Chapter 17
Digital Government in the US Local Government:
An Evaluation Study of North Carolina County Government

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ABSTRACT

This chapter provides a comprehensive assessment of the current practice of digital government in North Carolina local government by applying a comprehensive evaluative matrix to county websites. The evaluation encompasses key aspects of security and privacy, usability, content, service, and citizen participation, especially the use of social media by county government. In addition to ranking county websites based on each component of the evaluative scores, social and economic conditions of counties are used as predictors for the performance of these websites in regression analysis in identifying high performing and underperforming counties. The study finds that there are significant disparities between rural and urban counties in the development of e-governance, with some counties achieved better than expected. It concludes by discussing the implications and generalizability of the research findings and the limitations of this study as well as future research in US local digital government.

INTRODUCTION

With the emergence of artificial intelligence, or A.I., there seems to be another wave of revolution in information technology which can potentially have profound impacts on the provision of government services and the discourse on policy making. While the application and diffusion of these emerging technologies are still yet to clear various legal and technological obstacles in the United States federal government, local government might be in a better position to pilot and adopt some of these technologies. However, local government, while more agile and responsive, may also be constrained by its limited fiscal resources and technical capacities. It is yet to gain more knowledge on how local government,

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especially those smaller units, has reacted to these opportunities in providing its online services and interacting with citizens in policy decision making through information and communication technologies.

This chapter aims at providing a comprehensive assessment of e-government development in local government in the US by holistically evaluating the key elements of county websites in a southern state, with a focus on the applications of social media. Specifically, the assessment applies the Rutgers E-Governance Institute's e-government evaluative matrix in rating five key components of county government websites in North Carolina – privacy and security, usability, content, service, and citizen participation. The results of the evaluations are analyzed and used to identify key trends and factors that influenced the development of e-government in current local government. Potential solutions to address the barriers to e-government development and digital divide are also discussed.

THE EVOLUTION OF LOCAL E-GOVERNMENT IN THE US

The development of e-government in the US local government is impressive, with relatively faster adoption and implementation as compared some other countries. By 2019 the availability of e-government is almost universal among local government, with more cities offered more e-government services more consistently (Epstein, 2022). In state and local government services, services that traditionally had to be processed through paper forms and physical presence have been replaced with online digital forms, emails, chat boxes, and moderated or automated virtual meetings. However, there are also significant disparities in access to e-government which concern both policy makers and academics. In fact, there are persistent digital divides between urban and rural areas and social-economic groups that can contribute to the disparities in the development in e-government (Vogels, 2021; Atske & Perrin, 2021).

Accordingly, the concept of e-government has constantly evolved over the past two decades to reflect the advancements in both information and communication technologies (ICTs) and the progresses and increased expectations of the applications of ICTs in the public sector. For instance, a definition of e-government as "government use of information technology, particularly Web-based Internet applications, to enhance delivery of information and services to employees and agencies within government and to citizens and business partners" in the early 2000s may seem obsolete because it fails to encompass the interactive online features that have been generally made available in local government (Schelin, 2002). There is also an increased focus on the democratic and transformative effect of e-government. As a result, e-governance, which goes beyond the informational and transactional aspects of government-citizen relationship, has been a more popular term to the study of e-government.

Stages of Local E-government Development

There are numerous studies on municipal e-government in the US and the rest of the world. The evolutionary approach to assess local e-government development has been popular. Among these studies, the most noticeable ones may include the works of Moon (2002), Manoharan (2013), and several others. For instance, Moon (2002) in his seminal study of municipal government of the US developed a primitive stages model which includes (1) simple information dissemination (one-way communication); (2) two-way communication (request and response); (3) service and financial transactions; (4) integration (horizontal and vertical integration); and (5) political participation. However, there are only a few studies that apply this approach to county government. For instance, Manoharan (2013) in this