

## Susman – Use of Technology by Government

In the modern age, all governments are constantly challenged to provide more services while at the same time operating with ever constrained budgets (Harris, 2007). Governments turn to technology to help meet these service needs and overcome traditional government bureaucracy shortcomings of routinization and departmentalization (Porumbescu, 2017). In this context, use of technology by the public sector is commonly referred to as “e-Government” (Silcock, 2001, p. 88).

While there is no definitively accepted definition of e-Government, the term is used to describe the use of the internet and other “information and communication technologies” or ICTs to improve the improve or enhance the provision of government services to its various constituents and to improve or enhance governance in general (Chen & Hsieh, 2009, p. S151). While not a cure all for all government ills, with the proper application the use of technology as a tool does help government better perform its role and meet the needs of its citizens (Porumbescu, 2017).

Many see e-Government as having the ability to completely transform or reinvent the way government operates (Silcock, 2001, p. 100). The ability to reach this transformation requires the government’s use of ICTs to progress through various maturity stages. West (2004) lists four stages e-Government of maturity (p. 17). Silcock (2001) lists six stages of e-Government maturity (p. 89). Regardless of which scale is used, the success of e-Government is commonly based on the assessing what maturity stage the applicable e-Government initiative has reached. While many see e-Government as falling short of its potential to bring about transformative change, it has successfully progressed through the initial stages of development (Weerakkody, Dhillon, Dwivedi, & Currie, 2008, p. 1). Specifically, e-Government is routinely used to provide greater access to more information and for the delivery of some government services (West, 2004, p. 24).

However, rather than seeing the progression as a linear step-by-step process, with the one end goal being government transformation, it is better to view the different applications of e-Government as part of two different models or paradigms. The two paradigms are: (1) government centric; (2) citizen centric approach (Porumbescu, 2017). Under a government

centric approach, the focus is using ICTs to enhance the internal workings of government to increase efficiency, increase information availability and access, and provide better service delivery (Porumbescu, 2017). Under a citizen centric approach, the focus is using ICTs to enhance the external workings of government to increase citizen participation and create e-democracy (Porumbescu, 2017). Viewing the current state against these two paradigms, the applications of e-Government are currently primarily government centric (Im, Porumbescu, & Lee, 2013, p. 442).

To understand why the focus has predominantly been on government centric applications of e-Government, one must understand the political context in which e-Government applications are implemented (Porumbescu, 2017). Government centric applications allow more incremental changes rather than transformative changes (Im, Porumbescu, & Lee, 2013, p. 441).

Transformative change is significantly more complex, involves more barriers, and is more prone to failure than incremental process change (Harris, 2007). Absent some type of catalyst to cause the need to reengineer all business processes, such as \$54 million fraud in Dixon, Ill., the public sector rarely embraces transformative change (Pope, 2013). In general, the public sector is risk adverse and subject to change incrementally rather than dramatic transformations (Porumbescu, 2017). Further, by implementing e-Government applications from a government centric perspective, the government bureaucracy is able to maintain some of its autonomy as well as its expertise (Porumbescu, 2017). Given these reasons, it is understandable why government centric applications are the most common approaches to e-Government.

Political considerations are not, however, the only considerations. As research by Moon and Norris (2005) shows, managerial orientation and size are also strong indicators of adoption and advances in e-Government (pp. 53-54). Depending on factors such as managerial orientation to innovation and managerial commitment to service integration, government centric approaches to e-Government do not foreclose focusing on citizen centric applications as well (Chen, 2010, p. 437). In fact, Reddick (2011) in his study of the use of customer relationship management (CRM) technology found that both citizen centric (i.e., e-Government) principles and government centric (i.e., bureaucratic) principles were responsible for organizational change and adoption of technologies (p. 352).

Under government centric applications, e-Government is implemented to enhance efficiency of operations, standardize service delivery, provide cost savings, improve workflows, and increase productivity (Reddick, 2011, p. 348). Under citizen centric applications, e-Government is implemented to increase government accountability, increase information sharing, promote teamwork, increase management effectiveness, and improve organizational performance (Reddick, 2011, p. 348). As shown from this listing, e-Government is being implemented to help governments manage the ever-growing demands on them.

The need for adoption of e-Government applications, regardless of which approach is used, a government centric approach or a citizen centric approach, is now required for government (Gupta & Jana, 2003, p. 365). Through e-Government applications, internal efficiencies have increased by better organizing and process of information as well as increased communications between departments (Porumbescu, 2017). Externally, for citizens information and service delivery are more accessible. Additionally, increased access to information and services has increased transparency which in turn helps legitimize bureaucracy by making it more accountable to the public (Porumbescu, 2017).

This increase in transparency is one of the most important enhancements brought about by the application of e-Government. Porumbescu (2017) defines transparency as “information that facilitates external actors’ ability to monitor the internal workings or performance of government.” Under this definition, transparency may be viewed from the citizen’s perspective or the government’s perspective (Porumbescu, 2017). Under the citizen perspective, the more information available to citizens the better able they are to make decisions and steer government performance (Porumbescu, 2017). Better access to information (assuming such information is non-biased and factual) is also able to protect against misinformation (Porumbescu, 2017). Under a government perspective, increased access to information and, therefore, increased transparency makes government more accountable (Porumbescu, 2017). Ideally, the increased access to information provides greater transparency resulting in greater accountability and ultimately greater responsiveness (Porumbescu, 2017). For these results, however, it is necessary to gear information delivery using a citizen perspective and to match the correct technology and platform to the information being provided (Porumbescu, 2017).

e-Government has improved governance, enhanced service delivery, and helped provide more equitable access. E-Government, however, has not reached its full potential. It is also important to remember in assessing e-Government, technology is a tool (Porumbescu, 2017). As such, it may be used not only to enhance services and governance, but also to help maintain the status quo (Im, Porumbescu, & Lee, 2013, p. 436). This double use is shown in the studies of the Dasan Call Center (Im, Porumbescu, & Lee, 2013, p. 450). While one use of the Dasan Call Center was to maintain the status quo and to serve as a buffer against external accountability, another use fostered increased internal and external accountability (Im, Porumbescu, & Lee, 2013, pp. 450-451).

As described above, while some applications of e-Government are used to maintain the status quo, others are helping to better and more equitably serve the public. Even with the current predominately government centric application of e-Government, management is using those applications to help ensure more efficient, effective, and equitable service delivery. Additionally, these current e-Government uses have laid the groundwork for leadership to undertake more citizen centric applications (Chen, 2010, p. 437). With these foundations and the further catalyst of the pandemic, government applications of technology will continue to positively transform government services and their delivery.

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