The circular continuum of agencies, public libraries, and users: A model of e-government in practice

Natalie Greene Taylor *, Paul T. Jaeger, Ursula Gorham, John Carlo Bertot, Ruth Lincoln, Elizabeth Larson

Information Policy & Access Center, University of Maryland, College Park, Room 4105 Hornbake Bldg, South Wing, College Park, MD 20742, USA

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ABSTRACT

When e-government first became a viable solution to the dissemination of government information, experts believed that the rise of direct government-to-citizen (G2C) services would improve government transparency, foster civic engagement, and offer new and innovative service possibilities. It soon became clear, however, that not all users received the type of information, instruction, or services that they needed through this arrangement, giving rise to the need for an intermediary in this continuum of interaction. Increasingly, public libraries fulfill this role. Instead of direct government-to-user interaction, government information and services flow through channels from agency to public librarian to user, from user back up to agency, and from agency to user to public librarian. Based upon research conducted in collaboration with public libraries, government agencies, state library agencies, and a national library association in the United States, this paper expands on the idea of these multiple pathways of information and services, offering a practical model of e-government.

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1. Introduction

In the early stages of e-government, expectations ranged from cautious optimism to the belief that e-government would promote unprecedented waves of citizen interaction with the government. These government-to-citizen (G2C) services were expected to cut out information middle-men and let users interact directly with their government.[1] In the United States, however, it soon became clear that users were not getting the type of instruction, information, or services that they needed from this arrangement. Government agencies were not soliciting user input in developing services, feedback was not a priority, evaluation data was almost non-existent, and users identified a variety of access issues that kept them from fully engaging with the services (Bertot, Jaeger, & McClure, 2008). Increasingly, public librarians found that they were serving as the intermediary for the government in this continuum of services. In addition, users were communicating their frustrations, concerns, and suggestions related to government information to these public librarians, instead of the government directly. Rather than the government speaking directly to users, it became the librarian's job to disseminate information, assist patrons with form completion, or engage in other aspects of e-government, often without the guidance of the government agencies from which the information or service originated. The inclusion of librarians as intermediaries marks a departure from G2C e-government services, and this paper explores two main research questions raised by this development: 1) what are the different pathways of information in the context of e-government? and 2) what implications do these pathways have on e-government services and systems?

Based on a multi-method approach using informal interviews, site visits, and survey data, the authors propose a model representing a circular flow in which information related to e-government services travels from agency to librarian to user, from user back up to agency, and from agency to user to librarian. After outlining the different information flows that are represented in this model, the authors detail how this model guided the development of online engagement platform to foster innovative collaborations among public libraries and government agencies. This paper focuses on public libraries in the United States; however, to the extent that other entities in this country and abroad act as intermediaries in the flow of e-government information and services, this model has broader implications for the design of e-government services and the dissemination of government information.

2. Literature review

To lay the foundation for the model proposed in this paper, two closely related threads of e-government research – the development of e-government services in the United States and the role of public libraries in providing these services – will be examined here.

* Corresponding author.
  E-mail addresses: ngreenetaylor@gmail.com (N.G. Taylor), pjaeger@umd.edu (P.T. Jaeger), ugorham@umd.edu (U. Gorham), Zjbertot@umd.edu (J.C. Bertot), rlincoln21@gmail.com (R. Lincoln), elarson3@umd.edu (E. Larson).

[1] It is important to note that the term "Government-to-Citizen" is one historically used in e-government research. In this paper, outside of direct references to prior research, we have used the term "user" instead, acknowledging the individuals in need of government information who may not have citizen status. The term "user" thus refers to individuals who are either actively accessing government information or are attempting to do so.

Government Entities	- Create content - Mandate use (e.g. Electronic Data Procurement processes) - Disseminate information via electronic media (e.g. websites, social media)
Non-Governmental Organizations	- Disseminate information - Analyze information and re-release for community needs - Fund programs that tailor e-government content to needs of users
Public Libraries	- Provide information for community - Offer personalized help to users - Provide public access to technology - Possess knowledge of users that can inform content creation
Businesses	- Provide knowledge of user base (based on consumer information) - Provide funding and other resources for projects that can benefit the community
Users	- Provide feedback to content creators about effectiveness of dissemination - Possess the needs that determine strategies of content developers and providers

Fig. 1. Stakeholders in e-government dissemination — roles and responsibilities.

