further divided into 64 districts which consist of, on average, eight upazilas numbering 490 in total. Urban authorities include 12 city corporations and 323 towns (municipalities).

The minister is the executive head of a ministry, whereas the secretary is the administrative head and the principal accounting officer of that ministry. The secretary and additional secretary also advise the minister regarding policy and administrative issues (Kalimullah et al., 2013). The internal organizational structure of a ministry is hierarchical with the minister having the ultimate decision-making power but the secretary holding the power on what is to be decided, thus becoming the nodal point of decision-making process itself. The secretary or additional secretary conducts and looks after the duties of a division, which includes routine operation, supervision of its staffing, and organizational processes. Divisions under the ministries are responsible for monitoring field-level activities of the districts and upazila offices. It can be further divided into wings that are headed by joint secretaries who have the power to directly submit cases to the minister.

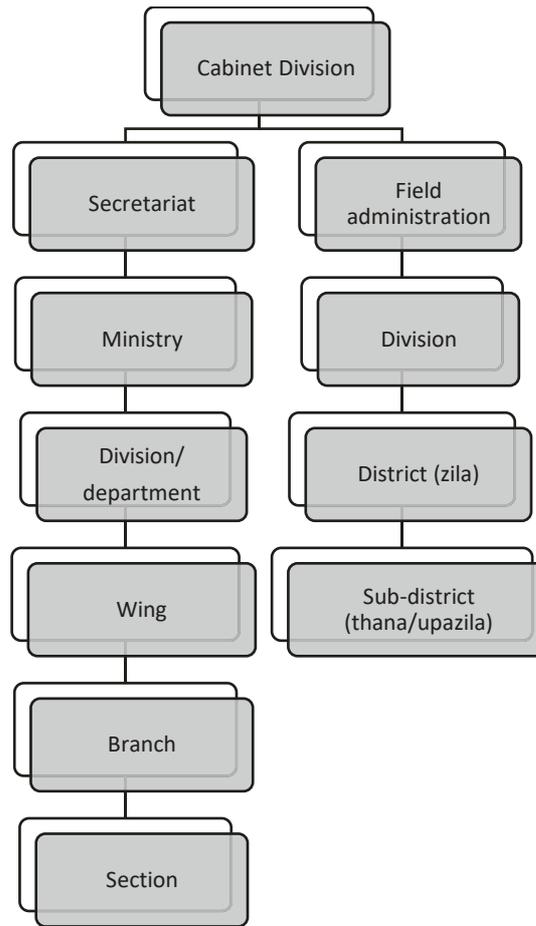


Figure 2: Administrative structure in Bangladesh

Source: Kalimullah et al., (2013)

The BCS follows inconsistent position classification principles. Positions are classified into two broad occupational groups: cadre and non-cadre positions³⁷. Since the British era, the functional cadres have been the top services of the state. At present, there are 28 cadres in the BCS. Positions are organized into four classes. Promotion from one class to the next higher class is strictly regulated and educational qualification, pay, and appointment procedures are distinct for each class. Class III employees are the semi-skilled working force of district administration such as office assistants and clerks, while class IV staffs are low-skilled and known as orderly, peon, guard, cleaner,

³⁷ Cadre services apply the rank-in-person method based on closed career and status. Non-cadre positions follow the rank-in-position method based on functional requirements. Cadre positions have a defined line of hierarchy and have higher vertical and horizontal mobility, line authority, and prestige than do non-cadre positions.

gardener, etc. Promotion from class IV to class III is not allowed and it has been pointed out that heavy politicization takes place at these less-skilled classes comprising of cleaners, office helpers and manual tasks.

Despite their similarity in the educational qualifications, the reasons for differentiating between class I and II positions are not very clear. All cadre positions belong to class I and these officers are employed directly by the Bangladesh Public Service Commission (BPSC) by an open competitive examination into 28 cadres. Apart from this, promotion from class II to class I is strictly regulated and requires both a minimum length of service and passing a promotion examination conducted by BPSC. Moreover, a quota policy is strictly followed for promotion to a particular position belonging to a higher class.

Every cadre officials has his place in Class I salary positions and enjoys the equivalent prominence and remunerations (Khan, 2013). Mainly, the BCS (Administration) cadre officers administer the districts and besides them, there are first- and second-class officers from other cadres. They work as a team in district administration and the purpose of the *Innovation Team* gazette has been to mobilize a collective effort for e-Government service delivery innovation. Class I and II officers are supported by class III employees, who are also assisted by class IV staff. The same class employee has different designations according to their nature of work³⁸. For example, a first class BCS administration cadre officer can hold the position from Deputy Commissioner or DC to Assistant Commissioner. But the custom of the administration is that the most senior one is assigned to the DC post, while the most junior officers work as assistant commissioner in district administration.

³⁸ In district administration, class I and class II officers have 13 and 4 designations respectively, whereas class III and class IV staffs have 19 and 10 designations respectively.

The civil service organizations in Bangladesh (also India and Pakistan) remain to be affected in an important method by British colonial organizational philosophy, though a long time has passed since the culmination of the British rule in the Indian sub-continent. The organizational structures entirely in the three countries still “depend on the ascendancy, exclusiveness and suspicion equally within the general people and elected agents” (Ferdous, 2016, p. 4). A lot of unsatisfying training efforts are the outcome of the absence of political determination and strong presence of bureaucratic resistance. A survey of class I officers revealed that they do not perceive training as a method for building competence and excellence and undergoing training is associated with an officer’s deficiency and as a “waste of time” by bureaucrats (World Bank, 2006).

The hierarchical system of the public administration provides a broad understanding of the different actors and processes engaged in service delivery processes to citizens at the field-level. The ETP adopted a whole-of-government, bottom-up approach by targeting Class-I officers from the field-level to the ministry-level. In particular, the field-level officers from the rural level are assistant secretaries, DCs, district magistrates, assistant DCs, assistant deputy magistrates, assistant commissioners, upazila nirbahi officers (UNOs), etc., who are directly engaged service delivery interactions with citizens. However, not all DCs and UNOs are eager to adopt digital technologies and this chapter analyzes the second category of bureaucrats – those who are able to shift to an entrepreneurial mindset for e-Government implementation, and they are able to garner organizational support for the implementation of their new ideas. Unlike the first group of bureaucrats who resist e-Government change from analog to digital processes, this second category of

bureaucrats have an empathic understanding of citizens' needs, and they are eagerly exploring and pursuing new opportunities to address citizens' needs.

This study focuses on one individual value for conceptualizing public service delivery innovation: bureaucratic entrepreneurship. Public sector entrepreneurs have a desire to implement innovation, they are not afraid to take risks and fail when implementing new ideas. These entrepreneurs also understand the organizational dynamics because public sector entrepreneurs, unlike private sector entrepreneurs, need support from their colleagues and supervisors in the implementation process of innovations (Rao & Weintraub, 2013; Prabhu, Tellis, & Chandy, 2010). The link between empathy and entrepreneurship with ETP lies in the latter training class-I bureaucrats across all cadres, to adopt an outside-in approach by making them interact anonymously with citizens, and at the same time, providing organizational support for the implementation of innovations using the approved innovation toolkit. In the following discussion, data from the ETP has been used to analyze an alternate hypothesis, i.e., whether this bureaucracy-citizen incongruity is being reduced by making bureaucrats more entrepreneurial, empathic, and citizen-centric.

5.2. Empathy Training Program (ETP): Survey design, sampling, and descriptive statistics

The objective of the ETP survey was to identify determinants of successful e-Government implementation from an administrative behavioral perspective. The survey was conducted to assess whether ETP, as an administrative capacity building tool for e-Government implementation, is helping to nurture new individual behaviors such as entrepreneurship, empathy, creative action and learning, etc. At the same time, organizational factors such as budgetary resources, authority with supervisors, the

scope for being action-oriented and collaboration were assessed to understand their relationship with the implementation of service delivery innovation.

The ETP survey instrument consisted of three parts with 40 survey questions in total, covering (a) social demography characteristics and programmatic factors (10 survey statements), (b) individual behavior and attitude (15 survey statements or elements), and (c) organizational environment (15 survey statements or elements). The first set of survey questions related to basic administrative and social characteristics such as gender, age, location (administrative division), level and type of education, place of work, tenure, and whether the participants found the TCV and SPS useful in helping them to implement innovation. Rao and Weintraub (2013) presented a framework to measure behaviors and values such as entrepreneurship, creative learning, organizational energy, client relations, collaboration, and organizational resources in the case of private sector. Their framework was found to be long (54 elements with 18 components and six blocks), not suited for bureaucrats. For example, under creative component, a survey question related to the “playful” element, and this was removed from the ETP survey, given the disciplined nature of bureaucracy. Similarly, curiosity under learning component was collaboration could not be included in the ETP survey.

The survey elements from Rao and Weintraub (2013) were, therefore, modified to fit the e-Government implementation context in Bangladesh. For example, the administrative behavioral survey statements incorporate the utility of TCV which is mandated in the BCS for designing and implementing e-Government service delivery process innovation. Empathy, relations with citizens, power and hierarchy are not present in Rao and Weintraub’s (2013) culture of innovation framework. These are particularly important in relation to analyzing determinants of innovation in public service delivery and were added to the ETP survey from the research works by Jamil

(2002) and Norman et al., (2020). The choice of 30 administrative behavioral statements and their wordings were finalized after two-rounds of consultation meetings. The first meeting was held with representatives from the BRAC Institute of Governance and Development (BIGD), BRAC University and two meetings with teams from a2i – capacity development and results management.

5.2.1. Administrative behavior: Blocks, components, and elements

There are 15 individual behavioral elements and 15 organizational environmental elements, and altogether, these 30 elements make up the administrative behavioral part of the ETP survey. There are two blocks – individual behavior and organizational environment – comprising 30 elements under 10 components. There are five components under each block, and each component consists of three elements.

The first block consists of five components measuring individual-level behaviors – entrepreneurship, creative action and learning, cognitive empathy, emotional empathy and relationship with citizens – with successful innovation implementation. Entrepreneurship is measured in terms of bureaucratic mindset which represents the desire to explore innovation opportunities, not being afraid to fail, and taking risks while implementing new ideas for service delivery innovation (Prabhu, Tellis, & Chandy, 2010). These three survey statements, from the private sector literature, indicate bureaucrats’ entrepreneurial orientation for implementing e-Government.

The second component on creative action and learning includes survey statements relating to bureaucrat’s analytical ability, freedom to experiment with new ideas, and being action oriented. Analytical ability is important to avoid basic unnecessary costs and duplication of efforts, while experimenting with new ideas and being-action oriented measure the ETP’s success in creating a risk-space. The risk-

space allows bureaucrats to engage in a process of learning and applying new tools for service delivery improvements based on the TCV parameters through SPS. These three survey statements indicate bureaucrat's ability in terms of their analytical strength, willingness to experiment with new ideas, and being creatively action-oriented when using TCV to serve citizens in new ways.

The third and fourth components relate to cognitive and emotional empathy, respectively, which have been adopted from Norman et al. (2020). There are three survey statements under cognitive empathy. Cognitive empathy involves having more complete and accurate knowledge about the contents of another person's mind, including how the person feels (Hodges & Myers, 2006). The first is perspective-taking, or adopting the view of another person (Davis, 1980, cited in Norman et al. 2020). An understanding of that others may be different from one's own mental state is the other-perspective survey element. The third element under cognitive empathy is about fairness, or the sense of equality in bureaucrats. This element does not directly fall under cognitive empathy as it requires going beyond perspective-taking and other-perspective, by being able to judge with impartiality and objectivity. Nevertheless, it is more related to the cognitive sides of behavior, and it requires having more accurate information for making a fair decision.

Unlike cognitive empathy, emotional empathy is not calculative and more related to the emotional sides of behavior. It consists of three elements which are adopted from Homburg, Wieseke, & Bornemann (2009), cited in Norman et al. (2020). The first is about having compassion for the welfare of others. The second element is emotional concern which relates to the feeling of personal distress when faced with circumstances of inequality or fairness. The third emotional contagion element is about whether bureaucrats' behavior can be influenced by the emotional state of another

person or group of people. Unlike perspective-taking and other-perspective under cognitive empathy, these elements demonstrate the immediate, automatic, and reflex-like responses created in humans due to emotional empathy, which is distinct from the calculative cognitive empathy (de Waal, 2008; Gallese, 2003).

The fifth and final component under the individual behavior block relates to bureaucrats' relations with citizens which have been adopted from Jamil (2002). The three survey statements relate to whether egalitarianism, success and non-elitism can be associated with successful innovation under e-Government. It is assumed under the survey framework that the adoption of ICT to serve citizens and become more responsive requires bureaucrats to take on a less paternalistic role, acknowledging that citizens can make decisions on their own. If bureaucrats do not see the need to be closer to citizens to carry out their administrative duties or consider their views as important, then their ability to understand citizens' needs and use entrepreneurial means for becoming more responsive will not likely be effective. These elements are important to understand whether the bureaucracy is undergoing an incremental citizen-centric behavioral change – from being colonial and elitist to becoming more entrepreneurial, empathic, and egalitarian – because of the ETP.

The organizational-level block comprises five components – power and hierarchy, energy, resources, external collaboration and internal collaboration. Power and hierarchy draw upon a survey work by Jamil (2002) who used the survey frameworks by earlier scholars (Hofstede, 1991; Putnam, 1975). Jamil (2002) analyzed relationships within bureaucracy using power and hierarchy, and behaviors such as autonomy and responsibility with a total sample of 125 senior-level bureaucrats. The first component is on power and hierarchy which constitutes of the following three elements: autonomy, responsibility, and distance. Autonomy concerns whether

bureaucrats can take risks without worrying too much about rules and hierarchy. Whether or not bureaucrats feel they are responsible for innovation in public service delivery and if decisions approving innovations require top-level permissions, are measured through the last two elements. These three elements measure bureaucrats' power to implement innovation which are adopted from Jamil (2002).

The second component is related to organizational energy, measured through three elements: influence, inspire and ambiguity. The first two elements concern the role of supervisors in influencing the subordinates to use appropriate strategies and in inspiring them to experiment with TCV type of ideas and opportunities. The third element relates to bureaucrat's ability to navigate ambiguities and uncertainties associated with the implementation of innovation, and it measures whether TCV has been able to enable bureaucrats to implement innovations. These three elements, adopted from Rao and Weintraub (2013), measure organizational energy in terms of supervisors' roles and the significance of TCV to drive forward the implementation of TCV based innovation.

The third component is about organizational resources for successful innovation measured through money, growth and rewards. Money relates to budgetary support to implement innovation while growth resources are required for the scaling up of innovations. Rewards are important to motivate bureaucrats to continue experimenting with new ideas for improving service delivery processes to citizens, whose framework was established during colonial times. These three elements are important to measure the budgetary resources directed towards supporting bureaucrats to implement innovation in service delivery processes.

The fourth and fifth components are about collaborative behavior of bureaucrats. External collaboration comprises with NGOs, private sector and

international agencies. Such collaboration is required to draw upon wider support from the non-state actors. Internal collaboration relates to field-level cooperation with other field-level offices, teamwork between subordinates and supervisors, and in-office collaboration with other colleagues. Internal collaboration is necessary for bureaucrats to implement their new ideas within their offices. These elements measure the type of collaborative behavior that are supporting bureaucrats to drive forward the implementation of TCV based innovations.

A multiple-choice question format was used for the 30 administrative behavioral survey questions, and these were randomized to overcome order bias. The survey instrument included five negatively keyed items, and these were reverse scored before computing final scores. Reverse-scoring the negatively keyed elements ensures that all the statements are consistent in terms of what an “agree” or “disagree” statement indicates. Survey respondents rated each of the 30 administrative behavioral elements on a scale of 1 to 5, where 1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, and 5 = strongly agree.

5.2.2. Sampling process and size

A sample of 3,496 bureaucrats who underwent the ETP was identified, and it was revised down to 2,450 by removing participants missing email addresses, cell phone numbers and participants who were invited but could not fully complete the ETP. An identification number was assigned to the list of 2,450 bureaucrats and a clustered random sample was selected because of the high variation in (a) gender of participants (2,010 males versus 440 females), and (b) geographic participation across the eight divisions, with the Capital recording the highest rate (31 percent), and Mymensingh recording the lowest (3 percent).

A random sample of 332 bureaucrats with 95 percent confidence level and +/- 5 error was calculated using the following equation:

$$n = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

where N =population size, e =margin of error (3), z = z-score (1.96 for 95%), and $p=0.5$.

Then, the 332 cases were randomly and proportionally assigned to 16 clusters (gender \times geography strata). Out of the total 332 randomly selected respondents, 218 (or 65.66 percent) responded to the survey (see column 4 in Table 5). A majority of the randomly selected participants, i.e., 124 respondents, responded to the survey over e-mail which indicates the confidence of Bangladeshi field-level bureaucrats in using ICT. The remaining 94 bureaucrats were contacted by the researcher. Of the 94 randomly selected ETP participants, 24 requested to meet in-person, 34 completed the survey over phone, 36 participants requested for a printed copy which they completed by hand, then scanned and e-mailed as an attachment. The total response rate for the random sample was 65.66 percent with 34.34 percent attrition rate. A total of 114 respondents from the random sample did not agree to participate in the survey, and of this, 27 bureaucrats could not be reached over e-mail or phone (see column 5 in Table 5).

While the field-level visits helped to collect responses from the randomly selected participants, given the low rate of responses after a month into the research, the other ETP 2,118 participants, were invited to complete the online survey question. A total of 233 bureaucrats responded and the list of respondents was reduced to 224 after verification of the outcome variable, i.e., successful implementation of e-Government innovation, with the a2i. Findings from the random sample of respondents

(n=218) are presented in the following discussion. The multivariate logistic regression results of the pooled data (218+224 = 442 respondents) have been presented in Appendix 6 for the purpose of sensitivity analysis.

In Table 5, Mymensingh division reported the highest response rate of 88.89 percent (8 out of 9 respondents) because it had the lowest number of randomly selected participants. Dhaka reported the third highest respondent rate of 80.19 percent preceded by Barisal with 80.77 percent. In the regression analysis, Chattogram and Rajshahi were dropped given their attrition rates were more than 50 percent. A majority of the 179 respondents in the random sample are male (82.35 percent).

Table 5: Respondents and attrition rate (response in percentage)

Division (1)	Male (2) *	Female (3)*	Total respondents (4)**	Attrition rate (5)**
Dhaka	64 (79.01)	17 (20.99)	81 (80.19)	20 (19.81)
Mymensingh	6 (75.00)	2 (25.00)	8 (88.89)	1 (11.11)
Barisal	17 (80.95)	4 (19.05)	21 (80.77)	5 (19.23)
Khulna	28 (77.78)	8 (22.22)	36 (75.00)	12 (25.00)
Chattogram	18 (85.71)	3 (14.29)	21 (47.73)	23 (52.27)
Sylhet	17 (89.47)	2 (10.53)	19 (57.58)	14 (42.42)
Rajshahi	13 (92.86)	1 (7.14)	14 (37.84)	23 (62.16)
Rangpur	16 (88.89)	2 (11.11)	18 (52.94)	16 (47.06)
Total	179 (82.35)	39 (17.65)	218 (65.66)	114 (34.34)

Note: *Response as a percentage of total respondents (n=218), in parenthesis

**Response as a percentage of the random sample (n=332) in total in parenthesis

5.2.3. Findings: Descriptive statistics

Table 6 presents the social demography characteristics of the respondents. The largest group of respondents belong to the 32-41 years age group (80 or 36.7 percent of the sample), followed by the next age group of participants aged 42-51 years (73 or 33.49 percent of the random sample). The most senior age category of 52-59 years reported the lowest number of 26 respondents. This category was dropped from the multivariate logit regression analysis carried out in Section 5.3.

The tenure variable indicates that 134 respondents (61.47 percent of the random sample) were incumbent bureaucrats, with at least 10 or more years of experience. The number of new or entrant bureaucrats was 15 with 12 male and 3 female respondents. An overwhelming majority of the respondents are non-entrant bureaucrats (i.e., 93.12 percent of the random sample), which enriches the univariate analysis in understanding the individual and organizational level elements associated with a successful implementation of e-Government. At the same time, an alternate hypothesis could be that entry-level bureaucrats are more entrepreneurial because they do not come with colonial baggage, and they are more aware of how to use technology. For the logit regression analysis conducted in Section 5.3, the entrant-level category was dropped.

A majority of the respondents (167 or 76.61 percent of the sample) had a postgraduate degree, with 132 male and 35 female respondents. This was followed by 40 respondents (15.38 percent) with an undergraduate degree with 37 male and 3 female respondents. There were 11 respondents with a PhD or doctorate degree, and this category was dropped in the logit regression analysis.

For the type of education, three categories were used, and 111 respondents (50.92 percent of the random sample) reported to have a background in social science (anthropology, archaeology, economics, geography, history, law, political science, psychology and sociology). A total of 90 male (50.28 percent) and 21 female (52.85 percent) respondents belong to this category. There were 70 respondents (32.11 percent of the random sample) with a background in natural science (agriculture, geography, biology, chemistry, environment, botany, zoology). For the logit regression analysis, the applied science category was dropped due to the lowest number of 37 respondents under the education type category.

The place of work variable is used as a proxy to assess whether innovation implementation can be associated with hierarchy. Of the 218 respondents, 47 reported as working at the national level, and 171 respondents at the field-level, service delivery front. For the national level, a total of 11 bureaucrats from the ministry level responded to the ETP survey. This low turnout is not surprising given that the ETP focused on service delivery process innovation at the field-level, more than policy level innovation. Autonomous and semi-autonomous organizations such as banks, cooperatives recorded 15 respondents, and directorates and departments, given their administrative presence at the local level through offices, recorded the highest number of 21 respondents. For example, the Directorate General of Health Services, one of the agencies under the Ministry of Health and Family Welfare of Bangladesh, is responsible for the implementation of different health programs, management, planning and execution of different policies through administration. Directorates are responsible for administrative functions of different ministries.

For the field-level service delivery administration, of the 218 respondents, the number of respondents from the eight divisions recorded 23 in total, with 18 male and 5 female. The number of respondents at the rural level was 101 for upazilas (sub-districts), and 42 for the zilas (districts). The highest number of male and female respondents – 119 male and 24 female – was recorded at the rural, field-level. This is not surprising given that the ETP focused exclusive on the field-level administration from 2014 onward and moved to the ministerial and urban service points later in 2017. Five respondents from city corporations responded to ETP survey which was dropped from the logit regression analysis.

The 143 rural field-level respondents are engaged in direct interactions with citizens and the findings are representative of these frontline bureaucrats behavior, who

face higher degree of formal (e.g., political and administrative) and informal (e.g., public shame and embarrassment) pressures, than other bureaucrats in providing services to citizens (Hossain, 2009). These field-level respondents are class-I officers from different administrative cadres. The study could not classify the respondents into cadres because it required an additional verification step with a2i and Cabinet Division.

Table 6: Social demography characteristics of respondents (response as a %)

Indicators	Male (n=179)	Female (n=39)	Total (n=218)
Age (years)			
25-31	30 (16.76)	9 (23.08)	39 (17.89)
32-41	62 (34.64)	18 (46.15)	80 (36.7)
42-51	65 (36.31)	8 (20.51)	73 (33.49)
52-59	22 (12.29)	4 (10.26)	26 (11.92)
Tenure (years)			
1 to 3	12 (6.71)	3 (7.69)	15 (6.88)
4 to 9	51 (28.49)	18 (46.15)	69 (31.65)
10 or more	116 (64.8)	18 (46.15)	134 (61.47)
Education: Level			
PhD	10 (5.59)	1 (2.56)	11 (5.05)
Postgraduate	132 (73.74)	35 (89.74)	167 (76.6)
Undergraduate	37 (20.67)	3 (7.7)	40 (18.35)
Education: Type			
Social science, liberal arts, and humanities	90 (50.28)	21 (53.85)	111 (50.92)
Natural science	60 (33.52)	10 (25.64)	70 (32.11)
Applied science	29 (60.2)	8 (20.51)	37 (16.97)
Hierarchy (place of work)			
National	37 (20.67)	10 (25.64)	47 (21.56)
Ministry	9 (5.03)	2 (5.13)	11 (5.05)
Autonomous organizations	14 (7.82)	1 (2.56)	15 (6.88)
Directorate/departments	14 (7.82)	7 (17.95)	21 (.963)
Field-level	142 (79.33)	29 (74.36)	171 (78.44)
Division	18 (10.06)	5 (12.82)	23 (10.55)
City Corporation	5 (2.79)	N/R	5 (2.29)
<i>Rural</i>	<i>119 (66.48)</i>	<i>24 (61.54)</i>	<i>143 (65.6)</i>
Upazila	79 (44.13)	22 (56.41)	101 (46.33)
Zila	40 (22.35)	2 (5.12)	42 (19.27)

Note: N/R = No response

Table 7 presents descriptive statistics of the administrative behavioral change model. A mean value of 4 or more in column (4) and column (5) indicates a positive change in the bureaucrats' behavior, while a score lower than 2 indicates those elements and components which are hindering e-Government implementation. A score between

2 and 3 indicates that these components/elements are yet to make a positive influence on e-Government type of innovation. Under the individual-level block, three components – creative action and learning, emotional empathy, and relations with citizens – recorded mean scores of 3.01, 3.82 and 3.16, respectively. For the organizational-level block, three components – power and hierarchy, resources, and external collaboration – recorded mean scores of 3.13, 3.66 and 3.29, respectively.

