The way government operates is changing. Just as the business sector tapped into technology to change how it interacts with its customers, government is finding ways to better serve its customers. The key to this improved service is egovernment - the process of delivering information and processing government transactions digitally through web, phone, mobile, and point-of-purchase channels.

Beginning with the launch of eUtah.org in 1999, the state of Utah has proactively developed new online services to meet the demand of both citizens and businesses. Today, Utah.gov offers more than 1,000 online services. Examples are easy to come by when describing egovernment services – renewing car registrations, ordering birth certificates, or filing income taxes online are just a few.

**Study Design**

As the state has experienced tremendous growth in both the number of services it offers through Utah.gov and the number of visitors to the state website, it is valuable to determine the financial benefits to agencies and thus to the state and its taxpayers.

The 25 online services with the highest transaction totals are used as a gauge for this research. The services selected were based on the 2010 Utah.gov Online Service Report provided by the Utah Department of Technology Services. Data was requested from the respective agencies for the 25 services; however, agencies were able to provide adequate data for 19 of the services (see Table 1 for the list of services included in the study). CPPA's methodology included collection and analysis of data for a five-year period from FY 2007 to FY 2011.

**Benefits**

There are a number of potential benefits of online services for consumers, businesses, and government, this report provides an analysis and evaluation of the financial benefit realized in a specific form – cost avoidance. The benefits primarily occur in the costs avoided by agencies for staff and various variable and fixed items.

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Subsequently changed to utah.gov.

Cost avoidance can be simply defined as the cumulative difference between the costs of providing a service online and the costs for providing the same service offline (i.e., in person at a government office, by phone, or by mail). The findings of the cost avoidance analysis indicate that Utah has avoided significant expenses by providing services in an online format. Though only a limited number of Utah online services were analyzed, they alone produced a cost avoidance of millions.

**Cost Avoidance over 5 Years**

Calculating cost avoidance resulting from conversion of services to an online format is not an easy task.\(^\text{iii}\) The total cost avoidance is the product of the number of online transactions demanded and the cost avoidance per transaction as reported by each agency (transaction demand × cost avoidance = cost avoidance).

For example, if service A had a transaction demand of 2,000 over a five year period and the cost avoidance for this online service was $10 per transaction, the total cost avoidance for this service was $20,000. This is still a conservative estimate of dollars of cost avoidance because it is unlikely that another delivery method for offline transactions could be implemented that matched the same constituent-perceived quality and price of the online portals for the same or lower cost as the offline transactions.

The findings of the cost avoidance analysis indicate that Utah has avoided significant expenses by providing services in an online format. For the nine

\(^{\text{iii}}\)Inherently, there are differences in the constituents' perceptions of quality (convenience, efficiency, etc.) and price (actual transaction price coupled with the reduced time required to complete the transaction) between online and offline delivery of services. Any model used to derive the cost avoidance must rely on assumptions about the substitutability of the offline for the online service. This study takes an approach that assumes that each agency had some offline means of delivering services that the constituents perceived as identical in quality and price to the online services. Because there is no way of objectively estimating a ceteris paribus level of offline transactions assuming the program was never offered online, the study assumes that leaders would have decided to strive for the same level of constituent services provided by the online portals by using some other delivery method. If they had been able to achieve that same level of constituent-perceived quality and price, then it would follow that the level of transaction demand would be identical to the actual demand levels for online transactions from FY2007 to FY2008.
financial savings
By moving nine services to online, Utah avoided up to $45,911,391 in costs over five years.

$46M

services used in the study, a cost avoidance of nearly $46 million is seen over a five year period.\textsuperscript{iv} Considering the hundreds of other online services provided by the state, it is expected that the savings are even greater.

Online vs. Offline Format
A number of services offered through Utah.gov are available in both an online and offline format. In general, the cost for providing the services in an online format is less for the agency than providing the services in an offline format.

In a cost comparison between online and offline formats, nine services have a lower per transaction cost for online services, while four services see a higher online cost for each transaction.\textsuperscript{v} The average cost (per transaction) for these agencies to provide the service online is $3.91; to provide the same services offline, the average cost is $17.11 - a difference of $13.20 per transaction.

Self-Funded Model
Many state agencies in Utah work with an independent contractor, such as NIC’s Utah Interactive subsidiary, and use a self-funded model to fund the online services. There are two basic components of the self-funded model. The first involves modest user efficiency fees or transaction fees that are added to a select number of transactions. These efficiency fees cover a private sector provider’s costs to build, manage, and enhance eGovernment services across the state. The second form of the self-funded model involves an independent contractor who simply provides the service at no cost to the agency or the consumer. An example is the online voter registration service provided for the Lieutenant Governor’s office by NIC’s Utah Interactive. Although not included as one of the services analyzed in this study, Utah Interactive provides online voter registration services for the Lieutenant Governor’s office free of charge.

As a result of this model, Utah and other states use the self-funded model to provide eGovernment services without requiring the use of Legislative appropriations.\textsuperscript{vi}

\textsuperscript{iv} Data was requested from agencies for all 25 services; however, agencies provided data to analyze the cost avoidance for nine services. The remaining services did not have data, had inadequate data, or did not have an offline format of the service.

\textsuperscript{v} Data was requested for all 25 services; however, adequate data to complete a cost comparison between online and offline services was only provided for 13 services.

\textsuperscript{vi} Developed by NIC, the self-funded model allows governments to offer eGovernment services without using upfront taxpayer funds. The self-funded model may or may not include a transaction fee charged to the consumer. NIC collects a nominal transaction fee for a limited number of high-volume applications to cover the costs of building and managing thousands of online services on behalf of federal, state, and local governments across the country.
Utah Interactive provides more than 600 online services for the state of Utah through Utah.gov. The vast majority of these services (86%) are not financially self-sustaining. Under the self-funded model, Utah Interactive incurs direct costs for building, managing and maintaining the Utah.gov portal and hundreds of online services. These costs include the following: 1) information technology; 2) project management and marketing costs; 3) utah.gov management and customer services; and 4) other operational administrative costs.

The estimated costs for providing these services under the self-funded model are approximately $15 million. These are costs that the state of Utah would have likely spent to deliver a comparable in-house portal solution, but has avoided because it uses NIC’s services under the self-funded model. This self-funded cost avoidance calculation is in addition to the $46 million cost avoidance noted above – provided an estimated combined avoidance of $61 million.

**Conclusion**

eGovernment has a positive track record in the state of Utah. The growth in eGovernment services is significant and equaled by the high level of use by citizens and business. In 2011, the number of average monthly visitors to Utah.gov was nearly 1.3 million. These individuals and businesses accessed a wide range of services such as license renewals, business filings, and tax payments. Without question, Utah’s tech-savvy citizens are using the Utah.gov portal increasingly as their first point of contact for state information and services.

As technology changes and the digital divide disappears, governments throughout the nation are finding more reasons to provide services online. The potential benefits of e-Government for citizens are numerous, such as saving time and money, ease of use, and convenience of accessing services 24 hours a day, 7 days a week. Beyond these benefits, eGovernment produces significant cost savings for state agencies.

For both government and citizens, eGovernment is a smart choice.
financial savings
The cost savings from moving only nine of Utah’s services online was approximately $46 million over five years.

1000+ online services
The state avoided over $15 million in costs, over 5 years, by using a self-funded model.

average service costs
The average cost per transaction to provide a service online is $3.91 compared to $17.11 to provide the service offline - a difference of $13.20 per transaction.

Smarter eGovernment
The Economics of Online Services in Utah

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