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The Perceived Impact of E-Government on Government Effectiveness: A South Korean Bureaucrats' Perspective

Godfrey Mbabazi

Public policy and Governance Department, International University of East Africa (Uganda)

Government effectiveness has long been a concern for scholars, organizations, and governments. Ineffectiveness in government operations often results in significant costs, particularly for the consumers of public services. This paper empirically examined South Korean public bureaucrats' perception of the potential impact of e-government on government effectiveness. The analysis reveals that these bureaucrats believe internal e-government factors, such as ICT tools, IT management, and process innovation, significantly enhance government effectiveness. Furthermore, traditional components like business alignment and coordination are viewed as more critical to e-government success than technologically oriented factors like ICT infrastructure availability and skills. Interestingly, contrary to common belief, the study found no direct impact of political leadership, vision, goals, and business process reengineering (BPR) on e-government effectiveness.

Keywords: E-government, government effectiveness, bureaucrats, perceived impact

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Corresponding Author
Godfrey Mbabazi
Public policy and Governance Department, International University of East Africa (Uganda)
E-mail: mbabazi.godfrey@iuea.ac.ug / ezrah9@gmail.com

INTRODUCTION

In recent years, Korea's e-government development has been recognized not only as a catalyst for efficient public service but also as a benchmark for many other countries. After being stalled by the financial crisis of 1997, the Information and Communication Technology (ICT) industry was praised for playing a decisive role in the recovery of the Korean economy and its transition into a new phase of development. Work coordination between governmental agencies has greatly improved, as has the government's interaction with citizens, businesses, and other stakeholders through convenient access to information (Curtin, 2007; Myeong, 2019). Korea is now one of the world's leading e-government countries, making it an ideal case for testing the anticipated effects of e-government on government effectiveness

The existing body of research in the area of electronic government has been rather skewed to one side. Studies have been conducted that have linked e-government to service provision mostly from citizens' perspective (Bhatnagar, 2004; Bhatnagar & Singh, 2010; Mohale, 2024). Meanwhile, little is known about the perception of the providers, or public officers. In addition, there have been few explorations of the empirical evidence about e-government and its impact on public administration. Although the Korean government system, one of the key leaders in this area, allegedly has many virtues, empirical evidence is hard to come by.

This study therefore set out to explore the impact of e-government from Korean bureaucrats' perspective.

The providers' views may cast a different light on the system from the citizens. Among the many advantages of e-government, this study focuses exclusively on its impact on effectiveness, the most prominent feature of e-government. In short, based on a survey of Korean bureaucrats' perceptions, this study aims to gather empirical evidence for the impact of e-government on governmental effectiveness.

LITERATURE ON E-GOVERNMENT AND GOVERNMENTAL EFFECTIVENESS

E-government has a variety of effects. Numerous studies have evidenced e-government's relationship with transparency and anti-corruption (Adam & Fazekas, 2021; Andersen, 2009; Cuillier & Piotrowski, 2009), and with service delivery effectiveness (Moon, 2002). More specifically, the e-government system has been recognized for its potential administrative efficiency and effectiveness (Heeks, 2001), interactivity (DiCaterino & Pardo, 1996), interconnectivity (McClure, 2000), and it's capacity to reduce administrative burdens (European Commission, 2014).

Regarding the impact of e-government on effectiveness, numerous surveys have been conducted to explore the perceptions of both citizens and public officials. For example, Wimmer (2002) found that citizens looked for the government to provide a single point of contact where all their requests and problems could be handled. If public agencies are to achieve their goals, the handling of data and the ways the data are processed into information is of paramount importance (Taylor, 2010). Colesca (2009) found that citizens' perception of the high quality and usefulness of the e-government service directly enhanced their trust in the government.

Empirical studies on the relationship between e-government and effectiveness from the providers' perspective have been pervasively undertaken at every level of government. Researchers at Brown University conducted an e-mail survey of the chief information officers working in state and federal agencies. These CIOs believed that e-government improved the delivery of services, reduced the government's costs, and made it more efficient (Goings et al., 2003: 4). Surveying the city managers of Florida and Texas, Reddick and Frank (2007) found that 68.4 percent of the managers agreed that as a management tool, e-government helped them attain their goals, and 72.2 percent agreed that e-government enabled them to increase their productivity. Overall, 65.1 percent of the city managers surveyed believed that e-government made them more effective managers (Reddick & Frank, 2007). Using data collected from the Gangnam-gu district of Seoul in Korea, Kim (2009) found that about 66% of public officers found e-government effective. Moreover, the author provided empirical estimates suggesting that executive e-government leadership, IT capacity, HR capacity, and results management were all significant factors affecting the employees' perception of e-government performance.

According to a study conducted in Spain, the majority of the public managers surveyed (83.3%) believed that the implementation of ICT in large municipalities improved the functions assigned to the staff of operative departments. They considered e-government to be an enabler of inter-departmental collaboration and information exchange, two key components of governmental effectiveness (Alcaide-Muñoz et al., 2014). Polson and Theivananthampillai (2009) surveyed a local governmental organization in New Zealand. The respondents believed that e-government improved the department's performance, particularly in terms of operations and customer relations.