Under the individual-level block, survey respondents gave the highest rating of 4.44 and 4.25 for entrepreneurship and cognitive empathy components in column (5), respectively. For the entrepreneurship component, in column (4), respondents most “strongly agreed” with the failure ok element which reported the highest mean score of 4.64, with the lowest standard deviation across. The hunger element reported a mean score of 4.45, followed by willingness to take risks, 4.23. For cognitive empathy, perspective-taking recorded a mean score of 4.49, followed by fairness, 4.45. Two elements under emotional empathy recorded scores greater than 4 – compassion and concern, 4.01 and 4.34, respectively.

Under the organizational level block, survey respondents gave the highest rating of 4.22 and 4.18 for internal collaboration and energy components in column (5), respectively. For the internal collaboration component, in column (4), all three elements reported mean scores greater than 4 – collaboration within offices, 4.41, between subordinates and supervisors, 4.2, and with other field-level offices and departments, 4.06. For the energy component, the bureaucrats’ ability to deal with ambiguity because of TCV recorded a mean score of 4.3, followed by supervisors’ ability to influence, 4.18, and inspire, 4.09, their subordinates to implement e-Government based service delivery innovation.

Being analytical and the hierarchical distance, in terms of getting approval decisions for implementing e-Government innovation, reported the lowest mean scores of 1.82 and 2.04, respectively. Although bureaucrats are empathic of citizens' needs, the egalitarian element scored 2.29, indicating the paternalistic nature of the public administration. In other words, bureaucrats do not think that citizens are able to make the best decisions on their own. Nevertheless, the non-elitism behavior reported a mean score of 3.49, indicating an incremental change towards citizen-centric decisions. External collaboration with NGOs reported a mean score of 2.96 which indicates the scope for increasing collaboration with such non-state actors who are also providing many services to citizens. Bureaucrats were very close to the "agree" threshold in terms of viewing their responsibility for public service delivery innovation, which reported a mean score of 3.9, and with rewards for innovation, 3.83.

Entrepreneurship is often conceived as innovation, creativity, the establishment of new organizations or activities, or some kind of novelty (Klein et al., 2010). Innovation is not only novelty, but it is also about catalysing and creating practitioners' values, because bureaucratic contexts and culture inform change and innovation patterns. Bureaucrats with a 'knack' for using ICTs to become more responsive to citizens' needs can be characterized as empathic entrepreneurs, who are: (a) eager to explore innovation opportunities, not afraid of failure and willing to take risks, (b) perceptive of citizens' needs, (c) collaborative in the implementation process of innovation, and (d) deal with ambiguities and supported by their supervisors. Although entrepreneurial bureaucrats share similar traits as those of entrepreneurs (e.g., not being afraid to fail), their empathy in terms of understanding citizens' pain as service seekers distinguishes them as public sector entrepreneurs. The two blocks, individual and organizational, reported mean scores of 3.8 and 3.69 respectively, indicating that

respondents, on average, indicated towards individual-level behavioral elements having a slightly more positive impact than organizational components.

Table 7: Administrative behavioral aspects of the culture of innovation (n=218)

Component (1)	Element (2)	Survey Statement (3)	Element mean value (SD) (4)	Component mean value (SD) (5)
Individual behavior (Mean = 3.73, SD = .35)				
Entrepreneurship	Hunger	I have a desire to explore new TCV based innovation opportunities	4.45 (.74)	4.44 (.55)
	Failure ok	Failure is a learning opportunity	4.64 (.59)	
	Risk	I am comfortable taking risks when pursuing TCV opportunities	4.23 (.84)	
Creative action and learning	Action-oriented*	Our methods enable using TCV to serve citizens in new ways	3.3 (1.31)	3.01 (.65)
	Analytical*	I prefer taking action than doing heavy analysis	1.82 (.98)	
	Experiment	I have freedom to pursue TCV based opportunities	3.9 (1.07)	
Cognitive empathy	Perspective-taking	I try to consider everybody's opinion before I make a decision	4.49 (.67)	4.25 (.59)
	Other-perspective	When I'm upset at someone, I usually try to put myself in their shoes	3.81 (1.28)	
	Fairness	I try to look at the two sides to every question	4.45 (.72)	
Emotional empathy	Compassion	Other people's misfortunes usually disturb me a great deal	4.01 (1.09)	3.82 (.75)
	Concern	I have tender, concerned feelings for people less fortunate than me	4.34 (.84)	
	Contagion	I become nervous if others around me are nervous	3.1 (1.39)	
Citizen's relation	Egalitarian*	Citizens understand their best interests in the long-run	2.29 (1.11)	3.16 (0.71)
	Success	Our service delivery recipients, view us as an innovative organization	3.71 (1.04)	
	Non-elitist	Administrative duties are better performed if we are closer to citizens	3.49 (1.46)	
Organizational environment (Mean = 3.69, SD = .49)				
Power and hierarchy	Autonomy	I can take risks without worrying too much about rules, administrative hierarchy	3.44 (1.33)	3.13 (.7)
	Responsibility	We are responsible for innovation in public service delivery	3.9 (1.09)	
	Distance*	Innovation implementation do not require approval of top officials	2.04 (1.12)	

Energy	Influence	Our supervisors can use appropriate strategies to help us navigate around organizational obstacles	4.14 (.9)	4.18 (.67)
	Inspire	Our supervisors inspire us with a vision for experimenting with TCV based opportunities	4.1 (.87)	
	Ambiguity	Our approach to innovation is focused because of TCV	4.31 (.87)	
Resources	Money	We have budgetary support to implement our innovation pilot	3.45 (1.38)	3.66 (.84)
	Growth	We can rapidly allocate resources to scale up innovations that show public value creation promise	3.7 (1.16)	
	Reward	We are rewarded for successful implementation of innovations	3.83 (1.19)	
External collaboration	NGOs	We rely on partnership with local NGOs	2.88 (1.29)	3.29 (.88)
	Private sector	We rely on partnership with private sector actors	3.4 (1.14)	
	International agencies	We rely on partnership with international agencies	3.58 (1.08)	
Internal collaboration	Field-level	We rely on collaboration with other field-level offices, departments	4.07 (1.02)	4.22 (.67)
	Teamwork	Subordinates and supervisors work well together in teams to implement an innovation pilot	4.22 (.93)	
	Others*	We can collaborate with others to test an idea pilot by implementing it within our own offices	4.36 (.85)	

*Reversed statements

5.3. Multivariate logit regression analysis and findings

A multivariate logit regression approach fits the present study's objective to analyze the determinants of administrative behaviors with successful e-Government innovation implementation. There is one binary dependent variable with two mutually exclusive outcomes – success ($Y_i = 1$) or failure ($Y_i = 0$) to implement e-Government. Successful innovation implementation implies that an ETP trainee, along with his or her team members, have reached the final stage, i.e., sharing the story stage. The a2i and MoPA track the number of successfully implemented innovation in stage II of the ETP so that the successful innovators can be invited to Dhaka, the Capital, for the three-day workshop to share their success story. The dependent variable was verified with a2i to get data confirmation and ensure accuracy of the responses. The findings of logit regression using the random sample of 218 respondents are presented in the main discussion. The multivariate logit regression results for the pooled sample (n=442) are presented in Appendix 6.

Dummy variables were created for the location, age, education level and type, tenure, hierarchy (place of work) to understand the association of each category with the outcome variable of interest, i.e., successful e-Government type of innovation.

The multivariate logit regression model was used to assess for the odds ratio which can be expressed equivalently in terms of probability,

$$p = \frac{\exp(\beta_0 + \beta_k X_k)}{1 + \exp(\beta_0 + \beta_k X_k)}$$

The $\exp(\beta_k)$ has interpretation as the odds ratio of the response for two possible values of the predictor variable, and X_k represents the 30 administrative behavioral elements and selected social demographic characteristics. Instead of odds ratio, the study reports the average marginal effects which are useful to understand the

probability of implementing innovation in percentage. Average marginal effects are more informative than odds ratios and coefficients as a way for presenting results as differences in probabilities.

The first model is a logit regression analysis of the social demography variables with the dependent outcome variable. The indicators in model 1 are important to provide an analysis from the legal-rational perspective. In the following two models, the analysis adopts a behavioral approach to generate insights about the determinants in relationship to e-Government innovation. Thus, variables under model 1 can be conceptualized as controls for the present analysis. Model 2 includes the first 15 survey elements on individual-level behavior. Model 3 is the final equation which includes variables from the preceding two models and adds 15 more variables from the organizational environment block.

Further analysis has been done by creating indices for each one of the 10 components to analyze the association between administrative behavior and successful e-Government innovation. For 10 components, each set of three elements was summed and standardized, and a logit regression analysis was carried out. Furthermore, a principal component analysis (PCA) has been done for generating an index by retaining and rotating the components, with a minimum eigenvalue of 1. After discussing the logit regression results from the four models, sensitivity evaluation and goodness-of-fit analyses are presented in Section 5.3.5. Determinant analysis involves identifying the behavioral and organizational factors affecting successful e-Government implementation. The use of classification models is useful to characterize behavioral and organizational determinants by their effect, level and association.

5.3.1. Model 1 (control variables): Social demography characteristics

The findings for model 1 (Table 8) show that holding all other variables constant, the youngest group of respondents (22-31 years) and the following age group (32-41 years), are likely to decrease the probability of implementing an innovation by 39.4 percent (p-value<0.01) and 25.4 percent (p-value<0.05), respectively. Such bureaucrats are typically inexperienced, and they face more challenges in terms of implementing e-Government. Model 1 indicates that ETP respondents found the TCV method of innovation highly useful, as it reported to increase the probability of implementing e-Government innovation by 31.6 percent (p-value<0.01).

The TCV-led e-Government innovation represents citizens' pains and problems in new ways. It can be conceptualized as a "problem-oriented" governance approach where problems are represented under social constructs, and finding solutions requires a process of collectively reimagining citizens' needs (Meijer & De Jong, 2019). It is, therefore, especially useful to help ETP participants to generate new ideas, explore new opportunities and overcome hierarchical barriers, i.e., during the empathizing and implementation process. According to government executives, TCV is advantageous because of its citizen-centered approach which makes public value of e-Government more visible to those who can successfully implement an innovation.

Table 8: Logit regression analysis for successful innovation implementation (model 1)

Variable	Average marginal effects
Gender	-0.16 (0.087)
Dhaka	-0.07 (0.098)
Mymensingh	-0.133 (0.176)
Barisal	-0.139 (0.127)
Khulna	0.054 (0.112)
Sylhet	-0.022 (0.132)
Rangpur	0.101 (0.140)
22-31 years	-0.394** (0.144)
32-41 years	-0.254* (0.120)
42-51 years	-0.17 (0.111)
Postgraduate	-0.07 (0.144)

Undergraduate	-0.314 (0.163)
Social science	-0.007 (0.094)
Natural science	0.112 (0.094)
4-9 years	-0.003 (0.153)
10 years and more	-0.006 (0.161)
Upazila	0.038 (0.217)
Zila	-0.045 (0.223)
Division	-0.053 (0.237)
Directorate	-0.15 (0.239)
Ministry	-0.18 (0.268)
Semi-and full-autonomous	0.014 (0.241)
Utility of SPS	-0.008 (0.077)
Utility of TCV	0.316** (0.117)
Overall model evaluation	
Likelihood ratio test (df)	45.87** (24)
Wald test (df)	32.25 (24)
Goodness of fit	
Hosmer-Lemeshow (df)	7.3 (8)
Area under ROC curve	0.77
Overall accuracy rate (%)	71.56

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents within their respective specified categories: Chattogram and Rajshahi (more than 50 percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Table 6.1 in Appendix 6 presents the logit regression results for the pooled data (n=442). It substantiates the finding that use of TCV may be positive and significantly associated with the outcome variable, increasing the probability of implementing innovation by 25.2 percent (p-value<0.01), holding other variables constant. Results also indicate that use of SPS as a process mapping tool may increase the probability by 10.8 percent (p-value<0.05), holding other variables constant. Working in Dhaka may decrease the probability of implementing innovation by 12.8 percent (p-value<0.05), holding other variables constant. Bureaucrats working in the Capital city have a closer relationship with the national-level administration, ministries and the political representatives, and they do have the time to engage in activities that require outside-in thinking, according to a governance expert, (r16, interview, September 5, 2019).

5.3.2. Model 2: Social demography and individual level behavioral elements

The findings for model 2 (Table 9) show that holding other variables constant, bureaucrats in the 42-51 years age group are likely to decrease the probability of implementing innovation by 18.5 percent (p-value<0.05). These older bureaucrats may have a stronger personality influenced by the Weberian-colonial ethos, which makes it harder to implant new entrepreneurial values. The β_k for the hunger element, measuring respondents' desire to implement an innovation, reported to increase the probability of implementing innovation by 8.9 percent (p-value<0.05), holding other variables constant. The β_k for the action-oriented element, measuring respondents' ability to serve citizens in way news using TCV, reported the highest probability of 16.6 percent (p-value<0.001). These findings suggest the significance of hunger to explore SPS-TCV based innovation opportunities and to engage actively in creative learning and action. Being egalitarian may increase the probability of implementing innovation by 5.7 percent (p-value<0.05), while viewing success from the citizens' perspectives by 8.6 percent (p-value<0.01), holding other variables constant. These results indicate how ETP participants may have been able to adopt an entrepreneurial mindset, use TCV in new ways, and become citizen-oriented when implementing e-Government solutions.

A 2007 global survey of more than 700 public companies from 17 developed and developing economies found that managers' hunger or desire to innovate as the key driver of innovation, exceeding even R&D spending in its influence (Tellis, Prabhu, & Chandy, 2009). Modern public entrepreneurs are driven by a sense of moral duty to serve citizens using affordable and accessible technology means, and they differ from private and social entrepreneurs. As bureaucrats, they carry out a public or state role and the difference with the private/social entrepreneur is:

“While social [and private] entrepreneurs are people outside government, public entrepreneurs act within government and, at their heart, are a blend of two different roles: that of a public servant, and that of an entrepreneur. The underlying premise is that these roles are usually distinct, but the skill sets they require need not be. Indeed, the future public servant will increasingly need to think and act like an entrepreneur—building new relationships, leveraging resources, working across sector lines and acting, and sometimes failing, fast” (Centre for Public Impact, 2016, p. 2).

Innovations by government bureaucrats can be described using the language of entrepreneurship theory (Conway, Burbidge, Timmons, & Maani, 2018). As observed by Klein et. al (2012, p.4), “Like Kirznerian (1973) entrepreneurs, [public sector entrepreneurs also] seek to create or discover opportunities for gain, whether private or social. Like Knightian (1921) entrepreneurs, they invest resources, tangible, and intangible (time, effort, and reputation), in anticipation of uncertain future rewards. Like Schumpeterian (1934) entrepreneurs, they can introduce new processes.” Unlike private sector entrepreneurs, however, public entrepreneurs must work within the organizational structures and cannot access other non-state means (e.g., budgetary support or sponsorship), without having prior approval for such selection mechanism (Ramamurti, 1986).

Table 9: Logit regression analysis for successful innovation implementation (model 2)

Variable	Average marginal effects
Gender	-0.059 (0.068)
Dhaka	-0.068 (0.085)
Mymensingh	-0.161 (0.145)
Barisal	-0.084 (0.104)
Khulna	0.158 (0.096)

Sylhet	0.061 (0.101)
Rangpur	0.066 (0.108)
22-31 years	-0.092 (0.110)
32-41 years	-0.158 (0.094)
42-51 years	-0.185* (0.089)
Postgraduate	0.065 (0.133)
Undergraduate	-0.183 (0.150)
Social science	0.031 (0.077)
Natural science	0.084 (0.081)
4-9 years	0.130 (0.117)
10 years and more	0.175 (0.122)
Upazila	0.045 (0.195)
Zila	0.111 (0.202)
Division	0.08 (0.215)
Directorate	-0.097 (0.212)
Ministry	0.022 (0.226)
Semi-and full-autonomous	0.021 (0.210)
Utility of SPS	-0.006 (0.060)
Utility of TCV	0.08 (0.101)
Hunger	0.089* (0.043)
Failure OK	0.054 (0.054)
Risk	0.054 (0.036)
Action-oriented	0.166*** (0.015)
Analytical	-0.023 (0.028)
Experiment	-0.002 (0.028)
Perspective-taking	0.068 (0.041)
Other-perspective	-0.026 (0.026)
Fairness	-0.018 (0.039)
Compassion	-0.003 (0.028)
Concern	-0.026 (0.033)
Contagion	-0.009 (0.023)
Egalitarian	0.057* (0.025)
Success	0.086** (0.027)
Non-Elitist	-0.002 (0.022)
Overall model evaluation	
Likelihood ratio test (df)	146.88*** (39)
Wald test (df)	47.17*** (15)
Goodness of fit	
Hosmer-Lemeshow (df)	8.47 (8)
Area under ROC curve	0.92
Overall accuracy rate (%)	85.32

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents within their respective specified categories: Chattogram and Rajshahi (more than 50 percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Table 6.2 in Appendix 6 presents the logit regression results for the pooled data (n=442). Working in Dhaka and Mymensingh, which are in proximity in terms of their geography, may decrease the probability of implementing innovation, holding other variables constant. Bureaucrats working in these two divisions have a closer relationship with the national-level authorities and they are more focused on their day-to-day activities than implementing e-Government. Bureaucrats working at the upazila, zila, division and directorate level may increase the probability of implementing innovation by 22.2 percent (p-value<0.05), 23.9 percent (p-value<0.05), 32.1 percent (p-value<0.05), and 21.15 percent (p-value<0.05), respectively. It substantiates the finding that entrepreneurship may be positively and significantly associated with the outcome variable, holding other variables constant. The β_k for the three behavioral elements under entrepreneurship component reported a positive and significant association with successful innovation implementation, along with the action-oriented element. It shows that bureaucrats working at the field-level are likely to increase the probability of successfully implementing an e-Government innovation. The β_k for the perspective-taking element under cognitive empathy reported increasing the probability of implementing innovation by 7.1 percent (p-value<0.05). Cognitive empathy, in terms of understanding and being perceptive of citizens problems, can help bureaucrats to design citizen-centric solutions.

5.3.3. Model 3: Social demography, individual and organizational level elements

According to Table 10, working in Khulna may decrease the probability of implementing innovation by 19.5 percent (p-value<0.05), holding other variables constant. Under Khulna division, Jessore was declared as the first digital district and it was the first district to adopt ICTs in public administration. One of the interviewees of

the study worked as the Jessore assistant DC who is presently a secretary at the Ministry of Land (r3, interview, August 20, 2019). As noted earlier in Chapter 4, he was able to secure the support of a top-level bureaucrat in Dhaka to implement e-Government in his office, e.g., electronic filing and document, a dashboard for monitoring citizens' applications, etc.

Holding other variables constant, the average marginal effects of the four behavioral elements under the individual-level component reported an increase compared to the preceding model 2 (Table 9). Hunger under entrepreneurship may increase the probability by 9.7 percent ($p\text{-value}<0.05$), while being action-oriented, egalitarian and considering citizens' views important for organizational success, are expected to increase the probability of innovation implementation by 16.4 percent ($p\text{-value}<0.001$), 6.6 percent ($p\text{-value}<0.01$), and 6.8 percent ($p\text{-value}<0.01$), respectively, holding other variables constant.

With regard to the organizational-level block, dealing with ambiguities through TCV may increase the probability of implementing innovation by 11.1 percent ($p\text{-value}<0.05$) while collaborating with other in-office colleagues may increase the probability by 10.2 percent ($p\text{-value}<0.05$). TCV allows a more focused approach as it reduces ambiguities with the e-Government objectives that are to be achieved. Internal organizational collaboration is important, and Borins (2014) found that in 80 percent of the successful innovation, organizational collaboration was the main reason for success in taking an initiative for solving an existing problem. Public sector entrepreneurs behave in a collaborative manner which is necessary for the implementation of their new ideas in their offices.

Rewards are likely to decrease the probability of implementing e-Government by 7.9 percent ($p\text{-value}<0.05$), holding other variables constant. This finding is

unexpected and surprising that rewards are negatively associated with successful innovation because both private sector literature argues for incentives and organizational recognition in motivating managers to innovate. However, in the case of the Bangladesh bureaucracy, rewards have not been institutionalized in the public service promotion system which would send a stronger signal for bureaucrats to innovate for advancing their career. According to the secretary of the Ministry of Land, “it is important to get political attention to survive on the field when implementing innovations (r3, interview, August 20, 2019).” After the implementation of annual performance agreements (APA), innovation implementation has become mandatory, but rewards have not been directed to support such organizational success with e-Government efforts. R3 offered field-level insights about how the Digital Bangladesh created new opportunities for “entrepreneurially spirited” bureaucrats to use e-Government as a means for changing and improving service delivery processes. Interview questions relating to his career development – from being an additional DC in the Jessore DC office to becoming the Divisional Commissioner of Dhaka and secretary of Ministry of Land – were useful to understand how politicization may have created new ways of motivating bureaucrats for the achievement of e-Government related policy goals, particularly under the Digital Bangladesh agenda.

Table 10: Logit regression analysis for successful innovation implementation (model 3)

Variable	Average marginal effects
Gender	-0.02 (0.068)
Dhaka	-0.039 (0.084)
Mymensingh	-0.066 (0.157)
Barisal	-0.114 (0.108)
Khulna	0.195* (0.090)
Sylhet	0.065 (0.100)
Rangpur	0.115 (0.104)
22-31 years	-0.132 (0.114)
32-41 years	-0.156 (0.092)

42-51 years	-0.172 (0.103)
Postgraduate	-0.054 (0.116)
Undergraduate	-0.283 (0.131)
Social science	0.02 (0.080)
Natural science	0.101 (0.084)
4-9 years	0.041 (0.130)
10 years and more	0.117 (0.133)
Upazila	0.261 (0.293)
Zila	0.33 (0.303)
Division	0.238 (0.299)
Directorate	0.143 (0.312)
Ministry	0.208 (0.332)
Semi-and full-autonomous organization	0.184 (0.306)
Utility of SPS	0.015 (0.059)
Utility of TCV	0.159 (0.113)
Hunger	0.097* (0.046)
Failure OK	0.085 (0.053)
Risk	0.036 (0.040)
Action-oriented	0.164*** (0.017)
Analytical	0.014 (0.027)
Experiment	-0.002 (0.027)
Perspective-taking	0.052 (0.043)
Other-perspective	-0.02 (0.025)
Fairness	-0.040 (0.042)
Compassion	0.013 (0.027)
Concern	-0.022 (0.035)
Contagion	-0.017 (0.022)
Egalitarian	0.066* (0.027)
Success	0.068* (0.027)
Non-Elitist	-0.008 (0.022)
Power	0.016 (0.023)
Responsibility	0.036 (0.030)
Distance	-0.003 (0.025)
Influence	-0.067 (0.041)
Inspire	0.031 (0.034)
Ambiguity	0.111* (0.043)
Money	0.025 (0.018)
Growth	0.022 (0.027)
Reward	-0.079** (0.026)
NGOs	0.007 (0.026)
Private	-0.019 (0.027)
International	-0.039 (0.026)
Field-level	-0.004 (0.033)
Teamwork	-0.067 (0.037)
Other	0.102** (0.037)
Overall model evaluation	
Likelihood ratio test (df)	181.58*** (54)
Wald test (df)	19.92 (15)

Goodness of fit	
Hosmer-Lemeshow (df)	5.89 (8)
Area under ROC curve	0.95
Overall accuracy rate (%)	88.99

Note: * $p < .05$, ** $p < .01$, *** $p < .001$; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents within their respective specified categories: Chattogram and Rajshahi (more than 50 percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Table 6.3 in Appendix 6 presents the logit regression results for the pooled data (n=442). Results indicate that working in Mymensingh may decrease the probability of implementing innovation by 25.1 percent (p-value<0.05), holding other variables constant. Bureaucrats working at the field-level, i.e., upazila, zila, division and directorate level may increase the probability of implementing innovation by 22.3 percent (p-value<0.05), 24.1 percent (p-value<0.05), 29.5 percent (p-value<0.05), and 20.6 percent (p-value<0.05), respectively. It substantiates the finding that entrepreneurship may be positively and significantly associated with the outcome variable, holding other variables constant. Results indicate that use of SPS may increase the probability of implementing innovation by 8.8 percent (p-value<0.05), holding other variables constant.