2.1. E-government in the U.S.: A history

Since the advent of the World Wide Web in the mid-1990s, there has been a surge in the use of e-government by federal, state, and local governments to deliver information, communication, and services to users, with much of this content and services now available only online. As e-government has matured into a dynamic socio-technical system encompassing issues of governance, societal trends, technological change, information management, interaction, and human factors (Dawes, 2009), G2C, or government-to-citizen service, has become one of the central uses of e-government (Evans & Yen, 2006; Reddick, 2004). Democratic governance relies on access to the government by citizens (Schudson, 1997), resulting in G2C information, communication, and services holding significant potential not only for facilitating interactions, but also for promoting democracy.

In the United States, G2C e-government services are now used as a means to address a wide range of user needs — unemployment benefits, voter registration, license application and renewal, tax payments, enrollment of children in school, immigration and citizenship, and many similarly important functions (Bertot, McClure, & Jaeger, 2008; Gibson, Bertot, & McClure, 2009; Holt & Holt, 2010). As evidenced by this broad overview of e-government topics, it is clear that this information intersects with almost every facet of everyday life. Within the context of e-government, however, government information does not always flow directly from the source to the user. As shown in Fig. 1,[2] other stakeholders have key roles and responsibilities in the e-government process.

The growing involvement of intermediaries in G2C government coincides with users' increased need for e-government access. In 2003, a report issued by the Congressional Research Service identified G2C government as "initiatives [that] are designed to facilitate citizen interaction with government" (Seifert, 2003, p. 8). One marker of early G2C literature was that accessing government information online was deemed voluntary: "citizen use of a Web-based state government service is an individual choice and is not likely to be mandated" (Carter & Belanger, 2004, p. 3). This is quickly becoming an outdated assumption, however, as government agencies are already shifting from viewing e-government as their primary method for interacting with

members of the public (Bertot & Jaeger, 2006, 2008; Bertot, Jaeger, Shuler, Simmons, & Grimes, 2009; Ebbers, Pieterson, & Noordman, 2008; Streib & Navarro, 2006) to making government forms and services available exclusively online.

This transition poses a problem because G2C services do not always make life simple for users. In fact, from the agency perspective, the focus has often been on making the interactions easier and more cost-effective for the agency, rather than increasing access for members of the public (Jaeger & Bertot, 2010, 2011). A clear example of this situation was demonstrated by the Medicare Part D enrollment program in 2006, which required senior citizens – a group with large gaps in usage of the internet – to examine the different plans and sign up for one online (Jaeger, 2008).

The need to use e-government presents challenges for many members of the public because they lack the technical skills to use the online functions, lack sufficient internet access, or are uncomfortable engaging in online interactions without guidance (Bertot, Jaeger, Langa, & McClure, 2006a, 2006b). In many locations in the United States, a lack of available computers, low levels of internet access, and low levels of basic telecommunications infrastructure, continue to serve as barriers to access. Twenty percent (20%) of adults in the United States do not use the internet (Zickuhr & Smith, 2012). Among internet users, there is disparity as to the type of access available – only seventy percent (70%) have broadband access (which is necessary for most online activities, including certain types of social media) at home, while three percent (3%) still rely on dial-up service (Zickuhr & Smith, 2013). Lack of access to technology is not the only barrier to G2C e-government. Even if the technological infrastructure is in place, access to e-government services is often limited by difficulties in searching for and locating the desired information, a general lack of familiarity with the structure of government, lack of education about the value of e-government, language barriers, and attitudes toward technology and government among many users (Jaeger & Thompson, 2003, 2004).

2.2. The role of libraries in e-government

Paralleling the rise of the Web and e-government, public libraries in the United States quickly became providers of free public access to the internet, with virtually every public library already offering public access by the year 2002 (Bertot, 2011; Jaeger & Bertot, 2011). Throughout the intervening years, the public library has served as the primary – and often only available – access point for G2C access, training, and assistance in communities across the country (Bertot, 2009). In some

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[2] The model proposed in this paper incorporates three of these stakeholders — the government agencies that engage in e-government interactions, public libraries that act as intermediaries, and users. As noted in Section 5, however, further research is needed to understand how the other stakeholders identified here impact the dissemination of e-government services and information.