The existing literature has reported that public officers around the world recognized the positive impact of e-government on effectiveness. However, it also revealed that the degree and sources of that impact varied widely according to the region, IT tools, organizational operations, and so on. These findings therefore imply that empirical studies of this kind should be carefully designed to be rooted in adequate frameworks and theories.

CONCEPTUAL FRAMEWORK, OPERATIONALIZATION, AND DATA COLLECTION

Socio-Technical Framework

Kumar et al (2007) suggested a conceptual framework for analyzing citizens' adoption of e-government. Their proposed framework considers the user characteristics and website design, along with the way the level of service quality affects the users' willingness to adopt e-government. This kind of framework is widely utilized in studies on the perceived effectiveness of e-government.

To examine the relationship between e-government and effectiveness from the providers' perspective, the socio-technical system approach is more suitable. This method helps understand the intricate interactions between individuals in organizations and the use of technology (Davis et al., 2014). Historically, focusing predominantly on the technical aspects of e-government projects worldwide has resulted in failures and significant waste of financial, human, and political resources (Schware, 2005). Nograšek (2011) emphasizes that for successful outcomes, effective management of technology as an enabler, along with processes and people, is essential.

E-government involves the identification, selection, design, implementation, and use of information and communication technologies (ICT) by government agencies to enhance internal operations, managerial effectiveness, and service quality, while also improving public perception of the government. Consequently, ICT tools, IT management, and process innovation are essential components of e-government. Although some may contend that e-government encompasses more than these three elements, defining it in this manner aids in the empirical analysis. Additionally, external environmental factors like political leadership, vision, and institutional organization, along with these three internal factors, influence the perception of governmental effectiveness, as depicted in Figure 2.

Operationalization of Variables

• Governmental Effectiveness

This study defines the concept of governmental effectiveness as the question of whether an agency does what it is supposed to do well, whether people in the agency work hard and well, whether the actions and procedures of the agency and its members help it to achieve its mission, and, ultimately, whether it achieves its mission. To operationalize this definition, we used the World Bank government effectiveness indicators to measure the government effectiveness. These indicators capture the capacity of the state to implement sound policies by measuring the quality of the civil service and the degree of its independence from political pressures, the quality of the policy formulation and implementation, and the credibility of the government's commitment to these policies. These five items used to measure government effectiveness are congruent with the Worldwide Governance

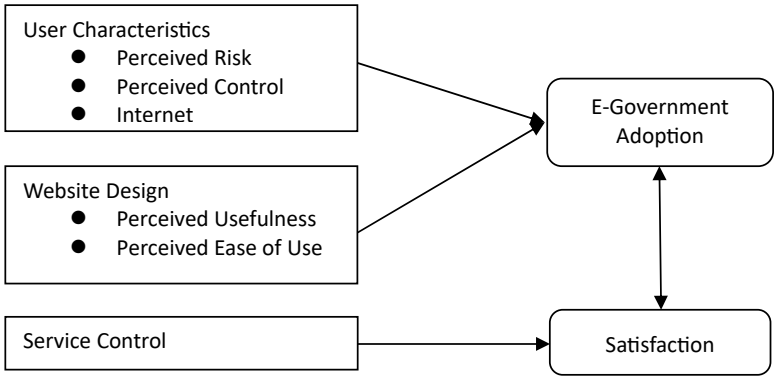

Fig. 1. Typical Conceptual Framework: User's Perspective
Source: Kumar et al. (2007).

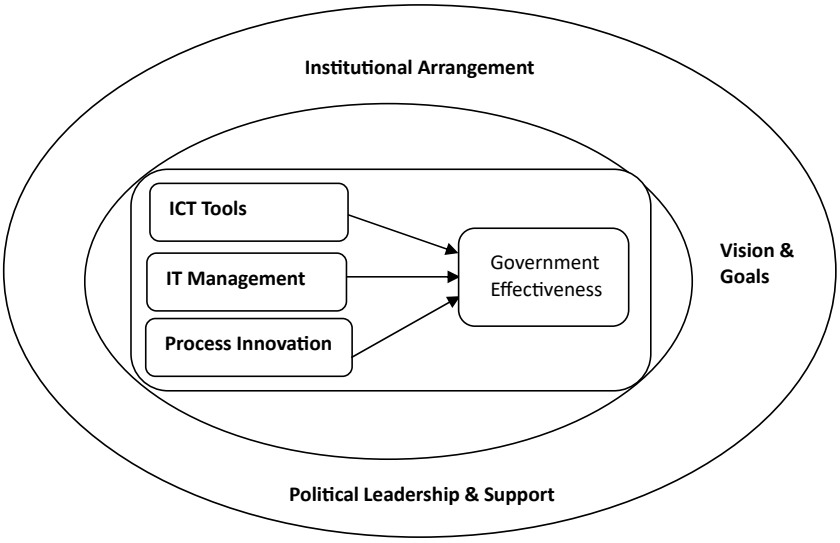

Fig. 2. Socio-Technical Framework: Provider's Perspective

Table 1. Indicators and Measurement Items for Government Effectiveness

Worldwide Governance Indicators	Items
Government effectiveness	**(PSSP)** I think people are satisfied with the services provided by my agency.
	(BACGC) The bureaucrats in my agency can continue serving without any interruption in case of a change of government.
	(CSC) The civil servants in my agency are very competent.
	(CSNPI) The civil servants in my agency are not politically influenced in their implementation of policies on a day-to-day basis.
	(FCP) My agency fulfills its commitment to policies.