The β_k for the three behavioral elements under entrepreneurship component reported a positive and significant association with successful innovation implementation, along with the action-oriented element. Elements under empathy reported a mixed result. While perspective-taking element may increase the probability of implementing innovation by 6.4 percent (p-value<0.05), fairness and emotional contagion may decrease the probability by 6.8 percent (p-value<0.05) and 3.1 percent (p-value<0.05), respectively, holding other variables constant. There is empirical work on personality variables and contextual causes influencing empathy (Vanman, 2016), but evidence points towards stronger inter-group empathy effect as a result of a social

categorization process (Tarrant, Dazeley, & Cottom, 2009). The ETP features both ingroup and outgroup perspectives through the secret-shopper's experience.

An observation made by a public administration scholar was that BCS recruits from rural areas were generally able to empathize more with the poor, than those who came from a wealthy, elite background with foreign education (r24, interview, January 7, 2020). While the declining elitist nature of bureaucracy has been attributed as a key influence deteriorating administrative quality (Haq, 2016; Huque, 2016; Zafarullah, 2007), inclusion of new BCS recruits from poor family backgrounds, has led to increased responsiveness to the needs of rural citizens. For example, an UNO in Gaibandha under Rangpur Division was visiting high schools in his area to teach the youth about how to read a land record deed, and what actions to take in case they fall prey to the unscrupulous practices of middlemen (r24). Such anecdotes indicate to an incremental behavioral change in terms of how bureaucrats are becoming more citizen-centric.

Regarding the organizational environment block, results from the pooled data substantiates the finding that dealing with ambiguities through TCV, and internal collaboration can increase the probability of implementing innovation, holding other variables constant. Internal collaborative behavior is necessary for public sector entrepreneurs and external collaboration reported a mixed result. While collaboration with NGOs increases the probability of implementing innovation by 3.3 percent ($p\text{-value}<0.05$), collaboration with donor agencies decreases the probability by 5.1 percent ($p\text{-value}<0.05$), holding other variables constant. Donor agencies are not too keen on sponsoring initiatives such as the ETP mainly because they cannot have complete authority over such programs (r5, interview August 21, 2019). Experiential behavioral change programs for public service delivery innovation needs to be owned and operated

by the government where donors must be creative in outlining the roles and responsibilities of different concerned institutions.

5.3.4. Model 4: Mean and principal component-based indices

Table 11 presents the regression findings based on a computation of indices through arithmetic sums of standardized variables and PCA applied to the 10 components with three elements each. Each component was converted into indices using standardization and principal components, for the purpose of testing the validity of the findings using two different methods. This was done to generate administrative behavioral insights through an index-based approach. Under both methods, entrepreneurship and creative action and learning reported increasing the probability of implementing innovation. Entrepreneurial orientation may increase the probability of implementing innovation by 11.8 percent and 9 percent under the standardized and PCA indices, respectively, holding other variables constant. Creative action and learning may increase the probability of implementing innovation by 18 percent and 20.3 percent under the mean and PCA indices, respectively, holding other variables constant.

Respondents aged 42-51 years reported a negative association with the outcome variable under both indices. Under the standardization-based index, it was found that inclusion of more males can decrease probability of implementing innovation by 14.8 percent ($p\text{-value} < 0.05$), holding other variables constant. Although this association is not significant in the PCA, an overwhelming majority of respondents are male, which makes the finding with arithmetic mean helpful in arguing for the inclusion of more female bureaucrats in training programs.

Table 11: Logit regression analysis for successful innovation implementation (model 4)

Variable	Average marginal effects: Standardized	Average marginal effects: Principal components
Gender	-0.148* (0.075)	-0.111 (0.070)
Dhaka	-0.026 (0.093)	-0.031 (0.086)
Mymensingh	-0.135 (0.162)	-0.221 (0.148)
Barisal	-0.033 (0.113)	-0.031 (0.106)
Khulna	0.178 (0.101)	0.157 (0.097)
Sylhet	0.021 (0.113)	0.038 (0.103)
Rangpur	0.048 (0.127)	0.056 (0.113)
22-31 years	-0.233 (0.123)	-0.218 (0.116)
32-41 years	-0.183 (0.101)	-0.201* (0.097)
42-51 years	-0.242* (0.097)	-0.235* (0.096)
Postgraduate	-0.074 (0.132)	-0.031 (0.126)
Undergraduate	-0.3* (0.145)	-0.255 (0.141)
Social science	0.036 (0.085)	0.045 (0.080)
Natural science	0.102 (0.090)	0.113 (0.086)
4-9 years	0.082 (0.134)	0.109 (0.120)
10 years and more	0.113 (0.143)	0.105 (0.128)
Upazila	0.034 (0.207)	0.062 (0.208)
Zila	0.083 (0.217)	0.107 (0.216)
Division	0.127 (0.225)	0.094 (0.222)
Directorate	-0.13 (0.229)	-0.101 (0.230)
Ministry	0.009 (0.250)	0.008 (0.243)
Semi-and full-autonomous	-0.011 (0.228)	-0.028 (0.227)
Utility of SPS	-0.043 (0.068)	0.012 (0.061)
Utility of TCV	0.052 (0.105)	0.06 (0.095)
Entrepreneurship	0.118** (0.065)	0.09** (0.027)
Creative action and learning	0.180*** (0.039)	0.203*** (0.019)
Cognitive empathy	0.014 (0.055)	0.021 (0.027)
Emotional empathy	-0.03 (0.043)	-0.04 (0.026)
Citizen's relations	0.067 (0.048)	0.003 (0.026)
Power and autonomy	0.025 (0.044)	0.042 (0.027)
Energy	0.022 (0.055)	0.021 (0.026)
Resources	-0.013 (0.039)	-0.013 (0.026)
External collaboration	-0.019 (0.036)	-0.028 (0.022)
Internal collaboration	-0.013 (0.049)	-0.002 (0.025)
Overall model evaluation		
Likelihood ratio test (df)	108.99*** (34)	130.27*** (34)
Wald test (df)	39.47*** (10)	46.98*** (10)
Goodness of fit		
Hosmer-Lemeshow (df)	7.84 (8)	8.3 (8)
Area under ROC curve	0.87	0.9
Overall accuracy rate (%)	80.28	83.03

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents within their respective specified categories: Chattogram and Rajshahi (more than 50

percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Results for the pooled data (n=442) in Table 6.4 in Appendix 6 substantiates the finding that working in Mymensingh and at the divisional level, having an entrepreneurial mindset and engaging in a creative action and learning process may increase the probability of implementing innovation. Holding other variables constant, working in Mymensingh decreases the probability of implementing innovation by 24.8 percent (p-value<0.05) and 26.3 percent (p-value<0.05) under the standardized and PCA indices, respectively. Bureaucrats working at the division level have higher authority than upazila-level and zila-level officials, and the probability of implementing innovation increases by 25.9 percent (p-value<0.05) and 26.4 percent (p-value<0.05) under the standardized and PCA indices, respectively, holding other variables constant. For the standardized indices, entrepreneurial behavior may increase the probability by 9.2 percent (p-value<0.001) and for the PCA indices, by 6.4 percent (p-value<0.001), holding other variables constant. The creative action and learning component has a stronger association as it may increase the probability of implementing innovation by 18.2 percent (p-value<0.001) and 21.1 percent (p-value<0.001), under the standardized and PCA indices, respectively.

Under the PCA based indices, emotional empathy may decrease the probability of implementing innovation by 3.7 percent (p-value<0.05), holding other variables constant. It has been argued by public administration scholars that if a bureaucrat becomes too deeply involved in the life of a client, s/he can be inefficient and undependable (Hummel, 2008). Cognitive empathy, i.e., the ability to understand citizens' problems and sufferings, has an opposite effect although it is not significant to be associated with the outcome variable (p-value>0.05) using the indices approach. External collaboration may decrease the probability of implementing innovation by 4.2

percent ($p\text{-value} < 0.05$), using the standardized indices, holding other variables constant. This result is not clear given that in model 3, collaboration with NGOs reported a positive association with the outcome variable³⁹.

5.3.5. Goodness-of-fit

Unlike the $\text{prob} > \text{chi}^2$ in the logit regression model for the likelihood ratio test which requires a $p\text{-value}$ of less than 0.05, the Hosmer-Lemeshow goodness-of-fit test looks for non-significance of $\text{prob} > \text{chi}^2$ tests. Non-significance with the Hosmer-Lemeshow test is an indication of a good model fit with a $p\text{-value}$ greater than 0.05 for $\text{prob} > \text{chi}^2$. All four models under the random sample ($n=218$) reported a higher $p\text{-value}$ than 0.05, implying that the logit regression model fits with the data. For the pooled data ($n=442$), excluding the regression results of the standardized indices in model 4, all other models also reported a higher $p\text{-value}$ than 0.05 (see Appendix 6). However, one of the limitations to the Hosmer-Lemeshow test is that it does not indicate how well the model fits to the data. This is because lack of evidence against a null hypothesis is not equivalent to evidence, in favor of the alternative hypothesis. An improvement over this baseline is examined by using a couple of inferential statistical tests: the likelihood ratio and Wald tests.

The likelihood ratio test indicates that all four models, using both random sample and pooled data, were more effective than the null model. The statistical significance of regression coefficients is tested using the Wald chi-square statistic. Sociodemographic indicators under model 1 (Table 8) were not significant predictors of successful e-Government type of innovation implementation ($p\text{-value} < 0.001$). For

³⁹ The two indices (standardized and PCA) for all the components were found to be highly correlated (> 0.6), excluding emotional empathy and external collaboration ($< .6$). The goodness of fit for the indices based on the arithmetic sums of standardized variables, does not pass the Hosmer-Lemeshow test ($p\text{-value} > 0.05$), although the ten indices were found to be significant ($p\text{-value} < 0.001$) under the Wald-test.

model 2 (Table 9), individual-level elements reported as significant predictors of successful e-Government innovation ($p\text{-value}<0.001$), while organizational-level elements were not significant predictors for model 3 (Table 10). This strongly suggests that removing individual-level behavioral data substantially reduces the fit of the model. The Wald chi-square statistic coefficients for the 10 components (Table 11) were significant for both indices ($p\text{-value}<0.001$).

A logit regression model needs to not only correctly predict a positive as a positive (true positive), but also a negative as a negative (true negative). The receiver operating characteristic (ROC) curve distinguishes between true positive (sensitivity) and true negative (specificity)⁴⁰. The area under the ROC curve (or AUC) is a measure of how well a parameter can distinguish between the two groups (success, $Y=1$, and failure, $Y=0$) in implementing innovation. The AUC is also referred to as the *c-statistic* (c for concordance), and it summarizes the discrimination ability of a model⁴¹. The c-statistic for the present analysis represents the proportion of bureaucrats' pairs with different observed outcomes, for which the model correctly predicts a higher probability for observations with the event outcome, than the probability for non-event observations.

The c-statistic is 0.77, 0.92, and 0.95 for the three models, respectively (Tables 5.4-5.6). For the arithmetic-based index, the c-statistic reports 0.87, and 0.9 for the PCA-based index results (Table 11). Model 2 (Table 9), model 3 (Table 10) and the PCA-based regression results correctly assigned a higher probability for 90 percent of

⁴⁰ To explain the ROC curve, we first recall the important notions of sensitivity and specificity of a test or prediction rule. Sensitivity is defined as the probability of the prediction rule or model predicting an observation as "positive" given that in truth $Y=1$. In other words, sensitivity is the proportion of truly positive observations which is classified as such by the model or test. Conversely, the specificity is the probability of the model predicting "negative" given that the observation is in truth "negative" and $Y=0$.

⁴¹ The greater the AUC, the better the model does at predicting the outcome. An AUC of 0.5 suggests no discrimination, 0.7 to 0.8 is considered acceptable, 0.8 to 0.9 is considered excellent, and more than 0.9 is considered outstanding.

all possible pairs of respondents, i.e., one successfully implementing innovation and the other failing to implement. These two models can be considered as “outstanding” in terms of their fit in predicting the outcome variable.

One way to further validate which of the two models fit the best with the outcome variable is by linking the predictions that happen (model correctly predicts successful e-Government implementation or $Y = 1$), and that did not happen (model correctly predicts failure or $Y = 0$). Figures 3 and 4 plot both sensitivity and specificity versus probability cutoff for model 2 and model 3. It shows that the cutoff sensitivity/specificity probability cutoff point is close to 0.5 for model 2 and 0.55 for model 3. Tables 12 and 13 present the sensitivity, specificity and overall accuracy rate for model 2 and model 3, respectively.

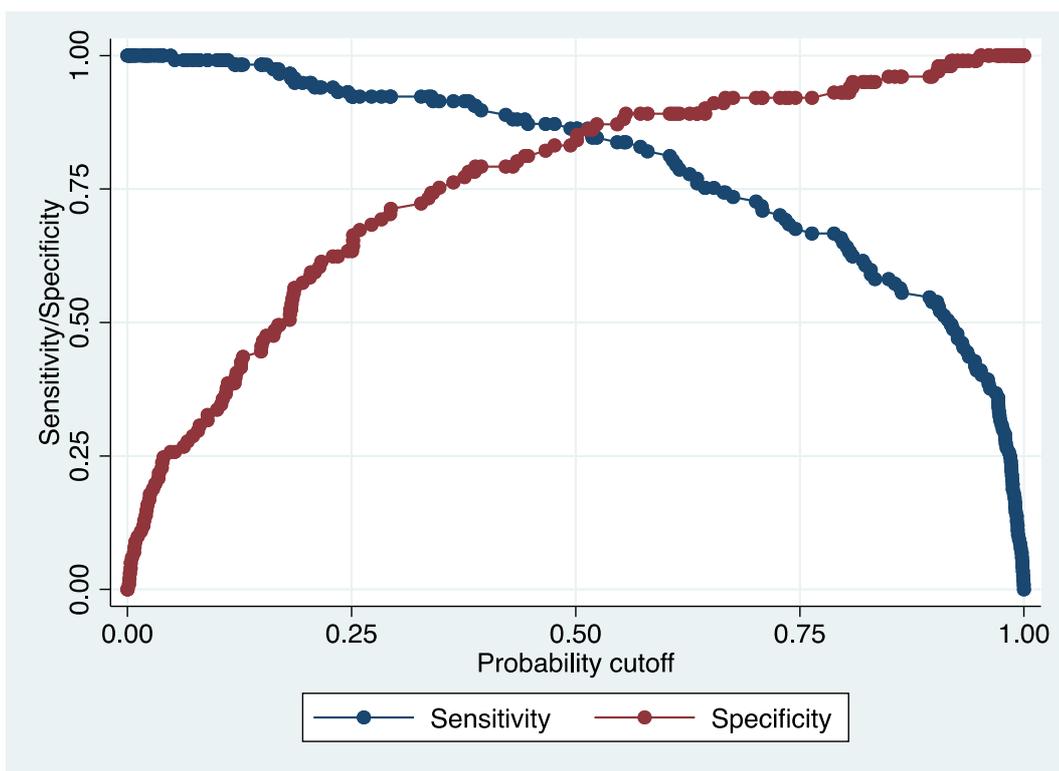


Figure 3: Sensitivity/specificity of prediction for model 2

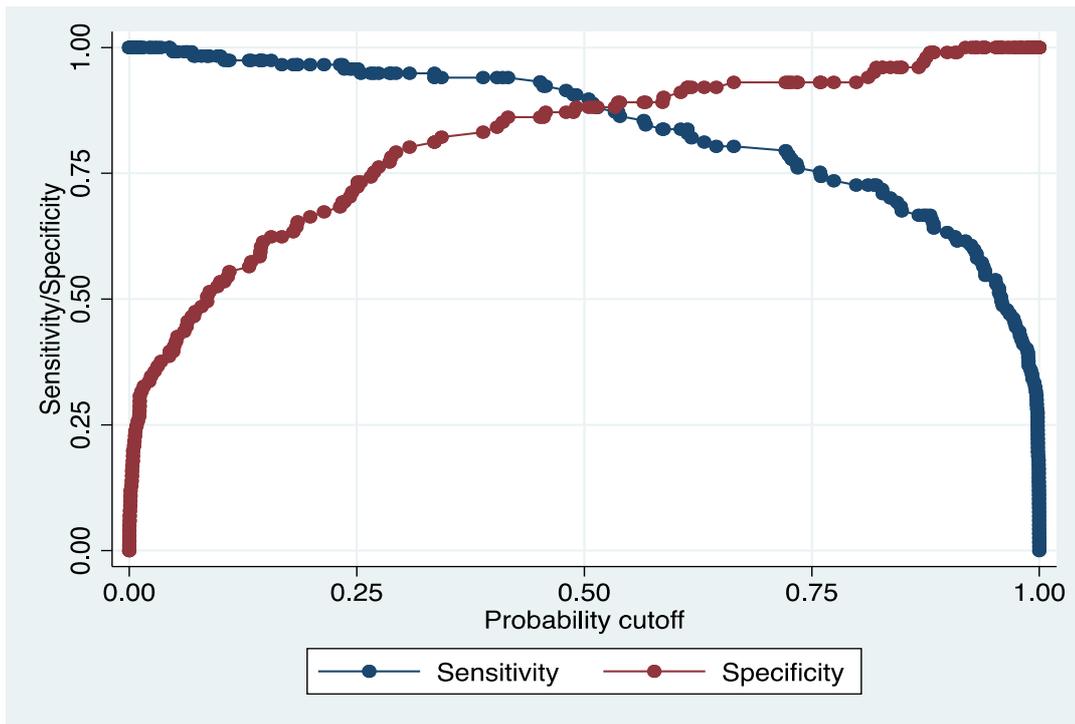


Figure 4: Sensitivity/specificity of prediction for model 3

The classification results are subject to assumptions such as the attrition rate. The following results are suggestive evidence of the key determinants of successful e-Government innovation implementation. Table 12 shows that 101 respondents were predicted correctly as true positives (86.32 percent accurate) and 85 as false negatives (84.16 percent accurate). The 101 bureaucrats can be classified as public sector entrepreneurs who have a hunger to implement e-Government innovation, they are action-oriented, egalitarian and they consider citizens' views as important for the organization's success. The 85 bureaucrats are the Weberian-colonial bureaucrats who are more inclined to follow traditional bureaucratic processes, and they are unwilling to adopt e-Government for becoming more responsive to citizens' needs.

A total of 16 bureaucrats were predicted correctly as false negative and false positive, respectively. While 16 respondents can be categorized as lackadaisical bureaucrats because of their lack of enthusiasm to implement an innovation, despite possessing the entrepreneurial qualities. On the other hand, the other 16 respondents do

not possess the entrepreneurial and creative learning qualities, but they were able to implement an innovation. These are responsible or rational, Weberian bureaucrats who can carry out their duties of e-Government change as rational decision-makers. Overall, the accuracy rate of model 2 is 85.32 percent.

Table 12: Observed and predicted frequencies for successful e-Government innovation by model 2 regression (with the Cutoff of 0.5)

Observed	Predicted		% Correct
	D (yes)	~D (no)	
Yes	101	16	86.32
No	16	85	84.16
Overall % correct			85.32

Note: Sensitivity = $101 / (101 + 16) \% = 86.32\%$. Specificity = $85 / (16 + 85) \% = 84.16\%$. False positive = $16 / (16 + 101) \% = 13.68\%$. False negative = $16 / (16 + 85) \% = 15.84\%$.

Under model 3, Table 13 shows that 100 bureaucrats were predicted correctly as true positives (90.09 percent accurate) and 90 as true negatives (84.11 percent accurate). Besides the significance of the individual-level behaviors reported in model 2, the 100 respondents are likely to be more action-oriented when pursuing new TCV based innovation opportunities, and collaborative during the implementation process. The 90 respondents are the Weberian-colonial bureaucrats. A total of 17 and 11 respondents were predicted correctly as false negative and false positive, respectively. The 17 respondents are the lackadaisical bureaucrats who exhibit the individual-level and organizational-level elements, but they are unable to implement an innovation. On the other hand, the 11 respondents are the responsible bureaucrats who do not exhibit the administrative behavioral elements, but they are able to implement an e-Government innovation. These are the Weberian bureaucrats who perform their duty in accordance with the objectives that are to be achieved. Overall, the accuracy rate of the model is 87.16 percent.

Table 13: Observed and predicted frequencies for successful e-Government innovation by model 3 regression (with the Cutoff of 0.55)

Observed	Predicted		% Correct
	D (yes)	~D (no)	
Yes	100	11	90.09
No	17	90	84.11
Overall % correct			87.16

Note: Sensitivity = $100 / (100 + 11) \% = 90.09\%$. Specificity = $90 / (17 + 90) \% = 84.11\%$. False positive = $17 / (17 + 100) \% = 14.53\%$. False negative = $11 / (11 + 90) \% = 0.99\%$.

Figure 5 plots both sensitivity and specificity versus probability cutoff for model 4's PCA-based indices regression results. It shows that the cutoff sensitivity/specificity probability cutoff point is close to 0.50. Table 14 presents the classification results.

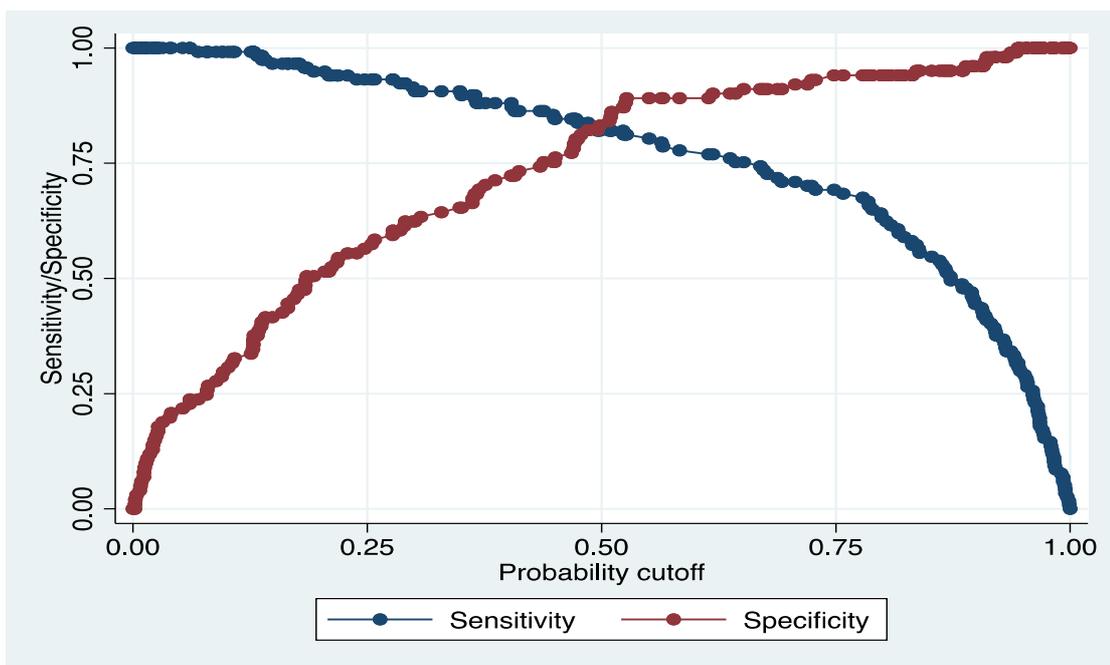


Figure 5: Sensitivity/specificity of prediction for principal components for model 4

Table 14 shows that 96 bureaucrats were predicted correctly as true positives (85.71 percent accurate) and 85 as true negatives (80.19 percent accurate). The administrative behavior of 96 respondents relate to the elements under entrepreneurship and creative learning and action, and these bureaucrats can implement e-Government.

