# How Government Can Thrive in the Digital Economy

**INDUSTRY PERSPECTIVE** 



### **Executive Summary**

Government agencies depend on actionable data to make mission-critical decisions about the services they provide, how citizens and employees use and interact with those services, and how they can continually improve operations.

Sometimes insights come from internal datasets that agencies have collected for months or even years. But more agencies are taking advantage of the proliferation of new data sources that give them a deeper understanding of their customers and preferences, such as online shopping habits and overall internet usage.

For agencies, economic trend data from organizations such as Adobe can bring greater perspective and diversity to their existing analyses of operations and the citizens they serve. For example, data has shown that the way citizens want to interact with agencies is very similar to the way they expect to interact with brands in the private sector. But to meet those expectations, agencies need to tap into the power of data and analytics for actionable insights. They also need to think outside the box about what data sources they rely on.

To help agencies explore new options for gathering, collecting and analyzing data, GovLoop partnered with Adobe for this report. In the following pages, you'll learn how Adobe is working to help government agencies take advantage of big data through its Digital Economy Project and what the overall effort entails.

To begin, we'll explain what the Adobe Digital Economy Project is and how it can help agencies enhance data-based decision-making.

## The Digital Economy Project

There is no shortage of data available today, but it can be challenging to determine which data is relevant, and then interpret it. As the number of data sources grows, it becomes more difficult to efficiently, affordably and consistently capture this data, especially on a national or international scale.

Adobe's Digital Economy Project is working to change that. As part of this initiative, Adobe uses data, updated daily, that it aggregates and analyzes about consumers' online spending. As online spending becomes an increasingly large driver of the economy, these transactions become a more reliable source to spot pricing trends, inflation, consumer behavior and more.

This effort enables Adobe to provide a deeper level of insight into digital transactions than is currently publicly available. Through the project, agencies can harness big data to understand economic trends in an accurate and timely manner. The project's core goal is to add insight to current economic discussions using dynamic, responsive data about the digital economy.

A key part of the project is the Adobe Digital Index, which publishes research on digital marketing trends and the economic landscape based on studies by a group of Adobe data scientists and researchers. This information comes from anonymized data aggregated from thousands of websites worldwide.

"Adobe Analytics sits on top of about 75 percent of the sales that go on in retail online," Adobe Digital Insights Director Taylor Schreiner said during a presentation at the 2017 Adobe Digital Government Symposium.

This massive volume of data can provide insights that give government agencies a better understanding of how citizens interact with websites and online entities.

The research is based on the analysis of select, anonymous and aggregated data from more than 5,000 companies worldwide that use Adobe Analytics Cloud, part of Adobe Experience Cloud obtain real-time data and analysis of activity on websites, social media and advertising.

Twenty of the top 30 employers and nine of the 10 largest hotel groups are among the users that rely on Adobe Experience Cloud, Schreiner said. Working closely with such a vast array of clients gives Adobe unique perspectives and data that can benefit agencies and other companies.

The impetus for the Adobe Digital Economy Project was making use of the company's existing data in a way that would be valuable to a wider audience, such as government agencies. "We had data in a secure and safe form but didn't have a product," Schreiner said. Through various engagement efforts, Adobe began to understand what data was missing in the marketplace and began publishing its insights.

The Digital Economy Project regularly reports on trends in about 20 categories, including apparel, computers and groceries. Because the transactions occur online, Adobe can compare pricing online to offline channels, proving a new layer of insight. Adobe can also track how digital prices shift.

These are key statistics that physical and online retailers need to know, but how does the Digital Economy Project benefit government?

In the next section, we explain how the Digital Economy Project is turning cloud-based data into state, national and international insights that agencies can use.



# How the Digital Economy Project Benefits Government

Findings about inflation or deflation and online vs. offline purchasing behaviors are guideposts that private firms regularly use to determine their strategies.

Although this information can provide useful indicators about current economic trends, they may not be statistics that government employees rely on to do their jobs. But that hasn't stopped government workers from seeing value in Adobe's Digital Economy Project and how they can tailor it to meet their needs.

"What we can provide is context," Schreiner said. For example, Adobe's analytics capabilities provide a more holistic view of citizens' digital experiences across multiple websites, compared with the view that a single government agency may be able to capture about the way citizens interact with its websites.