Source: Kaufmann et al. (2011).

Table 2. Specification of Constructs Domain

Domain	Construct	Description
ICT Tools	ICT Availability	Deployment of computers, communications hardware, and software tools to manage the clerical, administrative, and management tasks of public agencies.
	ICT Usage	Deployment of ICT tools to improve the way public servants work and deliver services.
IT Management	IT-Business Alignment	Harmonization of information technology with business requirements.
	Information Management Skills	Ability to execute, manage, and implement e-government works.
Process Innovation	BPR	Reengineering of work processes within and between public agencies to transform the way government works.
	Interoperability	The ability of information systems of public agencies to exchange information to achieve mutually beneficial and agreed common goals.
Political Leadership and Support	Political Commitment	Support of a broad range of civil and community leaders at all levels of society.
	Public Consensus	Gaining overwhelming agreement and support for e-government projects.
Vision and Goals		Description of the desired result and road map for making it a reality.
Institutional Arrangement	Co-ordination	Organization: making different people or things work together towards a common purpose to fulfill the desired goals of the organization.

Indicators developed by Kaufmann et al. (2011).Source: Kaufmann et al. (2011)

• **Explanatory Variables**

Based on the extensive review of the literature on e-government, this study selected a total of 50 items reflecting the internal and external environmental factors involved in e-government. Table 2 describes the variables and Table 3 presents the indicators used to measure the variables. Refer to Mbabazi (2015) for more details.

Table 3. E-Government Indicators and Measurement Items

Domain	Construct	Indicators	Measurement Items
Internal Factors	ICT Tools	Infrastructure Availability	PCs
			Government-Wide Area Network
			Intranet
			Servers
			Databases
			Websites
			Ubiquitous
			Cloud computing
			Mobile applications
		Level of Usage	PCs
			Internet
			Intranet
			Servers
			Databases
			Electronic mail
			Spreadsheets
			Word processing
			Mobile applications
		Purpose of Usage	Information only
			Application forms for download
			Interactive citizens' services
			Option for a functioning web portal
	IT Management	IT-Business Alignment	CIOs play a big role in aligning IT with business goals.
			The business goals and objectives are communicated to the IT department.
			The IT department is responsive to users' needs.
			IT is used to play a major part in defining the business strategy.
			Management has a good understanding of the impact of IT on the business.
		Information Management Skills	IT staff have working knowledge of IT applications.
			IT managers have coordination skills to ensure the proper sharing of information with other departments.
			IT managers have the ability to manage the changes resulting from e-government implementation.
			Outsourced IT experts provide IT services as requested by user departments.
			Outsourced IT experts ensure that the IT matches the business requirements.
			Outsourced IT experts ensure that the agency's information systems function properly.
			Through their experience and knowledge, outsourced IT experts are of great help to my agency.

Table 3. E-Government Indicators and Measurement Items(continue)

Domain	Construct	Indicators	Measurement Items
Internal Factors	Process Innovation	BPR	The processes in my agency have been redesigned for fast service delivery.
			The redesigned processes have been standardized across the agency.
			BPR was achieved through IT in my agency.
			IT plays a key role in the redesigned processes.
		Systems Interoperability	My agency shares information with other agencies well.
			My agency delivers services via a single window.
			The operations of this agency are streamlined to make the service provision fast.
			The flow of information across the agency is well-coordinated.
External Factors	Political Leadership and Support	Political Commitment	Has provided funding for e-government projects.
			Has ensured the proper regulation of e-government.
		Building Public Consensus	Has spread country-wide awareness of e-government.
			Has raised public support for e-government projects.
	Vision and Goals	Aligned with Core Public Values	Effective communication of the e-government vision and goals has laid a firm basis for the e-government implementation.
			The e-government vision and goals are aligned with core public values.
			The appeal of the e-government vision and goals has reduced the resistance to the e-government implementation.
			The priorities of the government are well-reflected in the e-government vision and goals.
			The e-government vision and goals are citizen-centered.
	Institutional Arrangement	Co-ordination	E-government driving committees ensure inter-agency collaboration.
			E-government driving committees foster cooperation between e-government stakeholders.
			E-government driving committees ensure the timely availability of funds for e-government projects.

Data Collection

To systematically select the research institutions and samples involved in the study, a combination of purposive and simple random sampling techniques was used. Institutions were purposively selected to ensure only those actively engaged in e-government implementation and application were included for data collection. Within these institutions, respondents were randomly selected to ensure representativeness.

The Seoul Metropolitan Government was chosen for its unique administrative and strategic importance and its leading role in e-government implementation, providing valuable insights into advanced e-government practices. Chuncheon and Wonju were randomly selected from six cities in Gangwon Province, chosen for it's notable socio-economic and demographic characteristics amidst e-government implementation. This selection allowed the study to capture insights from a population with a significant rural-urban mix, offering a comparison point for SMG.