The 85 respondents are the Weberian-colonial bureaucrats who fail to implement innovation. A total of 21 and 16 respondents were predicted correctly as false negative and false positive, respectively. The 21 respondents are the lackadaisical bureaucrats who exhibit the individual-level behavioral components, but they are unable to implement an innovation. On the other hand, the 16 respondents are the responsible bureaucrats who do not exhibit the administrative behavioral elements, but they are able to implement an e-Government innovation. Overall, the accuracy rate of the model is 83.03 percent.

Table 14: Observed and predicted frequencies for successful e-Government with PCA based indices regression (with 0.55 Cutoff)

Observed	Predicted		% Correct
	D (yes)	~D (no)	
Yes	96	16	85.71
No	21	85	80.19
Overall % correct			83.03

Note: Sensitivity = $96 / (96+16) \% = 85.71\%$. Specificity = $85 / (85+21) \% = 80.19\%$. False positive = $21 / (21+96) \% = 17.95\%$. False negative = $16 / (16+85) \% = 15.24\%$.

5.4. Summing up

It has been argued that administrative behavior, including individual-level behaviors and organizational environment, can be transformed through a “highly charged emotional experience [and] investing time and engaging in repeated practice of innovative thinking” (Weiss & Legrand, 2011, p. 32). The ETP was a “charged emotional experience” for bureaucrats to understand citizens’ perspectives and the public value of e-Government implementation. Initially, the ETP was supposed to be denoted by “entrepreneurship” and not “empathy,” but this proved challenging for the a2i. According to the director of a2i’s capacity development team, ‘entrepreneurship’ was perceived as an apprenticeship training program for bureaucrats and highly refuted by top-level bureaucrats in Cabinet Division, who argued that field-level bureaucrats

were not entrepreneurs seeking to open new businesses or learn new tools of trade (r10, interview, August 8, 2019). Thus, the term empathy was used instead of entrepreneurship as it resonated better with bureaucratic values and in terms of nudging them to acquire a genuine understanding citizens' need. Nevertheless, some bureaucrats were not comfortable with the term empathy as requiring training on such behaviors implied that they had a deficiency in their values as public servants.

This chapter has analyzed the ETP to identify the administrative behavioral determinants in explaining successful e-Government innovation. These behavioral insights can help to understand the structural-behavioral factors which drive e-Government advancement in LDCs like Bangladesh. Peters (2021) outlined five explanations for behavior within public organizations and a majority focuses on the nature of the structures and organizations that comprise the public bureaucracy, i.e., the formal and legal aspects, politics and the political process, rational action, institutional theory with its historical institutionalism link. In all these explanations, the structures and organizations that comprise the public are inhabited by individuals, and those individuals also affect the way the bureaucracy functions (Simon, 1997; Hummel, 2008).

While Simon (1997) proposed the idea of information and environment 'bounds' or the 'bounded rationality' as an alternative to the rational way of decision-making, others have contributed to the debate on the disengagement between rational choice and actual decision-making in positive behavioral research. For instance, considerations of fairness (Charness & Rabin, 2002), reciprocity (Dufwenberg & Kirchsteiger, 2004) or other-regarding preferences (Sobel, 2005). This has expanded the rational choice theory framework and the present chapter has examined behaviors such as entrepreneurship, empathy, creative action and learning, alongside structural

factors such as rewards, incentives and internal and external collaboration, in relation to successful innovation by analyzing data from the ETP survey.

The present chapter generates behavioral insights by using survey findings from a behavioral change training program. Findings show that holding all other variables constant, entrepreneurship reported a positive and significant association with successful innovation implementation under the components. Entrepreneurs in the public sector are bureaucrats who “don’t let bureaucratic barriers stop them from driving constructive change,” and “often, an entrepreneur’s success can depend in part on a manager who offers early support, an advocate in the agency, or a program or policy that allows them to try something new” (Arnold & Magia, 2013, p.2). Not surprisingly, support from in-office colleagues for internal collaboration also reported a strong and positive association with the outcome variable. Collaborative behavior is necessary for public sector entrepreneurs because, unlike private sector actors, bureaucrats require more internal and hierarchical support for the implementation of their new ideas in their offices. Such a step has been included in the ETP which requires ETP participants to organize cascading workshops once they return to their offices, after having completed the five-days of empathy training and designing TCV based SPS innovation plans.

The UNDP representative in Bangladesh opined that although a2i has succeeded in creating an “euphoria” for innovation implementation, it has not been sustained through scaling up processes (r28, interview, July 30, 2019). Nevertheless, bureaucrats are incrementally becoming more entrepreneurial and creative which have been found to increase the probability of implementing an innovation.

Although rewards can nudge entrepreneurs to engage in innovation efforts, in the case of the ETP analysis, rewards decreased the probability of implementing

innovation. Rewards for successful innovation need to be institutionalized so that bureaucrats see e-Government transformation, as a way for career advancement and development. If rewards were systemized, for example, reducing the promotion time for bureaucrats, increasing their salary and other benefits within the public administration, it could motivate bureaucrats for exploring innovation opportunities (r31, interview, January 22, 2020). After the implementation of APA, implementation of innovations has become mandatory, but rewards have not been directed to support such organizational success.

The chapter has argued how, through a structured process of innovation, the behaviors of field-level bureaucrats can incrementally be changed. The key message here is that bureaucrats operate within Weberian-colonial bounds, but this does not deter them from learning new methods and adopting new practices for exploring and pursuing new TCV based innovation opportunities. The finding that a DT strategy like ETP is resetting organizational boundaries and routines by increasing the scope for public sector entrepreneurship, is different than what is being advocated by DT models. Empathizing is a key component under DT, but it has been found to be relatively less important in driving forward successful TCV based innovations. The chapter's analysis suggests that public sector entrepreneurship and creative action are the two strongest behaviors that can be associated with successful e-Government innovation implementation, as illustrated by the findings from ETP survey⁴². Collaborative, creative, entrepreneurially-spirited empathic public sector managers, who can drive innovation, are called govpreneurs by the a2i (r9, interview, July 21, 2019).

⁴² Public sector entrepreneurship is termed as "govpreneurship" by a2i.

CHAPTER 6. CONCLUSION

The present dissertation has addressed two research questions raised by the e-Government paradox phenomenon in Bangladesh. The e-Government paradox rises from the weak performance in governance indicators against good performance in the e-Government Development Index (EGDI), as set out in the introductory chapter of this dissertation. The weak governance processes are reflected in the poor ranking in global indices such as the government effectiveness dimension under the Worldwide Governance Indicators (WGI), Corruption Perception Index (CPI) by Transparency International, and Global Competitiveness Index (GCI) by the World Economic Forum. These indices indicate high-levels of corruption and a bureaucratic resistance towards institutional change, particularly e-Government change. While Bangladesh ranks below India and Pakistan under both the CPI and GCI, it has been performing better than its neighbors in the EGDI which is prepared by the United Nations Department for Economic and Social Affairs (UNDESA, 2018; 2020). What explains this e-Government paradox?

The nested framework, presented in Figure 1 at the beginning of this thesis (see Chapter 1), has the bureaucratic experience component at its core. The first research question thus elaborated on the political, structural and behavioral conditions which impeded successive public administration reforms overtime in Bangladesh. A government provides a purpose to the bureaucracy of what things are to be done to carry out duties, achieve efficiency and govern citizens' expectations (Simon, 1997). Rules directing how public services are to be delivered through Weber's legal-rational bureaucracy requires embracing a sharp contradiction. The contradiction lies in how the Weberian values of control and efficiency were applied to impose control in colonial societies, making the public administration structure exploitative and non-responsive to citizens' needs. Under colonial times, efficiency was equated with

stability and bureaucrats were allowed to use force and other sanctions to keep the society from revolting. Beside the impact of colonial rule, one of the most common themes in the literature focusing on the Bangladesh Civil Service (BCS) is politicization and how it shaped administrative behavior.

Bureaucrats are not hired as private sector managers to be creative or behave like change-agents, but mainly as administrators to provide public service, so that a government can remain legitimate to its citizens (Simon, 1997, p.15). At the same time, “since it is in the interest of democratically elected governments to serve citizens [for getting re-elected] better through public administration offices, it *behooves* the government to guide the behavior of the bureaucrats by the criterion of *servicing citizens as efficiently as possible*” (Simon, 1997, p.15). The words “behooves” and “servicing citizens as efficiently as possible” are emphasized for two reasons. First, the aforesaid observation fits well with democratically advanced, high-income nation states today who have little or no colonial baggage and required no postcolonial reconstruction. Chapter 2 detailed the political history of Bangladesh and how the bureaucracy’s experience was shaped through colonial traditions, before a social order could be established that could shape the former’s values, and not the other way around (i.e., bureaucracy shaping society’s values). Second, what “behooves” a colonial, military or elected government may not always be in citizens best interest, and it is necessary to examine bureaucratic experience in its relation to “getting things done” under a postcolonial society’s context.

For example, the legal framework of the country promoted values, such as accountability, transparency, equity, democracy, effectiveness, and efficiency as the basis for administrative action; however, the actual bureaucratic behavior exhibited great deviation from the stated legal norms. The colonial-structural legacy was not

challenged after independence but leveraged by elected and non-elected regimes who could not gain control over the draconian government, i.e., a *Paper Tiger* (Mathur, 2012). Constitutionally mandated institutions and elected politicians were not able to control the district officers in Bangladesh. District and sub-district officers were accountable to their secretary, not directly to their elected members of the legislature. The public administration-political nexus after independence did not allow for innovation or adoption of new technology to emerge in the policy radar of the government. However, the efficacy of the e-Governance reforms and e-Government advancement points to a shift that has taken place within the public administration system, in terms of incremental changes in bureaucratic behavior.

The second research question explores the second component of the Figure 1, i.e., bureaucratic structural-behavioral change. It asks about the conditions which can change behavior of bureaucrats, working under a public administration system with a colonial legacy perpetuated by non-responsive structures, to influence e-Government implementation. This research has analyzed the weak administration aspects of the e-Government paradox, and how these were addressed by different governments, drawing upon international ideas and support. Starting from late 1990s onward, Bangladesh saw the introduction of successive new policies related to e-Government, which were aimed at converting and updating the old, colonial institutions and making them more citizen-centric. The international donor community also played a key role in supporting the government to design and implement training programs by combining ideas from different public administration reform models. This included importing private sector lessons and practices under New Public Management (NPM); focusing on citizens and increasing organizational collaboration under New Public Governance (NPG); transforming traditional services using electronic means under the digital-

enhanced governance (DEG) principles; and nudge-theory led design thinking (DT) strategies.

The Managing at the Top (MATT I and II), Support to ICT (SICT) project, Total Quality Management (TQM and later, IPS-TQM), Aspire to Innovate's (a2i) Quick Wins and Empathy Training Program (ETP), embodied a blend of NPM, NPG, DEG and DT ideas. Chapter 3 demonstrated how the momentum of NPM created new avenues for implementing top-down initiatives to alter the Weberian-colonial bureaucracy (e.g., through the implementation of MATT). It analyzed how successive governments tried to address some of the Weberian-colonial bureaucratic experiences, for reducing the bureaucratic barriers to administrative behavioral change. The novelty of chapter 3 lies in analyzing the non-NPM models and how these influenced different initiatives aimed at administrative behavior change in the service delivery process.

In so doing, it shows how the idea of the ETP followed a process of evolution, as depicted in Figure 6. A process of behavioral change started with MATT training for top-level executives in the bureaucracy in 1999. Then, in 2007, Kaizen concepts for service delivery improvements were introduced through training for field-level bureaucrats. A series of capacity building trainings known as Quick Wins between 2008 and 2013, drew upon the design and objectives of MATT and Kaizen. In 2015, the ETP was formally inaugurated by a2i which took lessons from Quick Wins and previous training initiatives. It established a structured process facilitating interactions between field-level bureaucrats and citizens, and the implementation of e-Government type of innovations for accelerating service delivery to citizens. The study has analyzed the evolution of these training programs that led up to ETP and demonstrated with empirical evidence the incremental changes in administrative behavior – from inside-out to outside-in - triggered by digital transformation of traditional, manual public

service delivery processes. While chapter 2 demonstrates how colonial legacies and institutional characteristics shaped the administrative behavioral patterns in the post-independence period, chapter 3 shows how the restoration of parliamentary democracy and the onset of DEG and DT ideas travelled through trainings and projects, supported by the international donor agencies.

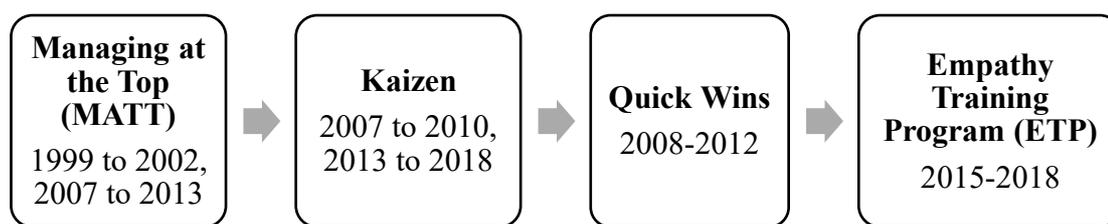


Figure 6: Evolution of administrative behavioral change training initiatives

The influence of Digital Bangladesh on changing bureaucratic experience and making room for incremental bureaucratic changes to take place is the third component of the conceptual framework (see Figure 1 in chapter 1), i.e., bureaucratic entrepreneurship. Digital Bangladesh, notwithstanding its e-Government advancement success, is a new source of politicization and patrimonial support for bureaucrats to lead public service delivery innovation efforts under e-Government agendas. Behavioural or institutional change happens when “ceteris is no longer paribus, that is, when shocks exogenous to the system of institutions alter the context” (Hall, 2010, p. 252). After the military rule between 2007 and 2008, Digital Bangladesh emerged as an exogenous shock to a public administration system which continued to rank at the bottom of the CPI. Chapter 4 examined the state of e-Government implementation under Digital Bangladesh from a political and international perspective, particularly drawing upon some real-life successful examples of public service delivery innovation.

A political vision such as Digital Bangladesh was instrumental in aligning bureaucratic interests and mobilizing popular support within administration. The role of bureaucracy as the driver of innovation in service delivery has been explored starting with the “steel frame” of the British colonial administration, whose objective was to maintain control and imperial dominance by controlling citizens. Political history and development of the organizational conditions shape the public service delivery process and practices.

The conceptual framework – bureaucratic experience, bureaucratic change and bureaucratic entrepreneurship – is useful to conceptualize how organizational conditions and individual level characteristics shaped the process of e-Government implementation and e-Governance thinking. The Digital Bangladesh agenda was a common theme in all interviews and how it offered bureaucrats with a political vision for the first time in its organizational history, to reach development and e-Government goals. Digital Bangladesh has been important in demonstrating a vision for shifting administrative behavior from authoritarian, paternalistic and formalistic, to citizen centric. The Digital Bangladesh case study illuminates the e-Government paradox by illustrating what type of endogenous processes and conditions are driving public service delivery innovation.

The second research question overlaps with the second and third components, and it was further examined using primary ETP survey data in Chapter 5. The statistical and regression analyses bring to fore the importance of training bureaucrats through a structured process in developing their entrepreneurial mindset and empathy. A nudging mechanism like ETP requires political patronage through paternalistic support as it attempts to motivate bureaucrats to design policies and interventions in a humane manner. Nudging bureaucrats through ETP has taken a more inward approach by attempting to reorient administrative behavior towards increasing the responsiveness of

service delivery to citizens, by leveraging e-Government as a means. This is because bureaucratic entrepreneurship cannot be left unfettered; bureaucrats' roles and responsibilities are governed by hierarchy, laws and regulations. Recent research has found that rather than stifling employees' entrepreneurial and empathy abilities, the correct structure can enable governments to utilize DT strategies (Liedtka & Salzman, 2018), as has been the case of ETP in Bangladesh. The ETP is aimed at enabling bureaucrats to adopt an outside-in approach when designing and implementing e-Government innovations. Backed by insights from its predecessors (Quick Wins, Kaizen and MATT), the ETP enabled a process of behavioral change for bureaucrats to reframe public service delivery challenges in new ways. While the source of political vision, Digital Bangladesh, was the greatest external pressure being made on public administration to adopt e-Government, the ETP was a catalyst which nudged bureaucrats to become entrepreneurial in using ICT and empathic, in understanding citizens' needs.

Simon's (1997) bounded rationality is useful to conceptualize the bounds of bureaucratic entrepreneurship. The service process simplification (SPS) maps and the time, cost and number of visits or the TCV result of innovation, have set the bounds for bureaucrats to implement e-Government. According to the bureaucrat who drafted the *Innovation Team* gazette in 2013, the SPS-TCV innovation toolkit helped to articulate the digital transformation process of traditional service delivery processes, and it was fundamental for measuring public value of service delivery innovation under e-Government (r5, interview, August 21, 2019). TCV takes citizens' perspectives but falls short of ensuring quality. For example, a service can be quickly delivered but if bureaucrats remain hostile and patronizing, such improvements will not suffice to improve citizens' experiences as service delivery recipients. As the ETP analysis

shows, a structured process of innovation can be used for nudging administrators to acquire a rich understanding of the public service delivery problems, and as argued by scholars, direct attention to more nuanced solutions (Chambers, 2003; Coates, 2006).

The colonial structure of Bangladesh's bureaucracy simply serves to magnify the importance of individual-level behavioral interventions, as opposed to broader institutional reforms, in altering bureaucratic objectives and practices. For example, quality of service delivery is not ensured by TCV but using ICT for increasing efficiency in the processes, is. With TCV, therefore, a "q" can be added to measure the quality of the service being delivered. The quality can be measured through a feedback process for citizens' satisfaction and suggestions for improvement. TCV has set the legal and rational bounds for bureaucrats to innovate, and the ETP was an attempt to nudge field-level bureaucrats to implement e-Government process innovations in service delivery to citizens.

6.1. Structural-behavioral recommendations for e-Government innovation

Implementation of e-Government in Bangladesh is ironically dependent upon bureaucrats who "spend eight or more hours a day immersed in its controlling [...]" Their cultural values are not inherited from a unique personal background but imposed by the organization, with prime emphasis on the virtues of efficiency, capitalism, and imperialism" (Hummel, 2008, p. 24). The challenges relate to training the Weberian-colonial bureaucrats and providing them with tools which can change their behaviors from inside-out to outside-in, with a new way of representing and working towards reducing public service delivery problems through e-Government. At the same time, organizational structures and arrangements for collaboration are fundamental for public sector entrepreneurs to implement innovation in their offices, as they are accountable to supervisors and other colleagues (Weiss & Legrand, 2011). Six recommendations

are made about integrating existing e-Government initiatives aimed at changing administrative behavior. These recommendations are based on the interviews where participants were asked to provide suggestions for the future of public administration reforms in Bangladesh, from the perspective of e-Government implementation.

6.1.1. Reducing excessing dependence on a2i's leadership

The success of a2i has been dependent upon the top-level political endorsement and leadership of top-level bureaucrats like r1, r2, r3 and r4. The role of these top-level bureaucrats had important implications in the way Digital Bangladesh was implemented on the ground, because of their positional and institutional power, their personal commitments in most cases, and personal connections in some cases. The appointment of bureaucrats at key positions relates directly to the postcolonial traditions of political cronyism in the higher echelons of the public service. On the other hand, the role of UNDP Bangladesh was important in the way the donor agency oversaw the design of a2i's predecessor, i.e., the SICT project, and provided strategic leadership in terms of making a2i the hub of e-Government change. The appointment of r9 was made by the UNDP Bangladesh and he has been able to garner interest within the bureaucracy because of his non-political role and views, according to a former UNDP assistant country director (r15, interview, July 21, 2019). The role of a2i and its leadership needs to be further formalized through appropriate policy gazette or other notifications, as there remains confusion regarding its leadership and institutional status – whether it is a project, program or a government entity. The present study views a2i as the DT institution or innovation unit of the Bangladesh government, implementing e-Government agendas under Digital Bangladesh. Innovation cannot be driven solely by behavioural change, and it also requires institutional leadership for creating a lasting cultural shift in the bureaucracy.

6.1.2. Institutionalizing innovation units

Total government ownership of the a2i has not yet been achieved as UNDP Bangladesh continues to provide administrative support to the project, and by helping it to connect with other global UN agencies. The a2i is today hosted in three places – Cabinet Division, ICT Division and UNDP Bangladesh – and this has given the a2i a degree of flexibility to work under a whole-of-government approach. In exploring where a2i would be best located, its role needs to be re-examined by considering the future role of Governance Innovation Unit (GIU) at the Prime Minister’s Office (PMO). While GIU is headed by an advisor to the prime minister of Bangladesh, the a2i has a project director, generally from the additional secretary rank. The leadership and location of a2i are intertwined and it may become important to assign higher political authority over a2i in the future. It is important for a2i and GIU to work together to carve out specific roles and responsibilities towards the implementation of the e-Governance Master Plan (BCC, 2019), and to also set a roadmap towards the achievement of Vision 2041. The Cabinet Division, a2i and GIU need to set up a framework which will allow aspiring public sector entrepreneurs to seek out policy and budgetary support for implementing their innovation. The framework can also act as a filtering mechanism which will allow identifying innovations which can be replicated and scaled up in other location and offices.

6.1.3. Sustainability of e-Government innovations

A common concern amongst the academic respondents (r23, interview, January 2, 2020; r24, interview January 7, 2020) and international donor agencies (r26, interview, July 23, 2019; r27, interview, July 24, 2019) was the sustainability of e-Government innovations. It is important to consolidate existing TQM cells and the Innovation Team into “Innovation Management Units” or IMUs across the eight

divisions, and 54 ministries and divisions. At the divisional level, the IMUs will be led by divisional commissioners who will be supported by the 64 deputy commissioners (or DCs), while the ministerial level IMUs will be led by secretaries with support from their field-level offices. The IMUs will be responsible for overseeing the implementation of different e-Government related behavioral change initiatives on one hand, and on the other hand, ensure the sustainability of e-Government innovations resulting from Kaizen, Quick Wins and ETP. The Cabinet Division and Ministry of Public Administration (MoPA) will be responsible for the monitoring of IMUs across the divisions and ministries, along with the a2i and GIU. The a2i and GIU will need to ensure that the Cabinet Division and MoPA, along with relevant ministries, evaluate the implementation of innovations, ensure their sustainability, and explore possible nationwide scaling opportunities.

6.1.4. Streamlining policy instruments

The existing annual performance agreements (APAs) can help to improve the efficiency and accountability of the IMUs. The APA is a framework of the Cabinet Division which has incorporated TCV based innovation implementation as a key item for measuring the performance of ministries. Activities under the APA's mandatory strategic objectives (MSO) should be reviewed annually, and an independent third-party assessment system disclosing results to the public, should be introduced to reduce the implementation gap of the MSO components. For developing a proper monitoring system for the MSOs, the APA needs monitoring for not only ensuring that successful and relevant innovations are scaled up, but also for identifying structural-behavioral changes taking place at the field-level for new policy reforms.

6.1.5. Institutionalizing awards for innovation

The present analysis has shown that rewards are not having a positive effect on driving forward successful implementation of e-Government innovation. While national awards and prizes for successful innovation are being rewarded to successful public sector entrepreneurs, these have not been incorporated into the promotion or any other professional criterion. Bureaucrats are not being awarded in a systemic manner that would help them in terms of advancing their career goals. For example, awards need to be made in the form of reducing promoting time, increasing salary and other benefits, and not only being limited to foreign tours and meeting top-level bureaucrats. When successful e-Government innovation will be seen as a rational way of advancing professional career, it may unleash more entrepreneurship by the bureaucrats who have so far not been too eager on the implementation of service delivery innovations.