A growing number of agencies are tracking citizen engagement, and building trust in government services using citizen-facing apps and other digital applications that make it easier for people to complete tasks. But what happens when government data lacks the context of larger national trends on citizen digital engagement?

For instance, an agency's data may show that most users access .gov websites using desktop computers rather than mobile devices and that they're spending more time on those websites than in previous months. The agency may conclude from this data that citizens prefer using desktop computers and are highly engaged with the content. But without proper context, the agency could be making assumptions based on incomplete information.

According to national trends collected by Adobe Analytics Cloud, since 2014 there has been a surge in website visits on smartphones, and this has come largely at the expense of visits on desktops or tablet devices. If mobile adoption continues at the current rate, desktops will eventually become a secondary option for people who are having problems with the mobile experience, Schreiner said.

Citizens are becoming more technologically savvy and demanding faster access to information. So if they are using a desktop to get to your website, and spending more time navigating the site, it is worth investigating if they are being forced to use a desktop because the mobile experience is subpar. It is also worth exploring whether visitors to your site are actually able to find or do what they need.

"People spend a lot of time on sites that are badly designed, but on well-designed sites they spend 15 [percent] to 20 percent less time getting done what they need to do," Schreiner said. They can easily figure out what they want to do and do it faster.

This is the type of context that Adobe can provide agencies through analytics, because it is able to look across multiple data sources to tell a complete story about what is happening and why.

Agencies such as the Federal Reserve and the United Kingdom's Office for National Statistics have shown interest in the work Adobe is doing to measure and track the digital economy.

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TAYLOR SCHREINER
ADOBE DIGITAL INSIGHTS DIRECTOR



## Adobe's Approach to Insights

Using its analytics capabilities, Adobe can help agencies see actionable information to optimize digital interactions and provide streamlined services.

Adobe brings together great content and powerful data, enabling millions of global customers to create high-impact digital experiences. What sets Adobe apart in terms of analytics, is the size, frequency and detail of the data sets.

"We process millions of anonymized e-commerce transactions each month via Adobe Analytics," said Siddharth Kulkarni, Data ScienceManager with Adobe Digital Insights. With these large sets of data, Adobe can provide a clearer and more accurate picture than conventional methods or standard data sets can provide. For example, Adobe can drill down to the day — and sometimes even the hour — of online consumer spending, or provide detail on consumer purchases down to the product and model levels, revealing new insights.

But the same technology that empowers these insights in the private sector can also reveal a lot about citizen preferences and behavior online. For government officials, this can mean knowing the difference between a successful or unsuccessful visit to your agency's website or mobile app.

"Say you work in a state department of revenue, and tax day is coming soon," says Melanie Megregian, Senior Solutions Consultant with Adobe. "One question you might ask is: 'Are my constituents able to find and complete the forms they need on our website, or are they giving up and completing the process elsewhere?" This information may make a major difference in your agency's digital strategy, but it is not available with simple web analytics like page views.

Adobe Analytics can provide detailed information on how and where citizens access your services online. And features like Analysis Workspace make it easier than ever to create data visualizations for your team or your citizens.

New stories told using data are essential for government agencies looking to do more with less and improve citizen services. These stories can lead to more analytical thinking and data-driven decision-making that positively impacts your agency and the customers you serve.

#### Adobe's Cyber Monday Projections on Target

Adobe made bold predictions going into the 2017 holiday season. Among them was the prediction that Cyber Monday — the Monday after Thanksgiving — would generate more online revenue for retailers than Thanksgiving Day, Black Friday, Small Business Saturday and Super Sunday sales. Adobe projected that Cyber Monday would generate \$6.6 billion in revenue. The data shows that Cyber Monday hit a new record as the largest online sales day in history with \$6.59 billion in revenue.

Adobe was also nearly spot-on with its predictions about mobile usage this holiday season, predicting that more than half of online visits to retail sites would come from mobile devices. According to Cyber Monday stats, mobile set a record, accounting for 47.4 percent of visits (39.9 percent on smartphones, 7.6 percent on tablets) and 33.1 percent of revenue (24.1 percent on smartphones, 9.0 percent on tablets).