Data was also collected from three ministries pivotal in e-government implementation: Ministry of the Interior and Safety (MOSPA): Selected for its overarching responsibility in implementing e-government policies and initiatives. Ministry of Economy and Finance: Chosen for its oversight of *customs* and *procurement agencies*, key areas where e-government systems are extensively utilized. Ministry of Agriculture, Food and Rural Affairs: Selected for managing the national forestry agency, an important sector for e-government application in rural and agricultural contexts. Lastly, the *National Information Society Agency* (NIA), a quasi-governmental agency, was selected due to its critical role in promoting and implementing e-government initiatives as a national think-tank for informatization and communication. NIA's involvement ensures a streamlined e-government implementation process across all sectors.

By selecting a diverse range of entities from different administrative levels and sectors with advanced e-government initiatives, the study aimed to capture a holistic view of the impact of e-government on government effectiveness. To this effect, a total of 600 questionnaires were issued to the bureaucrats from these selected entities of which 400 were hand-delivered, and 200 were mailed. A total of 422 responses were received in return, representing a response rate of 70 percent.

ANALYSIS AND FINDINGS

Status of E-Government in Korean Public Agencies

Among the central governmental agencies surveyed concerning their performance based on the e-government indicators, the MOSPA and the Customs Service demonstrated the highest levels of e-government usage, followed by the procurement agency and the forestry agency (see Figure 3). As the leading agency responsible for e-government coordination and implementation, the MOSPA showed significant progress across all areas of e-government. The remarkable performance of the Customs Service, as indicated by the radar chart, has been driven by the government's goal to reduce import and export processing times from two days to within two minutes (KCS, 2024). Except for the forestry agency, other central agencies exhibited a high level of interoperability, which is essential for sharing information to enhance service provision and overall effectiveness.

Among all the surveyed local agencies, the SMG provided the highest amount of web services, due to its high level of ICT tools availability and usage as it moves towards achieving a smart city status. Equally impressive in availing ICT infrastructure and its usage are the MOSPA, the Customs Service, and the City of Chuncheon Government.

All in all, e-government implementation in public agencies seems to be much related to the priorities of those particular agencies. Overall, radar charts show Customs and MOSPA to be the highest performers in terms of e-government implementation. They are closely followed by CCG and SMG.