6.1.6. Creation of a centralized database for e-Government advancement

There is a lack of a centralized database which makes the study of e-Government innovations particularly difficult in Bangladesh. Data is scattered and mostly based on a2i sources, which does not help with verifying the actual impact of TCV based innovation at the ministry level. Nor does the data from a2i help to understand the behavioral changes that may be taking place because of different initiatives by DFID, JICA and UNDP Bangladesh. It is important to create a centralized database of administrative training programs so that the proposed framework (led by Cabinet Division, a2i and GIU), can be used to track how many bureaucrats have received what type of training, and at the same time, evaluate the impact of TQM and TCV type of process innovations. This database can be valuable for further pinpointing areas or sectors which continue to follow colonial legacies, and at the same time, verifying the APAs and prioritizing e-Government for such areas/sectors.

6.2. Contributions to existing literature

The present study has added new knowledge on the topic of innovation and entrepreneurship from a developing country's perspective. Although the present study's findings are generalizable to many similar governments, the empirical context is limited to a single LDC's experience: Bangladesh. In the Bangladeshi context, digital transformation of the public service delivery process through e-Government has been driven by the government, making the data and findings more representative of the inside-out drivers of bureaucratic entrepreneurship. A significant proportion of e-Government research in developed countries' focuses on different successful drivers of public service innovation, such as heavy infrastructural investments in setting up the hardware and software, cybersecurity, artificial intelligence (AI), robotics, etc. Scholars have been asking for more research from the developing countries' perspective and particularly from the relevant behavioral elements which influence successful adoption of e-Government (Heeks, 2008; Jamil et al., 2013; Klein et al., 2010; Kuehnhanss, 2019). The present study addresses this broader request by analyzing the public administration in Bangladesh and a behavioral training program, the ETP. The ETP survey analysis is used for identifying key behaviors and values in driving e-Government's advancement in Bangladesh.

This dissertation makes three key contributions to the literature. First, it conceptualizes bureaucratic entrepreneurship in terms of why some bureaucrats are more successful than others in driving forward e-Government transformation. Understanding public sector entrepreneurship from a developing country's perspective is a new contribution to knowledge about an old phenomenon which has primarily been studied from developed countries' perspectives (Link & Link, 2009; Mazzucato, 2013; Osborne & Gaebler, 1992). By analyzing the association between public sector

entrepreneurship and e-Government from an LDC perspective, the present dissertation contributes to governance, political science and public administration literatures by adding a new behavioral perspective. It generates insights about bureaucratic behavior and its association with successful e-Government innovation implementation in institutional and political contexts that are distinct from earlier research.

Second, the dissertation offers evidence-based policy implications for experiential training programs more generally. An article of faith among policymakers in developing countries is that training programs are a waste of time and should be discouraged (World Bank, 2006). In contrast, the survey findings demonstrate the benefits of empathy training for bureaucrats to drive forward e-Government implementation. The study suggests that policymakers should be implementing programs such as ETP and encouraging bureaucrats to behave as entrepreneurs within the permitted administrative bounds using innovation toolkits, in making e-Government agendas more responsive and citizen-centric. The analysis on ETP is useful to generate insights about administrative behavioral change where entrepreneurship has been found to be the most significant element driving forward e-Government implementation. It looks at the innovation toolkit – TCV and SPS – and how these provide a better understanding of citizens’ needs on the one hand, and the ability to design better, digital solutions on the other. The ETP survey is a first step toward generating insights about the outside-in behavioral elements of a public sector entrepreneur, and identifying areas of strength such as cognitive empathy and collaboration, weakness such as emotional empathy, and inconsistency in terms of rewards.

Finally, the study presents a new way of looking at how public value created by e-Government innovations can be redefined through social interactions with citizens

through new e-Governance tools and measures. This is where the real advantage of the DT model lies, as social interaction with citizens allows public sector entrepreneurs to develop targets that relate to outcomes that the public genuinely value (e.g., reduction in TCV). The analysis of a DT strategy such as the ETP is a new contribution from an LDC's perspective. It sheds light on the nexus of e-Government advancement and administrative behavior and provides insights into real-life bureaucrats as they adopt ICT for improving the quality of services to citizens. Highly-charged emotional training like ETP can change bureaucrats behavior (Weiss & Legrand, 2011) and make them more entrepreneurial and empathic, by enabling them to adopt outside-in approaches in driving digital transformation.

6.3. Limitations and future studies

A key caveat of the present analysis is that it relies on one single country and specific training programs. Although findings are general in scope for many developing countries, the empirical context is limited to a single country, i.e., Bangladesh. The Bangladesh public administration context provides an institutional setting which might be unique in several ways. Thus, the findings presented in the should be used with caution when applying to other contexts. Moreover, future studies may uncover more drivers of e-Government's success and test frameworks in different contexts. A third and final caveat is that the present analysis is not focused on any single ministry, and it mainly focuses on the behavioral aspects of process innovations occurring at the field-level. Future studies might consider exploring the impact of e-Government in changing administrative behavior by looking at new forms and tools of service delivery management.

The focus of this study has been on administrative behavioral constructs, such as empathy and the entrepreneurial nature of bureaucrats. Future studies are encouraged

to further test these variables and incorporate the most significant behavioral constructs for analyzing the association with successful innovation implementation and scaling. The exploration of the present study's behavioral constructs will provide a richer understanding of the behavior of public sector entrepreneurs where future researchers will need to pay heed to organizational processes, activities, and outcomes under the innovation umbrella, and to move from "advancing a narrow intellectual agenda in the service of commercial elites, towards looking outwards and asking how organizations are altering our society" (Tracey & Stott, 2017, p.58).

By focusing on one training program, the present study echoes more explicit calls from the innovation scholars who encourage the investigation of entrepreneurship type of administrative behavior, and its association with successful e-Government implementation. The ETP was designed and implemented by a2i of the Bangladesh government between 2015 and 2018. The ETP allowed bureaucrats to test out new ideas using the government's method of innovation – time, cost and number of visits (TCV), required to access information and services. It therefore enabled studying e-Government efforts by the government of Bangladesh practically from the birth of the phenomenon.

Another limitation of the present study is its reliance on private sector literature in designing the survey. Lessons from developed countries' contexts is useful in analyzing the major public administration reform models but whether such lessons are valid for studying entrepreneurship in postcolonial bureaucracies is open to debate. The public administration reform models and ideas are used to update the knowledge on Bangladesh's success with e-Government efforts from a non-NPM perspective.

This study focuses on the implementation of e-Government innovations. As a result, it limits the generalizability to other types of innovations and the scaling

up/diffusion of innovation. Future studies can explore the generalizability to other types of innovations and the scaling up process. The number of implemented innovations is large compared to scaled up innovations in Bangladesh, and by focusing on the implementation process, the present study focuses on the legal-rational structures and methods influencing innovations by bureaucratic entrepreneurs. The study analyzes factors driving implementation success and failures which can help future studies to explore the administrative behavioral elements in the scaling process of successfully implemented innovations.

A possible contentious point of the study is that it focuses on Bangladesh's bureaucracy exclusively without getting entangled into the political discussion, which has not been the case for public administration scholars. Political environment is considered important insofar as it provides a framework for bureaucrats to take decisions, and at the same time, political forces are important for prioritization of e-Government vision for bureaucrats to innovate. The present study focuses on field-level administration but not the BCS cadre typology, which would allow for adopting a more holistic approach to understand how administrative behavioral elements, comprising, entrepreneurship and empathy alongside collaborative behavior, can influence the process of implementing an innovation.

The final dissertation is a useful guide to LDCs and developing countries as it provides practical insights and lessons for driving forward e-Government implementation by structuring a process for bureaucratic entrepreneurship to take place for the implementation of public service delivery innovation. Although colonial influences are still present in the structures and ideas which govern bureaucratic behaviour, this is changing across developing countries (Lewis & Hossain, 2019; Lewis & Van Schendel, 2020). The rationale for innovation lies in the ability of bureaucrats

to deal with the wicked service delivery problems and help governments remain relevant for the citizens. For LDCs like Bangladesh, innovation has been a political slogan and has a high appeal in the media, which has helped to spur interest across the society. In Canada and elsewhere, innovation is cited as an important objective, and many reform initiatives have been tried and failed because the target could not be defined.

“Just as genes may express themselves differently for individuals, so too does the DNA that underlies administrative systems interpreted differently in different political systems, reflecting other aspects of the political setting as well as the specific challenges that history provides for those administrative systems” (Peters, 2021, p. 48). Bangladesh is going to celebrate its 50 years of independence on 16th December 2021. Compared to older democratic and high-income countries like Canada, the US, the UK, France, Germany and even India, it is a fairly new state. The country has witnessed a strong developmental transformation process despite its weak governance structure, and today, it outperforms its neighbor - the developing giant India – in many social indicators such as reducing child mortality rate, better access to sanitation and health facilities. Public sector entrepreneurship is driven by a sense of moral duty to serve others. The present dissertation is an early attempt towards asking how the e-Government paradox, exhibited by new forms of public administration structures and behavior changing traditions, can be used to understand why countries are doing well in e-Government development, but not on traditional governance indicators. The hope is that the present study will inspire further work in the same vein of examining how digital transformation of manual, paper-based services ignite administrative change in administrative behavior and traditions, for the implementation of e-Government.

Reference

- a2i. (2015). *Empathy Training Guideline*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of Bangladesh.
- a2i. (2018). *Digital Bangladesh Booklet on Public Services*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of Bangladesh.
- Agur, C. (2018). Re-imagining the Indian state: External forces and the transformation of telecommunications policy, 1947–present. *Global Media and Communication*, 14(1), 65–83. <https://doi.org/10.1177/1742766518759794>
- Ahamed, E. (2004). The military and democracy in Bangladesh. In R. . May & V. Selochan (Eds.), *The Military and Democracy in Asia and the Pacific* (pp. 101–118). Canberra: The Australian National University (ANU) E Press.
- Ahsan, S.K., Hasan, S., & Imran, N. N. (2020). *Bangladesh: Political Economy of Right to Information*. Washington, DC: World Bank, Washington, DC. Retrieved from <https://openknowledge.worldbank.org/handle/10986/33733>
- Alam, Q., & Teicher, J. (2012). The State of Governance in Bangladesh: The Capture of State Institutions. *South Asia: Journal of South Asian Studies*, 35(4), 858–884.
- Allio, L. (2014). *Design Thinking for Public Service Excellence*. Singapore: UNDP Global Centre for Public Service Excellence. Retrieved from https://issuu.com/undppublicserv/docs/gpcse_design_thinking/27
- Amabile, T., & Kramer, S. J. (2011). The power of small wins. *Harvard Business Review*, (May), 4–12.
- Aminuzzaman, S. (1994). Structural Adjustment program and its impact on Bangladesh public administration. *Philippine Journal of Public Administration*, 38(3), 275–293.
- Aminuzzaman, S. (2013). Governance at grassroots: Rhetoric and reality: A study of the Union Parishad in Bangladesh. In S. Askvik, I. Jamil, & T. N. Dhakal (Eds.), *In Search of Better Governance in South Asian and Beyond* (pp. 201–222). New York: Springer.
- Aminuzzaman, S., & Khair, S. (2014). *National Integrity System Assessment: Bangladesh 2014*. Dhaka.
- Auyero, J. (2012). *Patients of the State: The Politics of Waiting in Argentina*. Durham and London: Duke University Press.
- BBS. (2014). *Census Report on Union Information and Services Centre (UISCs)*. Dhaka: Bangladesh Bureau of Statistics (BBS), Statistics and Informatics Division (SID), Ministry of Planning.
- BCC. (2019). *e-Government Master Plan for Digital Bangladesh*. Dhaka: Bangladesh Computer Council, Ministry of Posts, Telecommunication and IT, Government of the People's Republic of Bangladesh.
- Bertelli, A. M., Hassan, M., Honig, D., Rogger, D., & Williams, M. J. (2020). An agenda for the study of Public Administration in Developing Countries. *Governance*, 33(4), 735–748. <https://doi.org/10.1111/gove.12520>
- Bertrand, A. (2019). *The role of artificial intelligence in government*. London. Retrieved from https://www.ey.com/en_gl/government-public-sector/why-ai-and-the-public-sector-are-a-winning-formula
- Bhat, R. (2020). *The politics of internet infrastructure: Communication policy, governmentality and subjectivation in Chhattisgarh, India*. London School of Economics and Political Science, London.
- Bhatnagar, S. (2004). *E-Government: From Vision to Implementation. A Practical Guide with Case Studies*. New Delhi: Sage Publications.

- Bhatnagar, S. (2014). *eGovernance in Bangladesh: Current Status and Way Forward Improving Service Delivery for e-Inclusion*. Colombo. Retrieved from www.lirneasia.net
- Bhattacharjee, P. P. (2019, December 25). Coveted promotions only to be short-lived. *The Daily Star*. Retrieved from <https://www.thedailystar.net/frontpage/news/coveted-promotions-only-be-short-lived-1844833>
- Bhattachary, D., & Titumir, R. A. (2001). *Bangladesh's Experience with Structural Adjustment: Learning from a participatory exercise*. Dhaka, Centre for Policy Dialogue (CPD).
- Bhuiyan, S. H. (2011). Modernizing Bangladesh public administration through e-governance: Benefits and challenges. *Government Information Quarterly*, 28(1), 54–65. <https://doi.org/10.1016/j.giq.2010.04.006>
- Blake, S. (1979). The patrimonial-bureaucratic empire of the Mughals. *Journal of Asian Studies*, 39(1), 77–94.
- Borins, S. (1998). *Innovating with Integrity: How Local Heroes Are Transforming American Government*. Washington, D.C.: George Town University Press.
- Borins, S. (2002). Leadership and innovation in the public sector. *Leadership & Organization Development Journal*, 23(8), 467–476. <https://doi.org/10.1108/01437730210449357>
- Borins, S. (2014). *The Persistence of Innovation in Government*. Washington D.C.: Brookings Institution Press.
- Boyer, B., Cook, J. W., & Steinberg, M. (2011). *Recipes for Systemic Change*. Helsinki: Helsinki Design Lab/Sitra. Retrieved from http://www.helsinkidesignlab.org/peoplepods/themes/hdl/downloads/In_Studio-Recipes_for_Systemic_Change.pdf
- BPATC. (2019). *64th Foundation Training Course*. Dhaka: Bangladesh Public Administration Training Centre (BPATC), Ministry of Public Administration (MoPA).
- BPATC & JICA. (2017). *Project for Improving Public Services through TQM in Bangladesh Project Completion Report*. Dhaka: Bangladesh Public Administration Training Centre (BPATC), Ministry of Public Administration (MoPA) and Japan International Cooperation Agency (JICA).
- Brinkerhoff, D. W., & Brinkerhoff, J. M. (2015). Public Sector Management Reform in Developing Countries: Perspectives Beyond NPM Orthodoxy. *Public Administration and Development*, 35(4), 222–237. <https://doi.org/10.1002/pad.1739>
- Brookfield Institute. (2019). *Exploring Policy Innovation: Tools, Techniques + Approaches*. Toronto.
- BTV. (2010). Prime Minister Sheikh Hasina's Speech at the Annual DC Conference. Bangladesh: Bangladesh Television (BTV).
- Burki, S. J. (1969). Twenty Years of the Civil Service of Pakistan: A Reevaluation. *Asian Survey*, 9(4), 239–254. <https://doi.org/10.2307/2642543>
- Cabinet Division. Innovation Team (2013). Dhaka: Government of Bangladesh.
- Campbell, J. L. (2004). *Institutional Change and Globalization*. Princeton: Princeton University Press. Retrieved from <https://www.amazon.ca/Institutional-Change-Globalization-John-Campbell/dp/0691089213>
- Carmody, L., Hosain, M. S. H., & Shams, L. (2018, April 10). Supporting innovation in public services: Empathy Training in Bangladesh. Retrieved December 8, 2020, from <https://www.bi.team/blogs/supporting-innovation-in-public-services->

- empathy-training-in-bangladesh/
 Centre for Public Impact. (2016). *Enter the public entrepreneur: Implementing innovation in the public sector*. Boston, MA.
- Chakrabarty, D. (1992). Postcoloniality and the Artifice of History: Who Speaks for “Indian” Pasts? *Representations*, 37(Special Issue: Imperial Fantasies and Postcolonial Histories), 1–26. <https://doi.org/10.2307/2928652>
- Chambers, S. (2003). Deliberative Democratic Theory. *Annual Review of Political Science*, 6(1), 307–326. <https://doi.org/10.1146/annurev.polisci.6.121901.085538>
- Charness, G., & Rabin, M. (2002). Understanding Social Preferences with Simple Tests. *The Quarterly Journal of Economics*, 117(3), 817–869. <https://doi.org/10.1162/003355302760193904>
- Cheung, A. B. L. (2003). Public Service Reform in Singapore: Reinventing Government in a Global Age. In I. Scott (Ed.), *Governance and Public Sector Reforms in Asia* (pp. 1–24). London: Routledge.
- Coates, D. (2006). *Reviving the public: A new governance and management model for public services*. London.
- Cohn, B. S. (1966). Recruitment and Training of British Civil Servants. In R. Braibanti (Ed.), *Asian Bureaucratic Systems Emergent from the British Imperial Tradition* (pp. 87–140). Durham: Duke University Press.
- Cohn, B. S. (1996). *Colonialism and Its Forms of Knowledge: The British in India*. Princeton: Princeton University Press.
- Conklin, A. L., S. Fishman, & Zaretsky, R. (2011). *France and its Empire Since 1870*. Oxford: Oxford University Press.
- Conway, R., Burbidge, I., Timmons, L., & Maani, S. (2018). *Move fast and fix things: How to be a public entrepreneur*. London.
- Cornell University, INSEAD, & WIPO. (2020). *Global Innovation Index 2020: Who Will Finance Innovation?* . (S. Dutta, B. Lanvin, & S. Wunsch-Vincent, Eds.) (13th ed.). Ithaca, Fontainebleau and Geneva: World Intellectual Property Organization (WIPO).
- CSCMP. (2009). *District Consultation and Workshop Report on Citizen’s Charter and Business Process: October 12-14, 2009*. Dhaka: Civil Service Change Management Program (CSCMP), UNDP Bangladesh.
- d.school. (2010). *An Introduction to Design Thinking: Process Guide*. Stanford.
- Daily Star. (2001a, September 8). BNP announces 21-party manifesto: Law, order and corruption top priority. *The Daily Star*, p. 1.
- Daily Star. (2001b, September 10). Awami League announces manifesto: Poverty alleviation top priority. *The Daily Star*, p. 1.
- Daily Star. (2015, April 7). Mass promotion in bureaucracy . *The Daily Star*. Retrieved from <https://www.thedailystar.net/frontpage/mass-promotion-bureaucracy-76017>
- Davis, M. (1980). A Multidimensional Approach to Individual Differences in Empathy. *JSAS Catalog of Selected Documents in Psychology*, 10(4), 85.
- De Waal, F. B. M. (2008). Putting the altruism back into altruism: The evolution of empathy. *Annual Review of Psychology*, 59, 279–300. <https://doi.org/10.1146/annurev.psych.59.103006.093625>
- Denhardt, J. V., & Denhardt, R. (2015). *The new public service : serving, not steering* (4th ed.). New York: Routledge.
- Dufwenberg, M., & Kirchsteiger, G. (2004). A theory of sequential reciprocity. *Games and Economic Behavior*, 47(2), 268–298. <https://doi.org/10.1016/j.geb.2003.06.003>

- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). New Public Management is dead- Long live digital-era governance. *Journal of Public Administration Research and Theory*, 16(3), 467–494.
<https://doi.org/10.1093/jopart/mui057>
- Dunleavy, Patrick, & Hood, C. (1994). From old public administration to new public management. *Public Money and Management*, 14(3), 9–16.
<https://doi.org/10.1080/09540969409387823>
- Dunleavy, Patrick, & Margetts, H. (2015). Design principles for essentially digital governance. In <http://eprints.lse.ac.uk/64125/> (pp. 1–32). London: American Political Science Association. Retrieved from <http://eprints.lse.ac.uk/64125/>
- Edelenbos, J., & Klijn, E.-H. (2007). Trust in Complex Decision-Making Networks. *Administration & Society*, 39(1), 25–50.
<https://doi.org/10.1177/0095399706294460>
- Evans, P., & Rauch, J. E. (1999). Bureaucracy and Growth: A Cross-National Analysis of the Effects of “Weberian” State Structures on Economic Growth. *American Sociological Review*, 64(5), 748.
<https://doi.org/10.2307/2657374>
- Fagerberg, J., Mowery, D. C., & Nelson, R. R. (Eds.). (2005). *The Oxford Handbook of Innovation*. Oxford: Oxford University Press. Retrieved from <http://library.books24x7.com.proxy.library.carleton.ca/assetviewer.aspx?bookid=12866&chunkid=132001795&rowid=22>
- Feldman, M. S. (2005). MANAGEMENT AND PUBLIC MANAGEMENT. *Academy of Management Journal*, 48(6), 958–960.
- Ferdous, J. (2016). Bureaucracy in Bangladesh: Past, present experiences and future expectations. *Public Policy and Administration Research*, 6(4), 1–10. Retrieved from www.iiste.org
- Franda, M. (1980). Ziaur Rahman and Bangladeshi Nationalism. *Economic & Political Weekly*, 16(10/12), 357–380. Retrieved from <https://www.jstor.org/stable/pdf/4369609.pdf?refreqid=excelsior%3Afe0012ab88f898c5ce8c9a151dc73b78>
- Gallese, V. (2003). The roots of empathy: The shared manifold hypothesis and the neural basis of intersubjectivity. *Psychopathology*, 36(4), 171–180.
<https://doi.org/10.1159/000072786>
- GED. (2010a). *Outline Perspective Plan of Bangladesh 2010-2021: Making Vision 2021 a Reality*. Dhaka: General Economics Division (GED), Planning Commission, Government of the People’s Republic of Bangladesh.
- GED. (2010b). *Seventh Five Year Plan (2011-2015)*. Dhaka: General Economics Division (GED), Planning Commission, Government of the People’s Republic of Bangladesh.
- GED. (2015). *Seventh Five Year Plan FY2016-FY2020: Accelerating Growth , Empowering Citizens*. Dhaka: General Economics Division (GED), Planning Commission, Government of the People’s Republic of Bangladesh. Retrieved from <http://www.plancomm.gov.bd/7th-five-year-plan/>
- GED. (2020a). *Eighth Five Year Plan July 2020 - June 2025: Promoting Prosperity and Fostering Inclusiveness*. Dhaka: General Economics Division (GED), Bangladesh Planning Commission, Government of the People’s Republic of Bangladesh.
- GED. (2020b). *Making Vision 2041 a Reality: Perspective Plan of Bangladesh 2021-2041*. Dhaka: General Economics Division (GED), Bangladesh Planning Commission, Government of the People’s Republic of Bangladesh. Retrieved