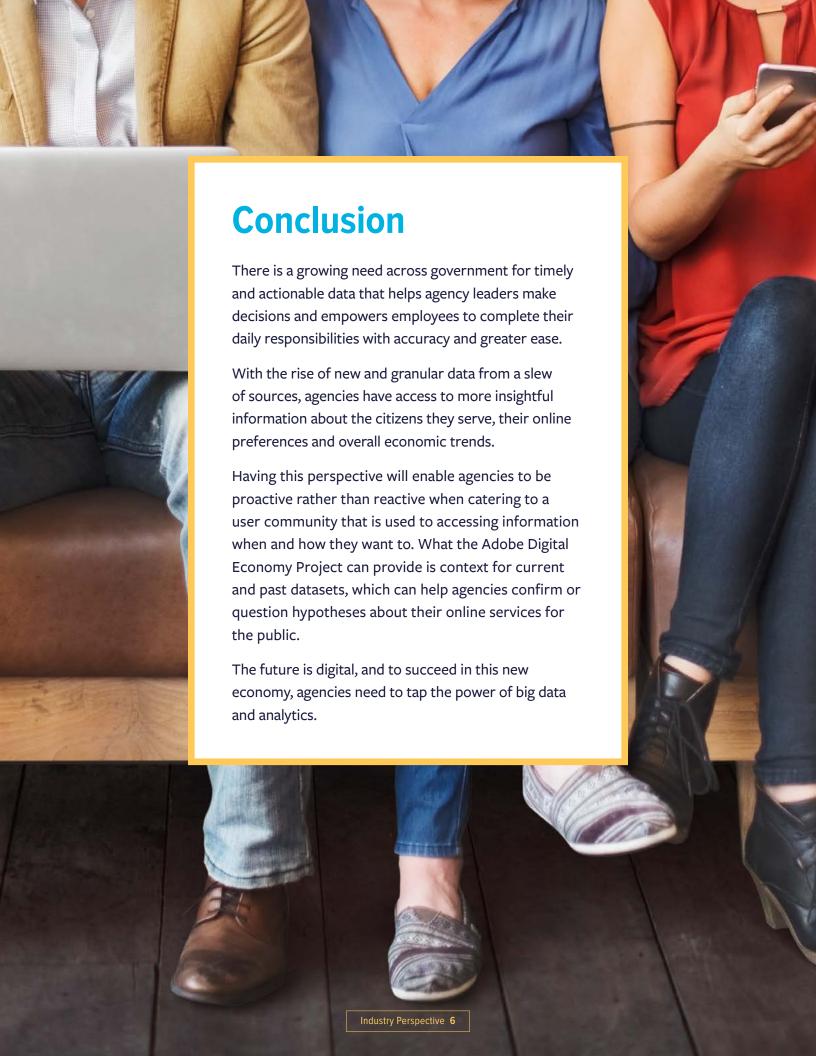
This is one of many examples that show the power of digital insights and online behavior to drive decisions. While predictions to date have largely focused on the commercial sector, Adobe Analytics Cloud could have broad applications for government in the future, including predicting online tax or fee revenues, and optimizing the digital experience for applicants seeking public sector jobs.

Learn more at:

http://www.cmo.com/adobe-digital-insights.html.

"We had an incredibly large scale of data, and that gave us information that we couldn't otherwise have gotten, and that helped us tell new stories."

TAYLOR SCHREINER
ADOBE DIGITAL INSIGHTS DIRECTOR



#### **Additional Resources**

Adobe Digital Insights on CMO.com

Adobe Digital Insights Holiday Recap 2017



#### **About GovLoop**

GovLoop's mission is to "connect government to improve government." We aim to inspire public-sector professionals by serving as the knowledge network for government. GovLoop connects more than 250,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to connect and improve government.

For more information about this report, please reach out to <a href="mailto:info@govloop.com">info@govloop.com</a>.



#### **About Adobe**

Adobe's trusted and proven enterprise solutions enable next-generation digital government. We help government agencies modernize service delivery while reducing cost to serve and processing time, all while delivering remarkable digital experiences.

To learn more visit www.adobe.com/government.

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