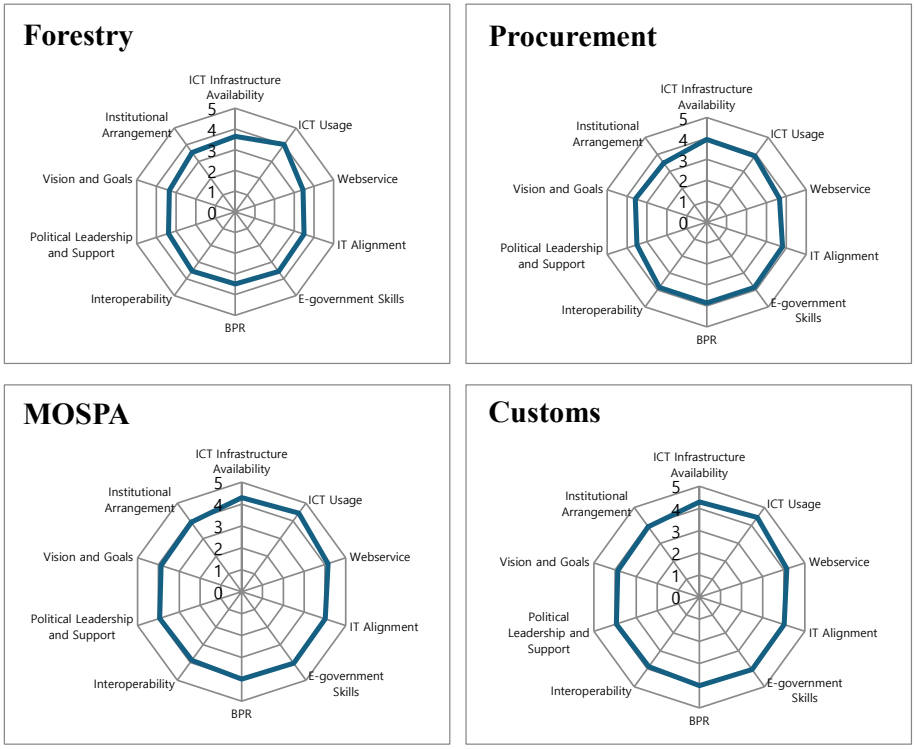

Fig. 3. Perceived Measures of E-Government: Central Governmental Agencies

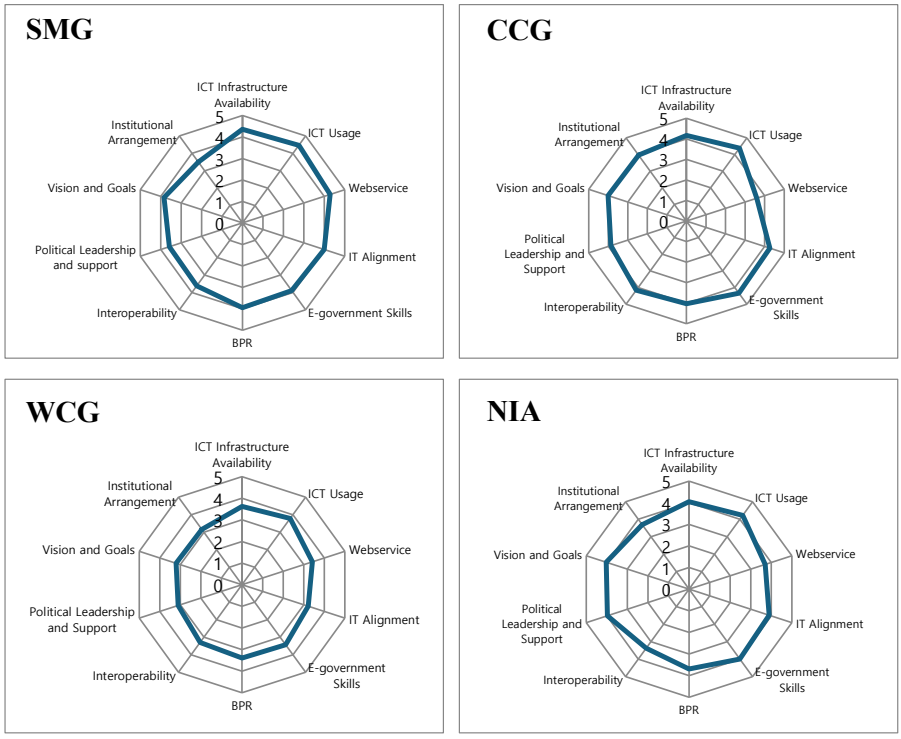

Fig. 4. Perceived Measures of E-Government: City Governments and Quasi-Governmental Agencies

Relationship between E-Government and Effectiveness

A series of regression analyses were conducted to identify the relationship between e-government and effectiveness, which is defined and operationalized in Table 1. The regressors were the vectors of internal and external factors as presented in Table 3. The personal characteristics of the respondents including age, gender, level of education, and years of work, were also included as explanatory variables.

• **Internal Factors**

The internal factors consisted of three constructs: IT Tools, IT Management, and Process Innovation. As expected, all three constructs demonstrated significantly large and positive coefficients for each of the five dependent variables: PSSP, BACGS, CSC, CSNPI, and FCP. However, there were some differences in the correlation strengths for each of these three constructs.

In the IT Tools construct, only the ICT Usage variable showed a significant coefficient for PSSP ("I think people are satisfied with the services provided by my agency") and BACGS ("The bureaucrats in my agency have the ability to continue serving without any interruption in case of a change of government"). This finding aligns with a previous study surveying Korean local bureaucrats, which reported that IT tools were positively related to service quality, transparency, and cost-efficiency (Kim, 2009).

The other variables, including IT Infrastructure Availability and Purpose of Usage, were not significantly correlated with any of the five variables for perceived effectiveness. This is surprising, as IT infrastructure and skills are typically considered essential for the introduction and adoption of e-government. Empirical research in developing countries, such as Indonesia, Susanto and Goodwin (2010) and Egypt, Abdelsalam et al. (2012), have supported this conventional wisdom. However, the current study presented different empirical results concerning infrastructure. It is presumed that Korean bureaucrats are already accustomed to using IT tools, as Korea is a world

Table 4. Regression Analyses Result

Variables			Model 1 PSSP	Model 2 BACGC	Model 3 CSC	Model 4 CSNPI	Model 5 FCP
Constant			.594 (2.276)**	1.036 (4.177)***	.134 (.323)***	.249 (.557)	.404 (1.007)
Internal Factors	*IT Tools*	*IT Infra-Structure*			-.076 (-1.111)		-.019 (-.295)
		ICT Usage	.128 (2.548)**	.127 (2.321)**	.091 (1.472)	.067 (.985)	.033 (.557)
		Purpose Of Usage			.075 (1.117)	-.087 (-1.165	.085 (1.327)
	IT Management	*IT-Business Alignment*	.244 (4.088)***	.217 (3.042)***	.260 (3.246)***	.265 (2.988)**	.222 (2.967)***
		E-government. Skills		.172 (2.194)**	.231 (2.708)***	.088 (.935)	.256 (3.219)***
	Process Innovation	*BPR*			.110 (1.452)		
		Interoperability	.266 (4.632)***	.231 (3.656)***	.174 (2.337)**	.174 (2.171)**	.214 (3.219)***
External Factors	*Political Leadership & Support*	*Commitment*			-.089 (-1.141)	-.117 (-1.333	-.041 (-.565)
		Public Support		-.126 (-2.182)	-.058 (-.850)	.164 (2.114)**	.044 (.682)
	Vision & Goals	*Vision*					
	Org. Arrangement	*Coordination*	.119 (2.524)**	.106 (1.849)		.230 (3.205)***	.014 (.238)
Agency Factors		*Agency 1(SMC)*				.214 (1.158)	
		Level of Govt					
Personal Characters		*Gender*					
		Education					
		Age	.008 (2.008)*				
Others		*Channel*		.019 (2.204)**			
Statistics		*Adjusted R^2*	.331	.282	.295	.291	.316
		F	24.076***	23.710***	25.261***	24.798***	24.379***
		N	406	406	406	406	406

Note 1: Asterisks (*, **, ***) denote the significance at the 0.10, 0.05, and 0.01 levels, respectively.