- from www.plancom.gov.bd
- GoB. (1972). *Report of the Administrative and Services Reorganization Committee, Part I: The Services*. Dhaka: Bangladesh Government Press, Government of the People's Republic of Bangladesh (GoB).
- GoB. (1977). *Report of the Pay and Services Commission, Part I: The Services*. Dhaka: Bangladesh Government Press, Government of the People's Republic of Bangladesh (GoB).
- GoB. (1979). *The Government Servants (Conduct) Rules, 1979*. Dhaka: Cabinet Secretariat, Government of the People's Republic of Bangladesh (GoB). Retrieved from [https://publicofficialsfinancialdisclosure.worldbank.org/sites/fdl/files/assets/law-library-files/Bangladesh_Government Servants \(Conduct\) Rules_1979_en.pdf](https://publicofficialsfinancialdisclosure.worldbank.org/sites/fdl/files/assets/law-library-files/Bangladesh_Government_Servants_(Conduct)_Rules_1979_en.pdf)
- GoB. (1981). *Bangladesh Civil Service Recruitment Rules, 1981*. Dhaka: Cabinet Secretariat, Government of the People's Republic of Bangladesh. Retrieved from https://www.dpp.gov.bd/upload_file/gazettes/001-Law-1981.pdf
- GoB. (1982). *Report of the Committee for Administrative Reorganization/Reform*. Dhaka: Bangladesh Government Press, Government of the People's Republic of Bangladesh (GoB).
- GoB. (1985). *Government Servants (Discipline and Appeal) Rules, 1985*. Dhaka: Ministry of Establishment, Government of the People's Republic of Bangladesh (GoB).
- GoB. (2000). *Report of the Public Administration Reform Commission*. Dhaka: Bangladesh Government Press, Government of the People's Republic of Bangladesh (GoB).
- GoB. (2002). *National Information and Communication Technology Policy*. Dhaka: Bangladesh Computer Council, Ministry of Science and Information & Communication Technology, Government of the People's Republic of Bangladesh (GoB).
- GoB. (2012). *Commitment for Golden Bengal: National Integrity Strategy of Bangladesh*. Dhaka: Cabinet Division, Government of the People's Republic of Bangladesh (GoB).
- Gouillart, F., & Hallett, T. (2015). Co-creation in government. *Stanford Social Innovation Review*, 13(2), 40–47.
- Gupta, A. (2012). *Red Tape: Bureaucracy, Structural Violence, and Poverty in India*. Durham and London: Duke University Press.
- Halvorsen, T., Hauknes, J., Miles, I., & Roste, R. (2005). On the differences between public and private sector innovation. *Publin Report*, 16(1), 1998–2002. <https://doi.org/10.1057/9780230307520>
- Haq, S. (2016). Building an effective ethics infrastructure in the public service of Bangladesh. In N. Ahmed (Ed.), *Public Policy and Governance in Bangladesh: Forty Years of experience*. New York: Routledge.
- Haque, A. (1980). Bangladesh 1979: Cry for a Sovereign Parliament. *Asian Survey*, 20(2), 217–230.
- Haque, M. Shamsul, Wal, Z., & Berg, C. (2021). Comparative Studies in Public Administration: Intellectual Challenges and Alternative Perspectives. *Public Administration Review*, 81(2), 344–348. <https://doi.org/10.1111/puar.13349>
- Haque, M Shamsul. (1997). Incongruity between Bureaucracy and Society in Developing Nations: A Critique. *Peace & Change*, 22(4), 432–462.
- Haque, Mohammed Shamsul. (2007). Theory and Practice of Public Administration in Southeast Asia: Traditions, Directions, and Impacts. *Intl Journal of Public*

- Administration I*, 30(12–14), 1297–1326.
<https://doi.org/10.1080/01900690701229434>
- Haque, S. M. (2020). Entrepreneurship-driven public management reforms in Southeast Asia: Critical implications for public accountability. *Public Administration and Development*, 40(4), 220–231.
<https://doi.org/10.1002/pad.1889>
- Haque, S. T. M., & Haque, M. M. (2019). The Civil Service System of Bangladesh. In I. Jamil, T. N. Dhakal, & N. P. Raj (Eds.), *Civil Service Management and Administrative Systems in South Asia* (pp. 49–72). Switzerland: Springer International Publishing. https://doi.org/10.1007/978-3-319-90191-6_3
- Hardy, C. A., & Williams, S. P. (2011). Assembling E-Government Research Designs: A Transdisciplinary View and Interactive Approach. *Public Administration Review*, 71(3), 405–413. <https://doi.org/10.1111/j.1540-6210.2011.02361.x>
- Hartley, J. (2013). Public and private features of innovation. In S. P. Osborne & L. Brown (Eds.), *Handbook of Innovation in Public Services* (p. 384). Cheltenham: Edward Elgar Publishing Limited.
- Hasan, S. (2003). Introducing e-Government in Bangladesh: Problems and Prospects. *International Social Science Review*, 78(4), 111–125.
- Hasan, S. (2014). ICT Policies and their Role in Governance: The Case of Bangladesh. *Science, Technology and Society*, 19(3), 363–381.
<https://doi.org/10.1177/0971721814548818>
- Hasanuzzaman, A. M. (1998). *Role of Opposition in Bangladesh Politics*. Dhaka: University Press Limited (UPL).
- Heeks, R. (2008). Success and failure rates of e-Government projects in developing/transitional Countries. Retrieved December 8, 2020, from <http://www.egov4dev.org/success/sfrates.shtml>
- Hodges, S., & Myers, M. (2006). Empathy. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of Social Psychology*, (pp. 296–298). Thousand Oaks, CA: Sage.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill.
- Homburg, C., Wieseke, J., & Bornemann, T. (2009). Implementing the Marketing Concept at the Employee-Customer Interface: The Role of Customer Need Knowledge. *Journal of Marketing*, 73(4), 64–81.
<https://doi.org/10.1509/jmkg.73.4.064>
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3–19. <https://doi.org/10.1111/j.1467-9299.1991.tb00779.x>
- Homburg, V. (2008). *Understanding E-government: Information Systems in Public Administration*. London: Routledge.
- Hossain, F., Kumasey, A. S., Eldridge, D., Kravariti, F., & Bawole, J. N. (2018). Paradox of public sector capacity building: Lessons from MATT2 UK-Bangladesh co-operation. *Development Policy Review*, 36(6), 689–702.
<https://doi.org/10.1111/dpr.12267>
- Hossain, N. (2009). *Rude Accountability in the Unreformed State: Informal Pressures on Frontline Bureaucrats in Bangladesh* (IDS Working Paper No. 319). *IDS Working Papers*. Brighton: Wiley. https://doi.org/10.1111/j.2040-0209.2009.00319_2.x
- Howlett, M. (2014). From the “old” to the “new” policy design: design thinking beyond markets and collaborative governance. *Policy Sciences*, 47(1), 1–46.
<https://doi.org/10.1007/s11077-014-9199-0>

- Hughes, O. (2010). Does governance exist? In S. Osborne (Ed.), *The New Public Governance? Emerging Perspectives on the theory and practice of public governance* (pp. 87–104). New York: Routledge.
- Hull, M. S. (2012). *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. Berkley and Los Angeles: University of California Press.
- Hummel, R. P. (2008). *The Bureaucratic Experience: The Post-Modern Challenge* (5th ed.). New York: M.E. Sharpe.
- Huque, A. S. (2005). Explaining the Myth of Public Sector Reform in South Asia: De-Linking Cause and Effect. *Policy and Society*, 24(3), 97–121. [https://doi.org/10.1016/S1449-4035\(05\)70062-X](https://doi.org/10.1016/S1449-4035(05)70062-X)
- Huque, A. S. (2016). The “holy grail” of governance. In *Public Policy and Governance in Bangladesh: Forty Years of Experience*. London and New York: Routledge.
- Huque, A. S., & Ferdous, J. (2019). Bureaucratic and political leadership in Bangladesh: dynamics of administrative reform and the public interest. *Asia Pacific Journal of Public Administration*, 41(3), 169–180. <https://doi.org/10.1080/23276665.2019.1658364>
- Huque, A. S., & Rahman, M. T. (2003). From Domination to Alliance: Shifting Strategies and Accumulation of Power by the Bureaucracy in Bangladesh. *Public Organization Review*, 3(4), 403–418. <https://doi.org/10.1023/B:PORJ.0000004817.33343.a5>
- Huque, S. A. (1997). The Impact of Colonialism: Thoughts on Politics and Governance in Bangladesh. *Asian Affairs*, 28(1), 15–27. <https://doi.org/doi.org/10.1080/714041319>
- Islam, S. S. (1988). *Bangladesh: State and Economic Strategy - Syed Serajul Islam - Google Books*. Dhaka: University Press Limited (UPL).
- ITU. (2016). *Measuring the Information Society*. Geneva: International Telecommunication Union .
- Jacobs, C. (2009). How to bring about change in the Bangladesh civil service? Attempts to change mindsets, behaviours and practice. *Public Administration and Development*, 29(3), 218–227. <https://doi.org/10.1002/pad.536>
- Jahan, F. (2006). *Public Administration in Bangladesh* (CGS WP No. 1). Dhaka. Retrieved from [http://www.igs-bracu.ac.bd/UserFiles/File/archive_file/Public Administration in Bangladesh.pdf](http://www.igs-bracu.ac.bd/UserFiles/File/archive_file/Public%20Administration%20in%20Bangladesh.pdf)
- Jahan, F., & Shahan, A. M. (2008). Politics-bureaucracy Relationship in Bangladesh: Consequences for the Public Service Commission. *Public Organization Review*, 8(4), 307–328. <https://doi.org/10.1007/s11115-008-0061-8>
- Jahan, R. (1972). *Pakistan: Failure in National Integration*. New York and London: Columbia University Press.
- Jahan, R. (2001). *Bangladesh: Promise and Performance*. Dhaka: Zed Books.
- Jahan, R. (2015a). *Political Parties in Bangladesh: Challenges of Democratization*. Dhaka: Prothoma Prokasahan.
- Jahan, R. (2015b). The Parliament of Bangladesh: Representation and Accountability. *Journal of Legislative Studies*, 21(2), 250–269. <https://doi.org/10.1080/13572334.2014.975470>
- Jalal, A. (1995). *Democracy and Authoritarianism in South Asia: A Comparative and Historical perspective*. Cambridge University Press. Cambridge: Cambridge University Press.
- Jamil, I. (2002). Administrative culture in Bangladesh: Tensions between tradition and modernity. *International Review of Sociology / Revue Internationale de*

- Sociologie*, 12(1), 92–125.
- Jamil, I., Askvik, S., & Dhakal, T. N. (2013). *In Search of Better Governance in South Asia and Beyond*. (I. Jamil, S. Askvik, & T. N. Dhakal, Eds.). New York: Springer.
- Jamil, I., Dhakal, T. N., & Raj, N. P. (2019). *Civil Service Management and Administrative Systems in South Asia*. (I. Jamil, T. N. Dhakal, & N. R. Paudel, Eds.). Switzerland: Springer International Publishing.
- Kalimullah, N. A., Hassan, A. R., & Sarkar, M. G. K. (2013). Public Administration in Bangladesh. In M. Sabharwal & E. M. Berman (Eds.), *Public Administration in South Asia: Bangladesh, India and Pakistan* (pp. 279–296). London: CRC Press.
- Kattel, R., Cepilovs, A., Drechsler, W., Kalvet, T., Lember, V., & Tõnurist Ragnar, P. (2014). *Can we measure public sector innovation? A literature review*.
- Kaufmann, D., Kraay, A. and Mastruzzi, M. (2019). “The Worldwide Governance Indicators : A Summary of Methodology, Data and Analytical Issues.” World Bank Policy Research Working Paper No. 5430. Available online: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130
- Kearney, C., Hirich, R. D., & Roche, F. (2009). Public and private sector entrepreneurship: similarities, differences or a combination. *Journal of Small Business and Enterprise Development*, 16(1), 26–46.
- Kelman, S. (2008). Innovations in Government: Research Recognition, and Replication. In S. Borins (Ed.), *Innovations in Government: Research Recognition, and Replication* (pp. 28–51). Washington, D.C.: Brookings Institution Press .
- Kettani, D., & Moulin, B. (2014). *E-Government for Good Governance in Developing Countries: Empirical Evidence from the eFoz Project*. London and New York: Anthem Press.
- Khan, M. M. (1998). *Administrative Reform in Bangladesh*. Dhaka: University Press Limited (UPL).
- Khan, M. M. (2003). State of Governance in Bangladesh. *Round Table: The Commonwealth Journal of International Affairs*, 92(370), 391–405. <https://doi.org/10.1080/0035853032000111116>
- Khan, M. M. (2006). *Dominant Executive and Dormant Legislature: Executive-Legislative Relations in Bangladesh*. Dhaka: South Asian Publishers. Retrieved from <https://www.amazon.ca/Dominant-Executive-Dormant-Legislature-Legislature/dp/8170033063>
- Khan, M. M. (2013). Public administration in the governance framework: Bangladesh public administration at forty. *Journal of the Asiatic Society of Bangladesh (Hum.)*, 58(2), 277–288. Retrieved from <https://www.asiaticsociety.org.bd/journal/05MohammadMohabbatKhan.pdf>
- Khan, M. M., & Haque, A. (2013). Civil service system and reforms in Bangladesh. In M. Sabharwal & E. M. Berman (Eds.), *Public Administration in South Asia: Bangladesh, India and Pakistan* (pp. 218–242). London: CRC Press.
- Khan, M. M., & Husain, S. A. (1996). Process of democratization in Bangladesh. *Contemporary South Asia*, 5(3), 319–334. <https://doi.org/10.1080/09584939608719799>
- Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. (2010). Toward a theory of public entrepreneurship. *European Management Review*, 7, 1–15. <https://doi.org/10.1057/emr.2010.1>
- Klijn, E.-H. (2010). Trust in governance networks: looking for conditions for

- innovative solutions and outcomes. In S. Osborne (Ed.), *The New Public Governance? Emerging perspectives on the theory and practice of public governance* (pp. 303–321). New York: Routledge.
- Kochanek, S. A. (1996). The Rise of Interest Politics in Bangladesh. *Source: Asian Survey*, 36(7), 704–722.
- KPMG. (2012). *Bangladesh Beckons: An emerging destination for IT/ITeS outsourcing*. Dhaka.
- Krause, G. A., & Meier, K. J. (1999). Politics, Policy, and Organizations Frontiers in the Scientific Study of Bureaucracy. In G. A. Krause & K. J. Meier (Eds.), *Politics, Policy, and Organizations: Frontiers in the Scientific Study of Bureaucracy* (Vol. 4, pp. 1–20). Ann Arbor: University of Michigan Press.
- Kuehnhanss, C. R. (2019). The challenges of behavioural insights for effective policy design. *Policy and Society*, 38(1), 14–40.
<https://doi.org/10.1080/14494035.2018.1511188>
- Kumpf, B., & Schnurr, L. (2016). Drivers of public services and policies of tomorrow – the role of government innovation labs. UNDP. Retrieved October 10, 2018, from <http://www.undp.org/content/undp/en/home/blog/2016/10/12/Drivers-of-public-services-and-policies-of-tomorrow-the-role-of-government-innovation-labs-.html>
- Lange, M. K., Mahoney, J., & Von Hau. (2006). Colonialism and Development: Comparative Analysis of Spanish and British Colonies, *American Journal of Sociology*, 111(14), 12–62.
- Lange, M. K. (2009). *Lineages of Despotism and Development: British Colonialism and State Power*. Chicago, IL: University of Chicago Press.
- Levitt, B., & March, J. G. (1988). ORGANIZATIONAL LEARNING. *Annual Review of Sociology Ann. Rev. Sociol.*, 14(14). Retrieved from <http://www.jstor.org/stable/2083321>
- Lewis, D., & Hossain, A. (2019). Local Political Consolidation in Bangladesh: Power, Informality and Patronage. *Development and Change*, 1–20.
<https://doi.org/10.1111/dech.12534>
- Lewis, D., & Van Schendel, W. (2020). Rethinking the Bangladesh state. *Contributions to Indian Sociology*, 54(2), 306–323.
<https://doi.org/10.1177/0069966720911733>
- Liedtka, J., & Salzman, R. (2018). *Applying Design Thinking To Public Service Delivery*. Washington. Retrieved from <http://www.businessofgovernment.org/report/applying-design-thinking-public-service-delivery>
- Link, A. N., & Link, J. R. (2009). *Government as Entrepreneur*. Oxford: Oxford University Press. Retrieved from <https://www.amazon.com/Government-as-Entrepreneur-Albert-Link/dp/0195369459>
- Lipsky, M. (2010). *Street-Level Bureaucracy: Dilemmas of the individual in public services* (2nd ed.). New York: Russell Sage Foundation.
- Lomborg, B., & Chowdhury, A. (2017, January 10). A Digital Strategy for Bangladesh's Biggest Problems. *Wall Street Journal*, p. 11.
- Lomborg, B., & Rahman, M. (2017). *Bangladesh Priorities: Helping Make Vision 2021 a Reality*. Dhaka: AHDPH Publication.
- Lorenz, C. (2012). If you're so smart, why are you under surveillance? Universities, neoliberalism, and New Public Management. *Critical Inquiry*, 38(Spring), 591–629. Retrieved from www.zeit.de/stimmts/
- Luna-Reyes, L. F., & Gil-Garcia, J. R. (2011). Using institutional theory and dynamic

- simulation to understand complex e-Government phenomena. *Government Information Quarterly*, 28(3), 329–345.
<https://doi.org/10.1016/j.giq.2010.08.007>
- Mahmud, W., Ahmed, S., & Mahajan, S. (2008). *Economic Reforms, Growth, and Governance: The Political Economy Aspects of Bangladesh's Development Surprise* (Commission on Growth and Development No. Working Paper No. 22). Washington, DC.
- Majeed, R. (2011). *Energizing the civil service: Managing at the top 2, Bangladesh, 2006-2011*. Princeton, R
- Maniruzzaman, T. (1992). The fall of the military dictator: 1991 elections and the prospect of civilian rule in Bangladesh. *Pacific Affairs*, 65(2), 203–224.
<https://doi.org/10.2307/2760169>
- Mathur, N. (2016). *Paper Tiger: Law, bureaucracy and the developmental state in Himalayan India. Paper Tiger: Law, Bureaucracy and the Developmental State in Himalayan India*. New Delhi: Cambridge University Press.
<https://doi.org/10.1017/CBO9781316227367>
- Matin, K. M. (1990). Structural adjustment under the extended fund facility: The case of Bangladesh. *World Development*, 18(6), 815–830.
[https://doi.org/10.1016/0305-750X\(90\)90004-H](https://doi.org/10.1016/0305-750X(90)90004-H)
- Mazzucato, M. (2013). *The Entrepreneurial State: Debunking the Public vs. Private Myth in Risk and Innovation*. London: Anthem Press.
[https://doi.org/10.1016/S0048-7333\(01\)00108-1](https://doi.org/10.1016/S0048-7333(01)00108-1)
- McCourt, W. (2013). *Models of Public Service Reform A Problem-Solving Approach* (Policy Research Working Paper No. 6428).
- McGann, M., Blomkamp, E., & Lewis, J. M. (2018). The rise of public sector innovation labs: experiments in design thinking for policy. *Policy Sciences*, 51(3), 249–267. <https://doi.org/10.1007/s11077-018-9315-7>
- Meijer, A., & De Jong, J. (2019). Managing Value Conflicts in Public Innovation: Ostrich, Chameleon, and Dolphin Strategies. *International Journal of Public Administration*, 1–13. <https://doi.org/10.1080/01900692.2019.1664568>
- Milkowska, M. (2018). Design Thinking for Better Government Services | Government Innovators Network. Retrieved November 10, 2019, from <https://www.innovations.harvard.edu/blog/design-thinking-better-government-services-human-centered>
- Mintrom, M. (2019). So you want to be a policy entrepreneur? *Policy Design and Practice*, 2(4), 307–323. <https://doi.org/10.1080/25741292.2019.1675989>
- Mintrom, M., & Luetjens, J. (2016). Design Thinking in Policymaking Processes: Opportunities and Challenges. *Australian Journal of Public Administration*, 75(3), 391–402. <https://doi.org/10.1111/1467-8500.12211>
- Mollah, M. A. H. (2013). Growth and development of civil service and bureaucracy in Bangladesh: An overview. *South Asian Survey*, 18(1), 137–156.
<https://doi.org/10.1177/0971523112469530>
- Mollah, M. A. H. (2014). Administrative Reforms and Governance in Bangladesh: How Far the Dream of Success? *Journal of Arts Humanities and Social Sciences*, 2(4), 26–52. Retrieved from <http://ssrn.com/abstract=2728303>
- Moore, M. (1995). *Creating Public Value: Strategic Management in Government*. Cambridge: Harvard University Press. Retrieved from <http://www.hup.harvard.edu/catalog.php?isbn=9780674175587>
- Moore, M., & Hartley, J. (2008). Innovations in governance. *Public Management Review*, 10(1), 3–20. <https://doi.org/10.1080/14719030701763161>

- MoPA. (2014). *Secretariat Instructions 2014*. Dhaka: Ministry of Public Administration (MoPA), Government of the People's Republic of Bangladesh (GoB). Retrieved from [https://msw.portal.gov.bd/sites/default/files/files/msw.portal.gov.bd/page/23f6e7f2_b3f0_4044_a25f_ac1394b0d22c/Bangladesh Secretariat Instruction 2014.pdf](https://msw.portal.gov.bd/sites/default/files/files/msw.portal.gov.bd/page/23f6e7f2_b3f0_4044_a25f_ac1394b0d22c/Bangladesh%20Secretariat%20Instruction%202014.pdf)
- Mulgan, G. (2007). Ready or not? Taking Innovation in the Public Sector Seriously. *Nesta*, (Provocation 03: April), 1–37.
- Nkohkwo, Q. N., & Islam, M. S. (2013). Challenges to the Successful Implementation of e-Government Initiatives in Sub-Saharan Africa: A Literature Review. *Electronic Journal of E-Government*, 11(2), 253–267.
- Noman, M. (2014, September 8). Over 6,000 VoIP-related cases, not a single resolved. *Prothom Alo*. Retrieved from <https://en.prothomalo.com/bangladesh/Over-6-000-VoIP-related-cases-not-a-single>
- OECD. (1998). *Public Management Reform and Economic and Social Development*. Paris.
- OECD. (2017). *Fostering Innovation in the Public Sector*. Paris: Organization for Economic Cooperation and Development. <https://doi.org/10.1787/9789264270879-en>
- Osborne, D., & Gaebler, T. (1992). *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector*. Reading, MA: Addison-Wesley.
- Osborne, S. (2010). *The New Public Governance? Emerging perspectives on the theory and practice of public governance*. New York: Routledge.
- Osborne, S. P. (2006). The New Public Governance? *Public Management Review*, 8(3), 377–387. <https://doi.org/10.1080/14719030600853022>
- Osborne, S. P., & Brown, L. (2011). Innovation, Public Policy and Public Services Delivery in the UK. The Word that Would be King? *Public Administration*, 89(4), 1335–1350. <https://doi.org/10.1111/j.1467-9299.2011.01932.x>
- Osborne, S. P., Radnor, Z., & Stokosch, K. (2016). Co-production and the co-creation of value in public services: A suitable case for treatment? *Public Management Review*, 18(5), 639–653. <https://doi.org/10.1080/14719037.2015.1111927>
- Osman, F. A. (2010). Bangladesh Politics: Confrontation, Monopoly and Crisis in Governance. *Asian Journal of Political Science*, 18(3), 310–333. Retrieved from https://journals-scholarsportal-info.proxy.library.carleton.ca/pdf/02185377/v18i0003/310_bpcmacig.xml
- Osman, F. A. (2016). Road to e-governance and public service delivery in Bangladesh: how long is the journey? In N. Ahmed (Ed.), *Public Policy and Governance in Bangladesh Forty years of experience* (pp. 197–213). New York: Routledge.
- Ostrom, E. (1965). *Public Entrepreneurship: A Case Study in Ground Water Basin Management*. Los Angeles: Unpublished Dissertation, UCLA.
- Panday, P. K. (2019). The administrative system in Bangladesh: Reform initiatives with failed outcomes. In I. Jamil, T. N. Dhakal, & N. R. Paudel (Eds.), *Civil Service Management and Administrative Systems in South Asia* (pp. 215–240). Switzerland: Springer International Publishing.
- Peters, G. B. (2021). *Administrative Traditions: Understanding the Roots of Contemporary Administrative Behavior*. Oxford: Oxford University Press.
- Planning Commission. (1973). *The First Five Year Plan 1973-78*. Dhaka: Planning