Note 2: PSSP: "I think people are satisfied with the services provided by my agency."
BACGS: "The bureaucrats in my agency can continue serving without any interruption in case of a change of government."
CSC: "The civil servants in my agency are very competent."
CSNPI: "The civil servants in my agency are not politically influenced in their implementation of policies on a day-to-day basis."
FCP: "My agency fulfills its commitment to policies."

leader in e-government services, and is equipped with comprehensive IT infrastructure and e-services. Korean bureaucrats may view these technical factors, which they have assimilated through a continuous, decades-long drive towards e-government, as a given.

The second construct for internal factors, IT MANAGEMENT, was represented with two variables: IT-

BUSINESS ALIGNMENT and E-GOVERNMENT SKILLS. The IT-BUSINESS ALIGNMENT variable was found to be one of the two most important variables in this study, showing the strongest correlation of all variables with the five government effectiveness variables. Previous studies such as Schedler and Schmidt (2004), Polson and Theivananthampillai (2009), and Kim (2009) also revealed a strong relationship between IT-business alignment and governmental effectiveness.

As stated by Luftman et al. (2006), the alignment of IT and business is vital to achieving the desired outcomes. By aligning IT initiatives with business goals in an effective and cost-conscious way, agency staff and management can reduce duplication, avoid costs, and improve service delivery performance. The positive and significant coefficients for IT-BUSINESS ALIGNMENT presented in Table 4 support this idea, as well as Polson's interview with e-government managers: the latter believed that e-government enables customer orientation when it is well-aligned with the strategy of departments.

E-GOVERNMENT SKILLS were also found to be an important factor, as they enabled the goals of e-government to be implemented. The results from the regression analyses supported the hypothesis that the higher the level of SKILLS a public agency was perceived to possess, the more effective the Korean bureaucrat respondents believed its e-services to be.

The PROCESS INNOVATION construct set two hypotheses: first, as more public agencies undergo reengineering using IT, better services can be provided with enhanced effectiveness. Second, the more integrated the public agency information systems get, the easier the sharing of information and service provision.

Controversially, the first hypothesis was rejected by the regression analyses in this study. There is a widespread belief that "e-government can be effective if it is adopted alongside business process reengineering, or BPR" (Asgarkhani, 2005: 158). That is, the mere automation of existing services does not necessarily produce the intended results. It is surprising, however, that few empirical studies have examined the relationship between BPR and e-government effectiveness. The regression analyses in this study failed to produce a significant coefficient for the relationship between BPR and the five dependent variables for effectiveness. This result was contrary to common belief, suggesting that further investigations of this matter should be conducted.

However, the PROCESS INNOVATION construct included another variable with a significantly large coefficient, implying a strong relationship with the government effectiveness and thereby supporting the second hypothesis: this variable was that of INTEROPERABILITY. This result was congruent with Akemi and Al Hujran's (2007) argument that interoperability across agencies presented great potential to fundamentally transform the way governmental bodies operate, share information and deliver services to internal and external stakeholders. Lallana (2008) also argued that interoperability could improve data-gathering and parsing techniques, resulting in faster decision-making based on accurate information, which in turn could lead to enhanced transparency and an overall improvement in governance quality.

- **External Factors**

External factors, such as politics and organizational environments, are often deemed crucial for the success of e-government and e-services. This study included four external variables—Political Commitment, Public Support, Vision, and Coordination—anticipating positive and significant relationships with governmental effectiveness. However, the empirical findings largely contradicted this expectation

Song (2007) praised the role of political leadership and vision in the developmental trajectory of Korea's e-government. Reviewing the relevant literature, Kim (2009) found that the active engagement of elected officials was essential to e-government. The latter can lead to the use of e-government tools and civic engagement, making e-government more citizen-oriented. Kim also provided empirical evidence for this, showing positive and significant coefficients for the variables of executive leadership and leaders' emphasis on management for results.

Contrary to the above, this study found insignificant coefficients for the politics-related variables, as shown in Table 4. This finding echoed Schedler and Schmidt (2004), who found insignificant relationships between political involvement and e-government implementation. The latter also found that the relationship between soft factors such as political leadership and e-government implementation was not large enough to be significant.

This kind of contradiction can be explained in two ways. First, the strong relationship between politics and e-government effectiveness may be a country-specific phenomenon, as Korea generally tends to centralize its administration in favor of promptness and effectiveness. Secondly, as Schedler and Schmidt reported, political involvement has an indirect impact. Analyzing a structural equation model, the authors found that political involvement affected managerial activities, which served as enablers themselves and had a direct impact on e-government effectiveness.

Differing from the politics-related variables, COORDINATION had a positive and significant relation with some of the effectiveness variables, including PSSP ("I think people are satisfied with the services provided by my agency") and CSNPI ("The civil servants in my agency are not politically influenced in their implementation of policies on a day-to-day basis"). In this study, COORDINATION was defined as the act of organization and of making different people or things work together towards a common purpose to fulfill the desired goals of the organization. This seems to be a rhetorical expression of good politics.

Overall, the impact of the external factors was subtle. Although they were certainly influential, this influence was not direct, as they did not combine or mutually interact with the COORDINATION, INTEROPERABILITY, and IT-BUSINESS ALIGNMENT.