- Commission, Government of the People's Republic of Bangladesh. Retrieved from
[http://www.plancomm.gov.bd/sites/default/files/files/plancomm.portal.gov.bd/files/f9f0a4be_28d3_4b88_b3ea_c0c3e66ac853/1st Five year plan-1.pdf](http://www.plancomm.gov.bd/sites/default/files/files/plancomm.portal.gov.bd/files/f9f0a4be_28d3_4b88_b3ea_c0c3e66ac853/1st_Five_year_plan-1.pdf)
- Pollitt, C., & Bouckaert, G. (2017). *Public Management Reform: A Comparative Analysis*. Oxford: Oxford University Press.
- Prabhu, J., Tellis, G., & Chandy, R. (2010). *Creating a culture of innovation: Why corporate culture is key to radical innovation in firms*. London.
- Putnam, R. (1975). The political attitudes of senior civil servants in Britain, Germany, and Italy. In M. Dogan (Ed.), *The Mandarins of Western Europe* (pp. 81–175). New York: Wiley/Blackwell.
- Rahman, A. (1974). Administration and Its Political Environment in Bangladesh. *Pacific Affairs*, 47(2), 191. <https://doi.org/10.2307/2755606>
- Rahman, M. M., Harun, A., Chowdhury, A. W., Haque, M. A., & Kabir, R. H. M. A. (2019). *A Study on A Study on Annual Performance Agreement in Bangladesh: An Analysis on Implementation of Mandatory Strategic Objectives (MSO)*. Dhaka: Cabinet Division, Government of the People's Republic of Bangladesh (GoB).
- Rahman, N., Aminuzzaman, S., & Ahmed, N. (2019). *End-line Evaluation of Access to Information (a2i) – II Project*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of Bangladesh.
- Rahman, T. (2002). The Chronological Growth of Bureaucracy in Bangladesh: Search for Politico-Administrative Nexus. *Asian Affairs*, 24(1), 46–69. Retrieved from <http://www.cdrb.org/journal/2002/1/cronolog.pdf>
- Ramamurti, R. (1986). Public Entrepreneurs: Who They are and How They Operate. *California Management Review*, 28(3), 142–158. <https://doi.org/10.2307/41165207>
- Rashid, A. K. (2014). The role of the bureaucracy in policymaking in Bangladesh. *Asia Pacific Journal of Public Administration*, 36(2), 150–161. <https://doi.org/10.1080/23276665.2014.911491>
- Razzaque, F. (2012). *Citizen's Charter and Its Effectiveness: A Case Study of Department of Immigration and Passports of Bangladesh* (IGS Working Paper No. No. 01/2012). Dhaka.
- Riaz, A. (2005). *Unfolding state : the transformation of Bangladesh*. De Sitter Publications.
- Roberts, N. & King, P. (1996). *Transforming Public Policy*. Cambridge: Ballinger. Schultz.
- Robinson, M. (2015). *From Old Public Administration to the New Public Service Implications for Public Sector Reform in Developing Countries*. Singapore. Retrieved from file:///Users/Hasan/Downloads/PS-Reform_Paper.pdf
- Samaratunge, R., Alam, Q., & Teicher, J. (2008). The New Public Management reforms in Asia: A comparison of South and Southeast Asian countries. *International Review of Administrative Sciences*, 74(1), 25–46. <https://doi.org/10.1177/0020852307085732>
- Sarker, A. E. (2006). New public management in developing countries: An analysis of success and failure with particular reference to Singapore and Bangladesh. *International Journal of Public Sector Management*, 19(2), 180–203. <https://doi.org/10.1108/09513550610650437>
- Savoldelli, A., Codagnone, C., & Misuraca, G. (2014). Understanding the e-government paradox: Learning from literature and practice on barriers to

- adoption. *Government Information Quarterly*, 31(1), S63–S71.
<https://doi.org/10.1016/j.giq.2014.01.008>
- Schwab, K. (Ed.). (2019). *The Global Competitiveness Report 2019*. Geneva: World Economic Forum (WEF).
- Service, O., Hallsworth, M., Halpern, D., Algate, F., Gallagher, R., Nguyen, S., ... Sanders, M. (2015). *EAST Four Simple Ways to Apply Behavioural Insights*. London.
- Shah, S., O’Leary, J., Guszczka, J., & Howe, J. (2020). Nudging for good: Using behavioral science to improve government outcomes. In A. Rao, B. Hurley, A. Khan, & R. Bhat (Eds.), *Government Trends 2020 What are the most transformational trends in government today?* (pp. 24–31). New York: Deloitte Insights.
- Simon, H. A. (1997). *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations* (4th ed.). New York: Free Press.
- Sobel, J. (2005). Interdependent preferences and reciprocity. *Journal of Economic Literature*, 43(2), 392–436. <https://doi.org/10.1257/0022051054661530>
- Sobhan, R. (1993). Structural Maladjustment: Bangladesh’s Experience with Market Reforms. *Economic and Political Weekly*, 28(19), 925–931.
<https://doi.org/10.2307/4399699>
- Sobhan, R. (2004, September 4). Structural Dimensions of Malgovernance in Bangladesh. *Economic & Political Weekly*, 39(36), 4–10.
- Sørensen, E., & Torfing, J. (2015). Enhancing Public Innovation through Collaboration, Leadership and New Public Governance. In A. Nicholls, J. Simon, & M. Gabriel (Eds.), *New Frontiers in Social Innovation Research* (pp. 145–169). London: Palgrave Macmillan UK.
https://doi.org/10.1057/9781137506801_8
- Sørensen, J. B. (2007). Bureaucracy and Entrepreneurship: Workplace Effects on Entrepreneurial Entry. *Administrative Science Quarterly*, 52(3), 387–412.
<https://doi.org/10.2189/asqu.52.3.387>
- Sunstein, C. R. (2014). Nudging: A very short guide. *Journal of Consumer Policy*, 37, 583–588. <https://doi.org/10.1007/s10603-014-9273-1>
- Taufur, S., & Chowdhury, M. (2003). Problems of e-Governance in Bangladesh and Possible Steps Towards Solutions. In *ICT Roadmap for Bangladesh*. Dhaka: UNDP Bangladesh.
- Tarrant, M., Dazeley, S., & Cottom, T. (2009). Social categorization and empathy for outgroup members. *British Journal of Social Psychology*, 48(3), 427–446.
<https://doi.org/10.1348/014466608X373589>
- Tassabehji, R., Hackney, R., & Popović, A. (2016). Emergent digital era governance: Enacting the role of the “institutional entrepreneur” in transformational change. *Government Information Quarterly*, 33(2), 223–236.
<https://doi.org/10.1016/j.giq.2016.04.003>
- Tellis, G. J., Prabhu, J. C., & Chandy, R. K. (2009). Radical Innovation Across Nations: The Preeminence of Corporate Culture. *American Marketing Association*, 73, 3–23.
- Thaler, R. H., & Sunstein, C. R. (2008). *Nudge: Improving Decisions about Health, Wealth, and Happiness*. New Haven, CT: Yale University Press. Retrieved from <https://www.amazon.ca/Nudge-Improving-Decisions-Health-Happiness/dp/014311526X>
- Thomassen, J. P., Ahaus, K., Van de Walle, S., & Nabitz, U. (2014). An Implementation Framework for Public Service Charters: Results of a concept

- mapping study. *Public Management Review*, 16(4), 570–589.
<https://doi.org/10.1080/14719037.2012.726062>
- TI. (2021). *Corruption Perceptions Index 2020*. Berlin: Transparency International (TI).
- TIB. (2012). *Corruption in Service Sectors: National Household Survey 2012 Executive Summary*. Dhaka.
- TIB. (2017). *Union Digital Centers (UDCs) in Delivering Services: Roles, Potentials and Challenges. Research & Policy Md. Khorshed Alam*. Dhaka: Transparency International Bangladesh.
- Tinker, H. (1966). Structure of the British Imperial Heritage. In *Asian Bureaucratic Systems Emergent from the British Imperial Tradition* (pp. 23–86). Durham: Duke University Press.
- Tönurist, P., Kattel, R., & Lember, V. (2017). Innovation labs in the public sector: what they are and what they do? *Public Management Review*, 19(10), 1455–1479. <https://doi.org/10.1080/14719037.2017.1287939>
- Tracey, P., & Stott, N. (2017). Social innovation: A window on alternative ways of organizing and innovating. *Innovation: Management, Policy and Practice*, 19(1), 51–60. <https://doi.org/10.1080/14479338.2016.1268924>
- Turner, M., & Hulme, D. (1997). *Governance, administration, and development : making the state work*. Kumarian Press. Retrieved from https://books.google.ca/books/about/Governance_administration_and_developm en.html?id=otHtAAAAMAAJ&redir_esc=y
- Turner, M., Hulme, D., & McCourt, W. (2015). *Governance, management and development : making the state work* (2nd ed.). London: Palgrave. Retrieved from <https://he.palgrave.com/page/detail/Governance-Management-and-Development/?K=9780333984635>
- Tusher, H. J. (2016, February 3). Civil bureaucracy plagued by in-situ. *The Daily Star*. Retrieved from <https://www.thedailystar.net/frontpage/civil-bureaucracy-plagued-situ-211540>
- Twizeyimana, J. D., & Andersson, A. (2019). The public value of e-government – A literature review. *Government Information Quarterly*, 36(2), 167–178. <https://doi.org/10.1016/j.giq.2019.01.001>
- Ullah, R. R. (2018). Civil Service Reform for Development Goals: An Analysis of MATT Programs in Bangladesh. *Cornell Policy Review*. Retrieved from <http://www.cornellpolicyreview.com/matt-programs-bangladesh/?pdf=4876>
- UNDESA. (2001). *Benchmarking E-government: A Global Perspective Assessing the Progress of the UN Member States*. New York: United Nations Department for Economic and Social Affairs (UNDESA).
- UNDESA. (2003). *UN Global E-government Survey 2003*. New York: United Nations Department of Economic and Social Affairs (UNDESA).
- UNDESA. (2008). *UN E-Government Survey 2008 From E-Government to Connect Governance*. New York: United Nations Department of Economic and Social Affairs (UNDESA).
- UNDESA. (2010). *Leveraging E-Government at a Time of Financial and Economic Crisis*. New York: United Nations Department of Economic and Social Affairs (UNDESA).
- UNDESA. (2016). *E-Government Survey 2016: E-Government in Support of Sustainable Development*. New York: United Nations. <https://doi.org/978-92-1-123205-9>
- UNDESA. (2018). *E-Government Survey 2018: Gearing E-Government to Support*

- Transformation Towards Sustainable and Resilient Societies*. New York: United Nations Department of Economic and Social Affairs (UNDESA). Retrieved from https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2018-Survey/E-Government Survey 2018_FINAL for web.pdf
- UNDESA. (2020). *E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development*. New York: United Nations Department of Economic and Social Affairs (UNDESA).
- UNDP. (1993). *Report on Public Sector Study in Bangladesh*. Dhaka: United Nations Development Program (UNDP).
- UNDP. (2004). *Trends and Challenges in Public Administration Reform in the Asia Pacific*. Bangkok: Sub-Regional Resource Facility for the Pacific, Northeast, and Southeast Asia, United Nations Development Programme (UNDP).
- UNDP. (2007). *Building a 21st Century Public Administration in Bangladesh: Formulation Mission Report on September 16 – October 7, 2007*. Dhaka: United Nations Development Program (UNDP) Bangladesh.
- UNDP. (2019). *Independent Country Programme Evaluation: Bangladesh*. New York. Retrieved from <http://web.undp.org/evaluation/evaluations/adr/bangladesh.shtml>
- UNDP and MBRF. (2020). *Global Knowledge Index 2020*. Dubai: Mohammed Bin Rashid Al Maktoum Knowledge Foundation. Retrieved from <https://www.undp.org/content/undp/en/home/librarypage/capacity-building/Global-Knowledge-Index-2020.html>
- Vanman, E. J. (2016). The role of empathy in intergroup relations. *Current Opinion in Psychology*, 11, 59–63. <https://doi.org/10.1016/j.copsyc.2016.06.007>
- Weber, M. (1968). *Economy and Society (Translated by G. Roth & C. Wittich)*. New York: Bedminister Press (Original work published 1917).
- Weiss, D. S. (David S., & Legrand, C. P. (2011). *Innovative Intelligence*. Mississauga: John Wiley & Sons Canada.
- Wilson, W. (1887). The Study of Administration. *Political Science Quarterly*, 2(2), 197–222. Retrieved from <http://www.jstor.org/stable/2139277>
- World Bank. (1996). *Government that works: Reforming the public sector*. Dhaka.
- World Bank. (1997). *World Development Report 1997: The State in a Changing World*. New York: Oxford University Press. Retrieved from <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/518341468315316376/world-development-report-1997-the-state-in-a-changing-world>
- World Bank. (2006). *Is Class I Top Tier? Can the Civil Service be a Key to Progress in Bangladesh?* Washington, DC: The World Bank.
- World Bank. (2016). *World Development Report 2016: Digital Dividends*. Washington DC: World Bank. <https://doi.org/10.1596/978-1-4648-0728-2>
- World Bank. (2020). *Doing Business 2020*. Washington, DC: World Bank. <https://doi.org/10.1596/978-1-4648-1440-2>
- Zafarullah, H. (1987). Public Administration in the First Decade of Bangladesh: Some Observations on Developments and Trends. *Asian Survey*, 27(4), 459–476. Retrieved from <http://www.jstor.org.proxy.library.carleton.ca/stable/pdf/2644683.pdf?refreqid=excelsior%3Ab758d24786c618482107d0e56fe193aa>
- Zafarullah, H. (2002). Administrative Reform in Bangladesh: An Unfinished Agenda. In A. Farazmand (Ed.), *Administrative Reform in Developing Nations* (pp. 49–72). Westport: Praeger Publishers. Retrieved from

- <http://paconference.ir/uploadfiles/2015-9-23/Administrative Reform in Developing Nations.pdf>
- Zafarullah, H. (2007). Bureaucratic Elitism in Bangladesh: The Predominance of Generalist Administrators. *Asian Journal of Political Science*, 15(2), 161–173. <https://doi.org/10.1080/02185370701511339>
- Zafarullah, H. (2013a). Bureaucratic Culture and the Social-Political Connection: The Bangladesh Example. *International Journal of Public Administration*, 36(13), 932–939. <https://doi.org/10.1080/01900692.2013.773033>
- Zafarullah, H. (2013b). Bureaucratic Culture and the Social-Political Connection: The Bangladesh Example. *International Journal of Public Administration*, 36, 932–939. <https://doi.org/10.1080/01900692.2013.773033>
- Zafarullah, H. (2016). Public Administration and Bureaucracy. In S. Rahman & R. M. Ali (Eds.), *Routledge Handbook of Contemporary Bangladesh* (pp. 94–108). London: Routledge.
- Zafarullah, H., & Akhter, M. Y. (2001). Military rule, civilianisation and electoral corruption: Pakistan and Bangladesh in perspective. *Asian Studies Review*, 25(1), 73–94. <https://doi.org/10.1080/10357820108713296>
- Zafarullah, H., & Huque, A. S. (2001). Public management for good governance: Reforms, regimes and reality in Bangladesh. *International Journal of Public Administration*, 24(12), 1379–1403. Retrieved from www.dekker.com
- Zafarullah, H., & Khan, M. M. (2001). The Bureaucracy in Bangladesh: Politics Within and the Influence of Partisan Politics. In A. Farazmand (Ed.), *Handbook of Comparative and Development Public Administration* (2nd ed., pp. 981–997). New York: Marcel-Dekker. Retrieved from https://www.researchgate.net/publication/292818080_The_Bureaucracy_in_Bangladesh_Politics_Within_and_the_Influence_of_Partisan_Politics
- Zafarullah, H. M., & Khan, M. M. (1983). Staffing the higher civil services in Bangladesh: An analysis of recruitment and selection processes. *Public Administration and Development*, 3(2), 121–133. <https://doi.org/10.1002/pad.4230030204>
- Zafarullah, H., & Sarker, A. E. (2016). Public management reforms in developing countries. In N. Ahmed (Ed.), *Public Policy and Governance in Bangladesh: Forty Years of Experience* (pp. 40–52). London and New York: Routledge.
- Zaman, H. (2015). Service delivery process innovation: Insights from digital Bangladesh. *Innovation and Development*, 5(1). <https://doi.org/10.1080/2157930X.2015.1009698>

Appendix 1: Research participant recruiting materials

Email and letter of invitation

Title: Bureaucratic Entrepreneurship and Innovation under e-Government in Bangladesh

Dear Madam/Sir,

My name is Hasanuzzaman Zaman, and I am a PhD student in the School of Public Policy and Administration (SPPA) at Carleton University. I am working on a research project under the supervision of Prof. Gopika Solanki.

I am writing to you today to invite you to participate in a study on Bureaucratic Entrepreneurship: Analyzing Public Service Delivery Innovation in Bangladesh. This study aims to examine the impact of e-Government efforts on bureaucratic behavior, from the perspective of public service delivery innovation process and outcomes.

This study involves one 60-minute interview that will take place in a mutually convenient, safe location. With your consent, interviews will be audio-recorded. Once the recording has been transcribed, the audio-recording will be destroyed.

While this project does involve some professional and emotional risks, care will be taken to protect your identity. This will be done by keeping all responses anonymous and allowing you to request that certain responses not be included in the final project.

You will have the right to end your participation in the study at any time, for any reason, up until (31/12/2019). If you choose to withdraw, all the information you have provided will be destroyed.

All research data, including audio-recordings and any notes will be encrypted. Any hard copies of data (including any handwritten notes or USB keys) will be kept in a locked cabinet at Carleton University. Research data will only be accessible by the researcher and the research supervisor.

This ethics protocol for this project was reviewed by the Carleton University Research Ethics Board, which provided clearance to carry out the research. Should you have questions or concerns related to your involvement in this research, please contact:

If you have any ethical concerns with the study, please contact Dr. Bernadette Campbell, Chair by phone at 613-520-2600 ext. 2517 or by email at ethics@carleton.ca.

If you would like to participate in this research project, or have any questions, please contact me at hasan.zaman@carleton.ca

Sincerely,
Hasanuzzaman Zaman

Research consent form for interview

Name and Contact Information of Researchers: Hasanuzzaman Zaman, Carleton University, School of Public Policy and Administration (SPPA)
Email: hasan.zaman@carleton.ca

Supervisor and Contact Information:
Professor Gopika Solanki (gopika.solanki@carleton.ca)

Project Title: Bureaucratic Entrepreneurship: Analyzing Public Service Delivery Innovation under e-Government in Bangladesh

Invitation

You are invited to take part in a research project because of your direct experience with regard to Bangladesh's public administration and its function in public service delivery. The information in this form is intended to help you understand what is being asked of you so that you can decide whether you agree to participate in this study. Your participation in this study is voluntary, and a decision not to participate will not be used against you in any way. As you read this form, and decide whether to participate, please ask all the questions you might have, take whatever time you need, and consult with others as you wish.

What is the purpose of the study?

The purpose of this PhD study is to investigate whether and how, e-Government efforts can impact service delivery processes and practices. In other words, it is about examining the factors that undergirds success and failure of e-Government in bringing about a micro-level behavioral change, so that bureaucrats are able to serve citizens in new ways using technology.

What will I be asked to do?

If you agree to take part in the study, you will be requested for an hour's appointment for an individual interview. I will be asking you questions about Bangladesh's public administration system, and much of the information is mix of historical evidence complemented by contemporary political developments. I will be keeping your identity anonymous and use coded text to report my findings of different respondents.

Risks and Inconveniences

There are no anticipated high risks from participating in this study. Research is mildly personal as interviewees will be asked to report their views and attitudes towards innovation in service delivery. This may conflict with your personal political views because the focus is on bureaucracy's role in the implementation of e-Government effort.

Possible Benefits

You may not receive any direct benefit from your participation in this study. However, your participation may allow researchers to better understand the current role and functions of Bangladesh's bureaucracy, which can be illuminating for both Bangladesh and developing countries struggling to make service delivery processes more citizen-centric.

Compensation/Incentives

You will not be paid or compensated for your participation in this study.

No waiver of your rights

By signing this form, you are not waiving any rights or releasing the researchers from any liability.

Withdrawing from the study

If you withdraw your consent during the course of the study, all information collected from you before your withdrawal will be discarded and removed from the study data. After the study, you may request that your data be removed from the study and deleted by notice given to the Principal Investigator (Hasanuzzaman Zaman) before 31st December 2019.

Confidentiality

All identifying information from the study data will be removed as soon as possible, which will be after all interviews and survey results have been received by 31st August 2019.

All personal information will be treated as confidential, although absolute privacy cannot be guaranteed. No information that discloses your identity will be released or published without your specific consent. Research records may be accessed by the Carleton University Research Ethics Board in order to ensure continuing ethics compliance.

All data will be kept confidential, unless release is required by law (e.g., child abuse, harm to self or others).

The results of this study may be published or presented at an academic conference or meeting, but the data will be presented so that it will not be possible to identify any participants unless you give your express consent.

You will be assigned a code [or pseudonym] so that your identity will not be directly associated with the data you have provided. All data, including coded information, will be kept in a password-protected [or encrypted] file on a secure computer. I will encrypt and password protect any research data that is stored or transferred.

Data Retention

Your de-identified data will be retained for a period of 1 year and then securely destroyed. Data will immediately be destroyed should the participant wish to withdraw from the study prior to December 31, 2019.

Ethics review

This project was reviewed and cleared by the Carleton University Research Ethics Board [A]. If you have any ethical concerns with the study, please contact Dr. Bernadette Campbell, Chair by phone at 613-520-2600 ext. 2517 or by email at ethics@carleton.ca.

Statement of consent – print and sign name

I voluntarily agree to participate in this study Yes No
I agree to be (audio-recorded, which is not mandatory) Yes No
I agree that my information and view can be disclosed for research purposes Yes No

Signature of participant

Date

Research team member who interacted with the subject

I have explained the study to the participant and answered any and all of their questions. The participant appeared to understand and agree. I provided a copy of the consent form to the participant for their reference.

Signature of researcher

Date

Interview protocol and guidelines

1. Prior to the start of the interview, participants will be explained the procedure of the interview and asked to sign the consent form.
2. Participants will be reminded that the interview will take approximately over 45-60 minutes and that it will be audio-recorded.
3. Participants will be reminded that their participation to the research is voluntary and that at any time they may refuse to answer a question, take a break and/or stop the interview process.
4. Participants will be briefly explained about the research scope and asked if they have any questions prior to the start of the interview.
5. The interview will begin by asking some general, open ended, non-sensitive questions in order to build rapport.

6. The interview will proceed by asking more research related questions and will rely on probing and incorporating elements of the participant responses to previous questions.
7. The researcher will thank the participant and ask whether there are any other comments or questions about the research.

Research consent for survey

Name and Contact Information of Researchers: Hasanuzzaman Zaman, Carleton University, School of Public Policy and Administration (SPPA)

Email: hasan.zaman@carleton.ca

Supervisor and Contact Information:

Professor Gopika Solanki (gopika.solanki@carleton.ca)

Project Title: Bureaucratic Entrepreneurship: Analyzing Public Service Delivery Innovation under e-Government in Bangladesh

Invitation

You are being invited to complete this survey because you participated in the Empathy Training Program (ETP), organized by the Aspire to Innovate (a2i) and Ministry of Public Administration (MoPA) (a2i). This survey is being conducted by Hasanuzzaman Zaman of the Carleton University's School of Public Policy and Administration (hasan.zaman@carleton.ca), working under the supervision of Prof. Gopika Solanki (gopika.solanki@carleton.ca).

Objectives and Summary

The aim of this study is to better understand the drivers of ETP and improve its design as a Cabinet supported experiential learning initiative. The survey will take about 30 minutes to complete. Your participation in this survey is voluntary, and you may choose not to take part, or not to answer any of the questions. If you decide to withdraw after you submit the survey, all your responses will be removed from survey data if you notify the researcher within 31st December 2019. I expect to survey a total of 300 ETP participants.

Risks and Benefits

There are no anticipated high risks from taking the survey, nor do we anticipate that you will derive any benefit. Research is mildly personal as interviewees will be asked to report their views and attitudes towards innovation in service delivery. This may conflict with your personal political views because the focus is on bureaucracy's role in the implementation of e-Government effort.

Confidentiality and Data Storage

All personal information will be treated as confidential, although absolute privacy cannot be guaranteed. No information that discloses your identity will be released or

published without your specific consent. Research records may be accessed by the Carleton University Research Ethics Board in order to ensure continuing ethics compliance.

All data will be kept confidential, unless release is required by law (e.g., child abuse, harm to self or others).

The results of this study may be published, but the data will be presented so that it will not be possible to identify you, unless you give consent. All research data will be encrypted [or password-protected] and any hard copies of data will be kept in a locked cabinet at Carleton University.

After the study is completed, your anonymized data will be retained for a period of 1 year and then securely destroyed.

REB Review and Contact Information:

This project was reviewed and cleared by the Carleton University Research Ethics Board [A]. “If you have any ethical concerns with the study, please contact Dr. Bernadette Campbell, Chair by phone at 613-520-2600 ext. 2517 or by email at ethics@carleton.ca.”