• Non-Significant Results or Omitted Variables

Most of the agency factors and personal characteristics had weak relationships with the e-government effectiveness as perceived by the respondents. Goings et al. (2003: 4) undertook a study to understand key aspects of Web-based government services and surveyed technology executives about the potential for e-government services within their county concluding that federal governments were superior to the State in terms of e-services for citizens. This finding implied the existence of differences in the quality of e-government between different levels of government. The current study however found no significant differences between central and local governments in terms of e-government effectiveness. This study included the dummy variables for eight public entities in the regression analyses. None of these variables showed a significant difference.

Personal characteristics such as gender, age, and level of education were also considered as explanatory variables. The latter failed to present significant correlations with the effectiveness, which was consistent with Carrizales' findings (2008) that gender and age played no significant role in e-government. Variables such as the years of work or years of serving as a public officer did not show significant coefficients either. A similar result was found by Kim (2009), who reported that the respondents' years of work had little relation with their perception of e-government effectiveness.

CONCLUSION

Based on the realization that empirical evidence for Korean e-government's effectiveness was not abundant despite the large number of statements claiming so, this study aimed to explore the factors affecting e-government effectiveness. The results of the analyses of e-service providers' perceptions revealed many interesting findings.

First of all, internal factors such as ICT TOOLS, IT MANAGEMENT, and PROCESS INNOVATION had a greater impact on the e-government effectiveness than external factors, as the latter were believed to have a more indirect impact. Personal characteristics such as age, gender, level of education, and years of work did not affect the

differences in the perceptions of e-government effectiveness.

Second, Korean public bureaucrats perceived that traditional administrative issues such as BUSINESS ALIGNMENT, and COORDINATION, were the key factors in the enhancement of e-government effectiveness. The impact of these factors was perceived to be much greater than that of technology-oriented factors, such as ICT infrastructure availability, skills, and technology except for interoperability.

Third, and most interestingly, this study found several empirical results which ran contrary to common beliefs. For example, many commonly shared normative statements were not supported by the empirical results from the survey of Korean bureaucrats in this study. The hypotheses on the roles of political leadership, vision, and goals were rejected. Moreover, going against conventional wisdom, so was the impact of BPR. However, this study was not alone in finding these seemingly surprising results. Several previous studies have found results in line with this study. Further research is required on these issues.

Lastly, this study examined the impact of e-government on the perceived effectiveness among service providers. In doing so, it added valuable insights to the existing body of research in the field of e-government. However, it would also be more meaningful to simultaneously explore the perceptions of users and citizens, as few studies have considered the perspectives of both sides.

REFERENCES

Abdelsalam, H. M., Reddick, C. G., Elkadi, H. A., & Gama, S. (2012). Factors affecting perceived effectiveness of local e-government in Egypt. *International Journal of Information Communication Technologies and Human Development*, 4(1), 24-38.

Adam, I., & Fazekas, M. (2021). Are emerging technologies helping win the fight against corruption? A review of the state of the evidence. *Information Economics and Policy*, 57, 100950.

Alcaide-Muñoz, L., Hernández, A. M. L., & Caba-Pérez, C. (2014). Public managers' perceptions of e-government efficiency: A case study of Andalusian municipalities. In M. P. Rodríguez-Bolívar (Ed.), *Measuring e-government efficiency: The opinions of public administrators and other stakeholders* (pp. 135-156). New York, NY: Springer.

Andersen, T. B. (2009). E-government as an anti-corruption strategy. *Information Economics and Policy,* 21(3), 201-210.

Asgarkhani, M. (2005). The effectiveness of e-service in local government: A case study. *The Electronic Journal of e-government*, 3(4), 157-166.

Bhatnagar, S. C., & Singh, N. (2010). Assessing the impact of e-government: A study of projects in India. *Information Technologies & International Development*, 6(2), 109-127.

Bhatnagar, S. (2014). Public service delivery: Role of information and communication technology in improving governance and development impact. *ADB Economics Working Paper Series*, 391.

Carrizales, T. (2008). Critical factors in an electronic democracy: A study of municipal managers. *Electronic Journal of e-Government*, 6(1), 23-30.

Colesca, S. E. (2009). Increasing e-trust: A solution to minimize risk in e-government adoption. *Journal of Applied Quantitative Methods*, 4(1), 31-44.

Cuillier, D., & Piotrowski, S. J. (2009). Internet information-seeking and its relation to support for access to government records. *Government Information Quarterly*, 26(3), 441-449.

Curtin, G. (2007). E-government. In L. L. Kaid & C. Holtz-Bacha (Eds.), *Encyclopedia of Political Communication* (Vol. 1, pp. 200-205). Thousand Oaks, CA: SAGE Publications.

Davis, M. C., Challenger, R., Jayewardene, D. N. W., & Clegg, C. W. (2014). Advancing socio-technical systems thinking: A call for bravery. *Applied Ergonomics*, 45(2), 171-180.

DiCaterino, A., & Pardo, T. A. (Eds.). (1996). *Overview: The World Wide Web as a universal interface to government services.* Albany, NY: Center for Technology in Government.

European Commission. (2014). *Study on eGovernment and the reduction of administrative burden*. European Union.

European Communities. (2017). *The New Interoperability Framework*. ISA^2 - Interoperability solutions for public administrations, businesses, and

citizens.

Goings, D. A., Young, D., & Hendry, S. H. (2003). Critical factors in the delivery of e-government services: Perceptions of technology executives. *Communications of the International Information Management Association*, 3(3), 1-15.

Heeks, R. (2001). *Understanding e-Government for Development*. i-Government Working Paper No 11. Institute for Development Policy and Management. University of Manchester.

Korea Customs Service. (2024, February 20). *Future of Korean Custom Service Data Service*. Daejeon, South Korea: Korea Customs Service.

Kim, S. (2009). A case study of local e-government performance in South Korea: Do leadership and management for results matter? *International Public Management Review*, 10(1), 170-199.

Kumar, V., Mukerji, B., Butt, I., & Persaud, A. (2007). Factors for successful e-government adoption: A conceptual framework. *Electronic Journal of e-Government*, 5(1), 63-76.

Lallana, E. C. (2008). *e-Government interoperability*. Bangkok, Thailand: United Nations Development Programme.

Luftman, J., Kempaiah, R., & Nash, E. (2006). Key issues for IT executives 2005. *MIS Quarterly Executive*, 5(2), 81-99.

Mbabazi, G. (2015). *The perceived impact of e-government upon the quality of government* [Doctoral dissertation]. Yonsei University.

McClure, D. L. (2000). *Electronic government: Federal initiatives are evolving rapidly but they face significant challenges*. United States General Accounting Office. Retrieved from http://www.gao.gov/assets/110/108459.pdf.

Mohale, C. (2024). The role of e-government in the promotion of municipal service delivery in South Africa. *International Journal of Social Science Research and Review*, 7(3), 1-19.

Moon, M. J. (2002). The evolution of e-government among municipalities: Rhetoric or reality? *Public Administration Review*, 62(4), 424-433.

Nograšek, J. (2011). Change management as a critical success factor in e-government implementation. *Business Systems Research*, 2(2), 1-56.

Polson, H., & Theivananthampillai, P. (2009). *Customer orientation in e-government: The managers' perspectives*. SSRN. Retrieved from http://ssrn.com/abstract=1441648.

Reddick, C. G., & Frank, H. A. (2007). The perceived impacts of e-government on U.S. cities: A survey of Florida and Texas City managers. *Government Information Quarterly,* 24(3), 576-594.

Schedler, K., & Schmidt, B. (2004). Managing the e-government organization. *International Public Management Review*, 5(1), 1-20.

Schware, R. (Ed.). (2005). *E-development: from excitement to effectiveness*. Washington, D.C.: The World Bank Group.

Song, H. J. (2008). *E-government of Korea: Achievements and Tasks*. Seoul: Ewha Womans University.

Susanto, T. D. & Goodwin, R. (2010). Factors influencing citizen adoption of SMS-based e-government services. *Electronic Journal of e-Government*, 8(1), 55-71.

Taylor, J. (2010). *Maximizing the effectiveness of government with analytics*. Decision Management Solutions. Retrieved from http://www.decisionmanagementsolutions.com.

Wimmer, M. A. (2002). A European perspective towards online one-stop government: The eGOV project. *Electronic Commerce Research and Applications*, 1(1), 92-103.

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전자정부가 정부 효과성에 미치는 인식된 영향: 한국 정부 관료들의 관점을 중심으로

Godfrey Mbabazi

Public policy and Governance Department, International University of East Africa (Uganda)

정부 효율성은 오랫동안 학자들, 기관들, 그리고 여러 정부들 사이에서 관심사였습니다. 정부 운영의 비효율성은 종종 공공 서비스 이용자들에게 중대한 비용 부과를 초래합니다. 본 논문은 대한민국 공직자들이 가지는 '전자 정부가 정부 효율성에 미칠 잠재적 영향'에 대한 인식을 경험적으로 검토했습니다. 연구 결과, 이러한 공직자들은 ICT, IT 관리, 그리고 프로세스 혁신과 같은 내부 전자 정부 요소가 정부 효율성을 크게 향상시킨다고 믿습니다. 또한, 사업적 조정과 조화 같은 전통적 구성 요소가 ICT 인프라 보급과 기술적 기술보다 전자 정부 성공에 더 중요하다고 여겨집니다. 흥미롭게도, 연구는 정치적 리더십, 비전, 목표, 그리고 업무 프로세스 개편(BPR)이 전자 정부 효율성에 직접적인 영향을 미치지 않는다는 결과를 발견했습니다.

주제어: 전자 정부, 정부 효율성, 공직자, 지각된 영향

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Corresponding Author
Godfrey Mbabazi
Public policy and Governance Department, International University of East Africa (Uganda)
E-mail: mbabazi.godfrey@iuea.ac.ug / ezrah9@gmail.com

저자

Godfrey Mbabazi

Mbabazi Godfrey is an Expert in Public policy and Governance with a Masters & PhD: Public Administration, Yonsei University, South Korea.
He is also a Senior Lecturer at the Faculty of Business and Management at the International University of East Africa; Where he heads the Department of Research, and other administrative duties.
Email: mbabazi.godfrey@iuea.ac.ug / ezrah9@gmail.com