Implied consent:

By completing the online survey, you are agreeing to participate in the study.

Direct Consent:

I voluntarily agree to participate in this study.

Yes

No

Appendix 2: List of primary documents and materials

- a2i. (2015). *Empathy Training Program: Guideline and Instructions*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of the People's Republic of Bangladesh.
- a2i. (2018). *Digital Bangladesh Booklet*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of the People's Republic of Bangladesh.
- BPATC. (2019). 64th Foundation Training Course. Dhaka: Bangladesh Public Administration Training Centre (BPATC), Ministry of Public Administration (MoPA).
- BTV. (2010). Prime Minister Sheikh Hasina's Speech at the Annual DC Conference. Bangladesh: Bangladesh Television (BTV).
- Cabinet Division (2013). *Innovation Team Gazette*. Dhaka: Government of Bangladesh.
- GED. (2020a). *Eighth Five Year Plan July 2020 - June 2025: Promoting Prosperity and Fostering Inclusiveness*. Dhaka: General Economics Division (GED), Bangladesh Planning Commission, Government of the People's Republic of Bangladesh.
- GED. (2020b). *Making Vision 2041 a Reality: Perspective Plan of Bangladesh 2021-2041*. Dhaka: General Economics Division (GED), Bangladesh Planning Commission, Government of the People's Republic of Bangladesh.
- MoPA. (2014). *Secretariat Instructions 2014*. Dhaka: Ministry of Public Administration (MoPA), Government of the People's Republic of Bangladesh (GoB).
- Rahman, M. M., Harun, A., Chowdhury, A. W., Haque, M. A., & Kabir, R. H. M. A. (2019). *A Study on A Study on Annual Performance Agreement in Bangladesh: An Analysis on Implementation of Mandatory Strategic Objectives (MSO)*. Dhaka: Cabinet Division, Government of the People's Republic of Bangladesh (GoB).
- Rahman, N., Aminuzzaman, S., & Ahmed, N. (2019). *End-line Evaluation of Access to Information (a2i) – II Project*. Dhaka: Access to Information (a2i), Prime Minister's Office (PMO), Government of Bangladesh.
- Rahman, S.H. (2019). *Review of Governance and Institutions*. Background paper for the Eighth Five-Year Plan. Ministry of Planning.
- Shamim, M.I. (2013). *Proposed Changes for the Secretariat Instructions*. Paper presented at the workshop organized by Ministry of Public Administration (MoPA), February 3.
- Taufur, S., & Chowdhury, M. (2003). *Problems of e-Governance in Bangladesh and Possible Steps Towards Solutions*. ICT Conference organized by Ministry of Planning, September 3.

Appendix 3: Interview list

Respondent (r)	Designation	Office	Date
Government (r 1-8)			
Respondent 1 (r1)	Principal Secretary to the Prime Minister, Prime Minister's Office (PMO)	Prime Minister's Office (PMO)	22 August 2019
Respondent 2 (r2)	Chairman	Bangladesh Investment Development Authority (BIDA)	29 August 2019
Respondent 3 (r3)	Secretary	Ministry of Land	20 August 2019
Respondent 4 (r4)	Additional Secretary (project director of a2i)	Ministry of Public Administration	20 August 2019
Respondent 5 (r5)	Joint Secretary (former capacity development director of a2i, and project director of MATT-2)	Energy and Mineral Division, Ministry of Power, Energy and Mineral Resources	21 August 2019
Respondent 6 (r6)	Director	Governance Innovation Unit, (PMO)	20 August 2019
Respondent 7 (r7)	Director	Bangladesh Public Administration Training Centre (BPATC)	05 September 2019
Respondent 8 (r8)	First Secretary	Bangladesh High Commission, Ottawa	8 July 2019
ICT and e-Government projects (r9-14)			
Respondent 9 (r9)	Policy Advisor	Aspire to Innovate (a2i), Cabinet Division and ICT Division	21 July 2019
Respondent 10 (r10)	Director of Administration	a2i, Cabinet Division and ICT Division	08 August 2019
Respondent 11 (r11)	Capacity Development Expert	a2i, Cabinet Division and ICT Division	21 August 2019
Respondent 12 (r12)	Capacity Development Associate	a2i, Cabinet Division and ICT Division	21 August 2019
Respondent 13 (r13)	Policy Advisor	Leveraging ICT (LICT) project, ICT Division	3 September 2019
Respondent 14 (r14)	Communication expert	LICT Project, ICT Division	3 September 2019
NGOs and think-tanks (r15-20)			
Respondent 15 (r15)	Director (former assistant country director, UNDP)	BRAC	21 July 2019

	Bangladesh, 1999 to 2015)		
Respondent 16 (r16)	Executive Director and Country Director (former director general of Asian Development Bangladesh)	BRAC Institute of Governance and Studies (BIGD), BRAC University; International Growth Centre (IGC)	05 September 2019
Respondent 17 (r17)	Research Fellow	BIGD, BRAC University	08 September 2019
Respondent 18 (r18)	Research Fellow	BIGD, BRAC University	09 September 2019
Respondent 19 (r19)	Executive Director	Centre for Peace and Justice, BRAC University	09 September 2019
Respondent 20 (r20)	Senior Economist	Policy Research Institute (PRI)	19 December 2019
Academics (r21-25)			
Respondent 21 (r21)	Research Advisor	South Asian Institute of Advanced Legal and Human Rights Studies (SAILS)	19 December 2019
Respondent 22 (r22)	Professor of Business and Enterprise at the Judge Business School	University of Cambridge	19 July 2019
Respondent 23 (r23)	Lecturer in International Business	Flinders University	02 January 2020
Respondent 24 (r24)	Professor, Public Administration Department	Dhaka University	07 January 2020
Respondent 25 (r25)	Professor, School of Engineering and Physical Sciences	North South University	07 January 2020
International organizations (r26-31)			
Respondent 26 (r26)	Senior Social Development Specialist	World Bank	23 July 2019
Respondent 27 (r27)	Senior Public Sector Specialist	World Bank	24 July 2019
Respondent 28 (r28)	Country Representative	UNDP Bangladesh	30 July 2019
Respondent 29 (r29)	Economist	Islamic Development Bank (IsDB)	15 January 2020
Respondent 30 (r30)	Senior Governance Advisor	Department for International Development (DFID)	17 January 2020
Respondent 31 (r31)	Former Vice President	CIDA (now, Global Affairs Canada)	22 January 2020

Appendix 4: Research Instrument: Interview questions

Group 1: Retired bureaucrats and top/mid-level bureaucrats

Opening interview questions: Open ended, non-sensitive, general questions to build rapport

1. Could you briefly tell me about why you are decided to work in public sector?
2. When and in what position did you start working for the BCS? (In what capacity did you retire? – for retired bureaucrats).
 - What are some of the present day bureaucratic behavioral traits which can be explained by the impact of internal-colonial rule by West Pakistan?
 - In your opinion, was bureaucracy able to develop as an independent organ of the state in the post-independence period? Is there any evidence (laws, rules, reforms and regulations) that can substantiate your opinion?
 - What are the rules and policies that govern routines, i.e., practices and processes, in the delivery of public services to citizens? Has there been any change to these as a result of the political context or international influence on bureaucracy to adopt service delivery reforms? Can you give some examples?
 - Do you see any new change in terms of the role of IDC agencies advocating for service delivery reforms?
 - Can you provide any example of how formal rules may have established informal practices thereby undermining the pace of public service delivery reforms?
 - How were the recommendations by government appointed commissions and committees treated by those in-charge of its implementation?
 - What are some of the factors that explain bureaucratic resistance or willingness to implement these recommendations?
 - In your opinion, is Digital Bangladesh the *only* factor to engage political leaders and bureaucrats in changing traditional service delivery practices under e-Government? Are there examples of past reforms which nudged bureaucrats to behave in a way that encourages them to address public service issues without any fear of penalty or reprimand?

Group 2: Scholars, think-tanks' and IDC representatives

Opening interview questions: Open ended, non-sensitive, general questions to build rapport

1. Could you briefly tell me about your current research interests on Bangladesh public administration?
2. Since when have you been engaged in public administration research/advocacy?
 - How does the present organizational/bureaucracy environment encourage or discourage bureaucrats to be creative and risk-taking public service delivery innovation under e-Government efforts?
 - Is there any relationship between external factors such as NPM, NPG and DT, and endogenous parameter changes such as political-bureaucratic rotation between military and elected governments, play as drivers of change in bureaucratic behavior?

- In your opinion, is Digital Bangladesh the *only* factor to engage political leaders and bureaucrats in changing traditional service delivery practices under e-Government? Are there examples of past reforms or programs which tried to motivate bureaucrats to address public service issues, without any fear of penalty or reprimand?
- Have you heard of the Access to Information (a2i) Innovation Lab? How do you see the role of a2i in nudging bureaucracy to use technology as a means for public service delivery innovation?
- Have you heard about the TCV method, which is the innovation definition of the government? Do you think it is sufficient to measure public service delivery innovation and performance of bureaucrats?
- Have you heard of the Empathy Training Program (ETP)? What do you think about its impact in creating scope for bureaucratic entrepreneurship behavior, resulting in service delivery innovations?

Group 3: Government projects (Aspire to Innovate and LICT projects)

Opening interview questions: Open ended, non-sensitive, general questions to build rapport

1. Could you briefly tell me about what you do?
2. Since when have you been engaged in public administration research and advocacy?
 - When did a2i start working and how did it become the government's Innovation Lab? What are some of the factors that can explain a2i's success in being institutionalized from a UNDP and USAID supported project in 2008?
 - In your opinion, is Digital Bangladesh the *only* factor to engage political leaders and bureaucrats in changing traditional service delivery practices under e-Government? Are there examples of past reforms or programs which tried to motivate bureaucrats to address public service issues, without any fear of penalty or reprimand?
 - What are some of the key structural and micro-level factors which can explain a2i's successes and failures in the implementation of e-Government efforts? For example, are there laws inhibiting public sector entrepreneurship? What are the individual level traits which are key to driving innovation in service delivery – compassion, creativity or entrepreneurship?
 - Do you think generating empathy can inspire bureaucrats to be entrepreneurial? What has been the ETP's behavioral impact at the field-level?
 - Is there any policy tool being used by the government to monitor TCV based innovation at the field-level?
 - Is there evidence to demonstrate TCV's impact on increasing transparency, accountability and stimulating bureaucratic entrepreneurship, with regard to reforming the governance process of service delivery?
 - Is there scope for TCV's improvement as a measure for institutionalizing entrepreneurial and innovative behavior in the bureaucracy?
 - Can ETP initiate a learning process that can ultimately shape bureaucratic experience through entrepreneurship? For example, a new curriculum for recruiting bureaucrats with an entrepreneurial attitude, and amendments to the rules governing bureaucrats conduct?

Appendix 5: Empathy Training Program (ETP): Survey instrument

Consent for participating in the survey

Q1. Do you agree to participate in the study?

Yes (1)

No (2)

Skip to: End of survey if the response is “no”

Instructions for those agreeing to take the survey

This is a survey on the Empathy Training Program (ETP). To help you complete the survey, three key terms are defined below:

- Empathy Training Program (ETP): A capacity development program to enable an entrepreneurial spirit within bureaucracy for service delivery innovation
- TCV based innovation: A method which reduces time, cost, and number of visits (TCV) for citizens in accessing information and services. The TCV method was institutionalized under the Innovation Team gazette in 2013.
- Service process simplification (SPS): This is a tool introduced during the ETP to sketch the service delivery process, and apply the TCV method to simplify the process and steps.

Q2. Gender

- Male
- Female
- Other

Q3. Age

- 25-31
- 32-41
- 42-51
- 52-59

Q4. Education

- PhD
- Master's
- Bachelor's

Q5. Type of education

- Liberal arts, humanities and social science (anthropology, history, sociology, economics, political science, commerce, marketing, business management, law, philosophy, literature, classical and modern languages, etc)
- Natural science (physics, biology, chemistry, agriculture, environment, zoology)
- Applied science (computer science and engineering, electronics, biochemistry, medicinal science, medicine)

Q6. How long have you been a government employee?

- 1-3 years
- 4-9 years
- 10 or more years

Q7. Where were you working at the time when you participated in the ETP?

- Sub-district (Upazila)
- District (Zila)
- Division
- Directorate
- Ministry
- Autonomous bodies
- City corporation
- Municipality

Q8. Did the ETP help you better understand public service delivery challenges from citizens' experiences?

- Yes
- No

Q9. Did the TCV method help you better understand public service delivery challenges from citizens' experiences as a result of administrative processes?

- Yes
- No

Q10. Did you find the SPS map useful as a tool to scope out the possibility of change in the existing administrative process, for better service delivery to citizens?

- Yes
- No

Q11. Did you implement a TCV based idea or innovation at your own office?*

- Yes (1)
- No (2)

Please indicate the extent to which you strongly agree (1), somewhat agree (2) or strongly disagree (5) and somewhat disagree (4) with the following statements. If you are not sure or uncomfortable answering any question, please click on the third (3) option - neither agree nor disagree.

Q12. Our approach to innovation is focused because of TCV

Q13. I have a desire to explore new TCV based innovation opportunities

Q14. Our methods are still colonial to be able to serve citizens in new ways using TCV method of innovation (Reversed)

Q15. I prefer taking action than getting into heavy analysis (Reversed)

Q16. I have freedom to pursue TCV based opportunities

Q17. Failure can be a learning opportunity

Q18. I try to consider everybody's opinion before I make a decision

Q19. When I'm upset at someone, I usually try to put myself in their shoes

Q20. I try to look at the two sides to every question

Q21. Other people's misfortunes usually disturb me a great deal

Q22. I have tender, concerned feelings for people less fortunate than me

Q23. I become nervous if others around me are nervous

Q24. Citizens don't understand their best interests in the long-run (Reversed)

Q25. Citizens, i.e., our service delivery recipients, view us as an innovative organization

Q26. Administrative duties are better performed if we are not close to citizens (Reversed)

Q27. I am able to take risks without worrying too much about rules, administrative hierarchy

Q28. Bureaucrats are responsible for innovation in public service delivery

Q29. All innovation implementation require approval of top officials (Reversed)

Q30. Our supervisor inspires us with a vision for experimenting with TCV based opportunities

Q31. Our supervisors can use appropriate strategies to help us navigate around organizational obstacles

- Q32. I am comfortable taking risks when pursuing TCV opportunities
- Q33. We have budgetary support to implement our innovation pilot
- Q34. We can rapidly allocate resources to scale up innovations that show public value creation promise
- Q35. We are rewarded for successful implementation of innovations
- Q36. We rely very much on partnership with local NGOs
- Q37. We rely very much on partnership with private sector actors
- Q38. We rely very much on partnership with international agencies
- Q39. We rely very much on collaboration with other field-level offices, departments
- Q40. Subordinates and supervisors work well together in teams to implement an innovation pilot
- Q41. We can collaborate with others to test an idea pilot by implementing it within our own offices

Appendix 6: Logit regression results for successful innovation with pooled sample (n=442)

Table 6.1: Logit regression analysis for successful innovation implementation (model 1)

Variable	Average marginal effects
Gender	-0.033 (0.059)
Dhaka	-0.128* (0.065)
Mymensingh	-0.280 (0.146)
Barisal	-0.104 (0.097)
Khulna	0.050 (0.085)
Sylhet	-0.029 (0.086)
Rangpur	-0.030 (0.094)
22-31 years	-0.160 (0.113)
32-41 years	-0.059 (0.092)
42-51 years	-0.098 (0.085)
Postgraduate	-0.033 (0.113)
Undergraduate	-0.167 (0.124)
Social science	0.056 (0.064)
Natural science	0.092 (0.065)
4-9 years	-0.077 (0.096)
10 years and more	0.009 (0.104)
Upazila	0.190 (0.111)
Zila	0.164 (0.114)
Division	0.223 (0.126)
Directorate	0.141 (0.123)
Ministry	-0.121 (0.166)
Semi-and full-autonomous	0.117 (0.130)
Utility of SPS	0.108* (0.053)
Utility of TCV	0.252** (0.081)
Overall model evaluation	
Likelihood ratio test (df)	57.72*** (24)
Wald test (df)	48.43* (24)
Goodness of fit	
Hosmer-Lemeshow (df)	7.25 (8)
Area under ROC curve	0.71
Overall accuracy rate (%)	65.84

Note: *p < .05, **p < .01, ***p < .001; df=degrees of freedom

Table 6.2: Logit regression analysis for successful innovation implementation (model 2)

Variable	Average marginal effects
Gender	-0.010 (0.046)
Dhaka	-0.106* (0.049)
Mymensingh	-0.312** (0.099)
Barisal	-0.061 (0.072)
Khulna	0.117 (0.066)
Sylhet	0.028 (0.066)
Rangpur	-0.095 (0.072)
22-31 years	-0.054 (0.086)
32-41 years	-0.060 (0.071)
42-51 years	-0.074 (0.068)
Postgraduate	0.021 (0.096)
Undergraduate	-0.145 (0.105)
Social science	-0.029 (0.052)
Natural science	0.020 (0.053)
4-9 years	0.086 (0.077)
10 years and more	0.131 (0.082)
Upazila	0.220* (0.092)
Zila	0.239* (0.093)
Division	0.321** (0.107)
Directorate	0.215* (0.101)
Ministry	0.080 (0.128)
Semi-and full-autonomous	0.179 (0.102)
Utility of SPS	0.083 (0.041)
Utility of TCV	0.092 (0.064)
Hunger	0.057* (0.027)
Failure OK	0.079* (0.033)
Risk	0.076** (0.023)
Action-oriented	0.173*** (0.009)
Analytical	-0.005 (0.017)
Experiment	-0.000 (0.018)
Perspective-taking	0.071* (0.028)
Other-perspective	0.012 (0.016)
Fairness	-0.051 (0.027)
Compassion	-0.018 (0.019)
Concern	-0.017 (0.021)
Contagion	-0.019 (0.014)
Egalitarian	0.025 (0.016)
Success	0.024 (0.016)
Non-Elitist	-0.010 (0.014)
Overall model evaluation	
Likelihood ratio test (df)	273.82*** (39)
Wald test (df)	99.37*** (15)
Goodness of fit	

Hosmer-Lemeshow (df)	10.57 (8)
Area under ROC curve	0.91
Overall accuracy rate (%)	82.13

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents in the specified categories: Location, Chattogram and Rajshahi (more than 50 percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Table 6.3: Logit regression analysis for successful innovation implementation (model 3)

Variable	Average marginal effects
Gender	0.016 (0.044)
Dhaka	-0.062 (0.047)
Mymensingh	-0.251* (0.098)
Barisal	-0.031 (0.071)
Khulna	0.153* (0.064)
Sylhet	0.065 (0.060)
Rangpur	-0.072 (0.065)
22-31 years	-0.121 (0.085)
32-41 years	-0.116 (0.069)
42-51 years	-0.106 (0.065)
Postgraduate	-0.001 (0.094)
Undergraduate	-0.181 (0.101)
Social science	-0.004 (0.049)
Natural science	0.042 (0.051)
4-9 years	0.114 (0.083)
10 years and more	0.136 (0.085)
Upazila	0.223* (0.096)
Zila	0.241* (0.096)
Division	0.295** (0.109)
Directorate	0.206* (0.104)
Ministry	0.108 (0.134)
Semi-and full-autonomous organization	0.171 (0.107)
Utility of SPS	0.088* (0.040)
Utility of TCV	0.110 (0.065)
Hunger	0.058* (0.026)
Failure OK	0.081* (0.032)
Risk	0.060** (0.022)
Action-oriented	0.174*** (0.009)
Analytical	0.001 (0.017)
Experiment	-0.012 (0.018)
Perspective-taking	0.064* (0.027)
Other-perspective	0.018 (0.015)
Fairness	-0.068** (0.025)
Compassion	-0.029 (0.019)
Concern	-0.010 (0.021)
Contagion	-0.031* (0.014)
Egalitarian	0.021 (0.016)
Success	0.018 (0.016)
Non-Elitist	-0.012 (0.014)
Power	0.008 (0.014)
Responsibility	0.013 (0.017)
Distance	0.009 (0.017)
Influence	-0.043 (0.024)
Inspire	0.032 (0.021)
Ambiguity	0.063** (0.019)

Money	0.013 (0.013)
Growth	0.010 (0.017)
Reward	-0.022 (0.015)
NGOs	0.033* (0.017)
Private	-0.024 (0.018)
International	-0.051** (0.017)
Field-level	-0.020 (0.019)
Teamwork	-0.021 (0.019)
Other	0.090*** (0.022)
Overall model evaluation	
Likelihood ratio test (df)	322.91*** (54)
Wald test (df)	36.72** (15)
Goodness of fit	
Hosmer-Lemeshow (df)	14.94 (8)
Area under ROC curve	0.94
Overall accuracy rate (%)	84.62

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents in the specified categories: Location, Chattogram and Rajshahi (more than 50 percent attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).

Table 6.4: Logit regression for successful innovation implementation (model 4)

Variable	Average marginal effects: <i>Standardized index</i>	Average marginal effects: <i>Principal components index</i>
Gender	-0.013 (0.051)	-0.018 (0.047)
Dhaka	-0.099 (0.057)	-0.095 (0.053)
Mymensingh	-0.248* (0.122)	-0.263* (0.109)
Barisal	-0.010 (0.083)	-0.022 (0.076)
Khulna	0.112 (0.073)	0.113 (0.068)
Sylhet	0.019 (0.073)	0.027 (0.066)
Rangpur	-0.041 (0.081)	-0.056 (0.073)
22-31 years	-0.118 (0.098)	-0.091 (0.090)
32-41 years	-0.078 (0.079)	-0.077 (0.073)
42-51 years	-0.125 (0.075)	-0.106 (0.070)
Postgraduate	-0.081 (0.106)	-0.054 (0.098)
Undergraduate	-0.193 (0.114)	-0.184 (0.106)
Social science	0.043 (0.056)	0.012 (0.053)
Natural science	0.083 (0.059)	0.050 (0.055)
4-9 years	0.025 (0.086)	0.063 (0.079)
10 years and more	0.081 (0.091)	0.103 (0.083)
Upazila	0.150 (0.102)	0.169 (0.097)
Zila	0.157 (0.104)	0.183 (0.099)
Division	0.259* (0.117)	0.264* (0.112)
Directorate	0.163 (0.112)	0.196 (0.107)
Ministry	-0.021 (0.146)	0.020 (0.138)
Semi-and full-autonomous	0.081 (0.119)	0.105 (0.113)
Utility of SPS	0.070 (0.048)	0.075 (0.043)
Utility of TCV	0.100 (0.074)	0.071 (0.067)
<i>Entrepreneurship</i>	0.092*** (0.024)	0.064** (0.019)
<i>Creative action and learning</i>	0.182*** (0.018)	0.211*** (0.013)
<i>Cognitive empathy</i>	0.020 (0.023)	0.009 (0.018)
<i>Emotional empathy</i>	-0.043 (0.022)	-0.037* (0.017)
<i>Citizen's relations</i>	0.020 (0.021)	0.013 (0.018)
<i>Power and autonomy</i>	0.027 (0.021)	0.023 (0.018)
<i>Energy</i>	-0.014 (0.025)	0.001 (0.018)
<i>Resources</i>	0.005 (0.022)	-0.001 (0.018)
<i>External collaboration</i>	-0.042* (0.021)	-0.029 (0.015)
<i>Internal collaboration</i>	0.018 (0.023)	0.012 (0.017)
Overall model evaluation		
Likelihood ratio test (df)	188.02*** (34)	243.27*** (34)
Wald test (df)	82.67*** (10)	98.00*** (10)
Goodness of fit		
Hosmer-Lemeshow (df)	16.28* (8)	1.86 (8)
Area under ROC curve	0.85	0.89
Overall accuracy rate (%)	78.51	80.77

Note: *p < .05, **p < .01, ***p < .001; df = degrees of freedom; standard errors in parentheses. The following dummy variables were dropped due to high attrition rates and the lowest number of respondents in the specified categories: Location, Chattogram and Rajshahi (more than 50 percent

attrition rates); Age group, 52-59 years (26 respondents); Tenure 1 to 3 years (15 respondents); PhD (11 respondents); Applied science (37 respondents); City corporations (5 respondents).