

Digital Transformation Journey Guidebook





Planning the best route to the cloud

Meeting changing mission requirements and expectations is easier and more cost-effective with a modern cloud solution. However, the approach to adopting cloud technologies must follow best practices to establish a services portfolio that stands the test of time. A successful cloud transformation involves more than just replacing on-premises hardware with external cloud infrastructure. Real transformation requires strategic planning that maps individual business capabilities to the most appropriate cloud-service model and platform.

Digital transformations also require organizational change. Developers need to shift from using traditional, linear development processes to adopting agile methods. And IT departments must transition from being providers of IT services to being brokers of IT services.

Regardless of where you are on your digital transformation journey, Salesforce can help. We offer deep expertise to ensure that your enterprise is prepared to migrate and operate the right mix of cloud services.

Beginning the journey

Each agency's journey for transitioning from legacy, on-premises systems to cloud-based services is unique. And to be successful, it requires ongoing strategic planning. This is where Salesforce comes in. We understand that it's typically infeasible to rip

all IT and replace it with cloud services. A gradual migration using hybrid-cloud architectures is usually the best approach.

As you know, choosing the appropriate cloud service can be daunting due to ambiguity and industry noise about options. Agencies are often so focused on managing, scaling, and troubleshooting legacy systems that they have few resources for innovation. In addition, fear of change is often a powerful obstacle, and it's exacerbated by the unknown. As a result, many organizations that are unsure about which type of cloud services to use make the mistake of simply lifting and shifting all their IT to an infrastructure cloud service. This approach limits innovation. True digital transformation is facilitated by adopting a mix of cloud service types:

- **Infrastructure as a service (IaaS)** is exactly what it sounds like: infrastructure such as physical or virtual servers or storage arrays that a third-party service provider hosts for you.
- **Platform as a service (PaaS)** is a ready-to-go platform, such as a Microsoft SQL Server Database.
- **Application PaaS (aPaaS)** is a cloud service that offers development and deployment environments for application services. They can also include integration services, identity services, and other platform services that have traditionally been called middleware.

- **High-productivity application PaaS (hpaPaaS)** provides an application platform that facilitates rapid development of cloud-native solutions. An hpaPaaS service includes a ready-to-go application platform such as Salesforce, along with additional point-and-click development tools and capabilities for using declarative programming tools to create automated workflows.
- **Software as a service (SaaS)** is an application, such as Microsoft Office 365, that you access from a web browser.

Regardless of which type of service you use, your third-party cloud provider procures, hosts, and manages all underlying hardware and software. Cost models vary but are typically based on your use of resources.

By 2020, at least 50 percent of all new business applications will be created with high-productivity aPaaS toolsets. Avoid a “two-hop” cloud migration by planning for all cloud options today.

Gartner Inc.,
“Market Guide for Application Platforms,”
November 23, 2016, Anne Thomas and
Aashish Gupta

The transformation journey

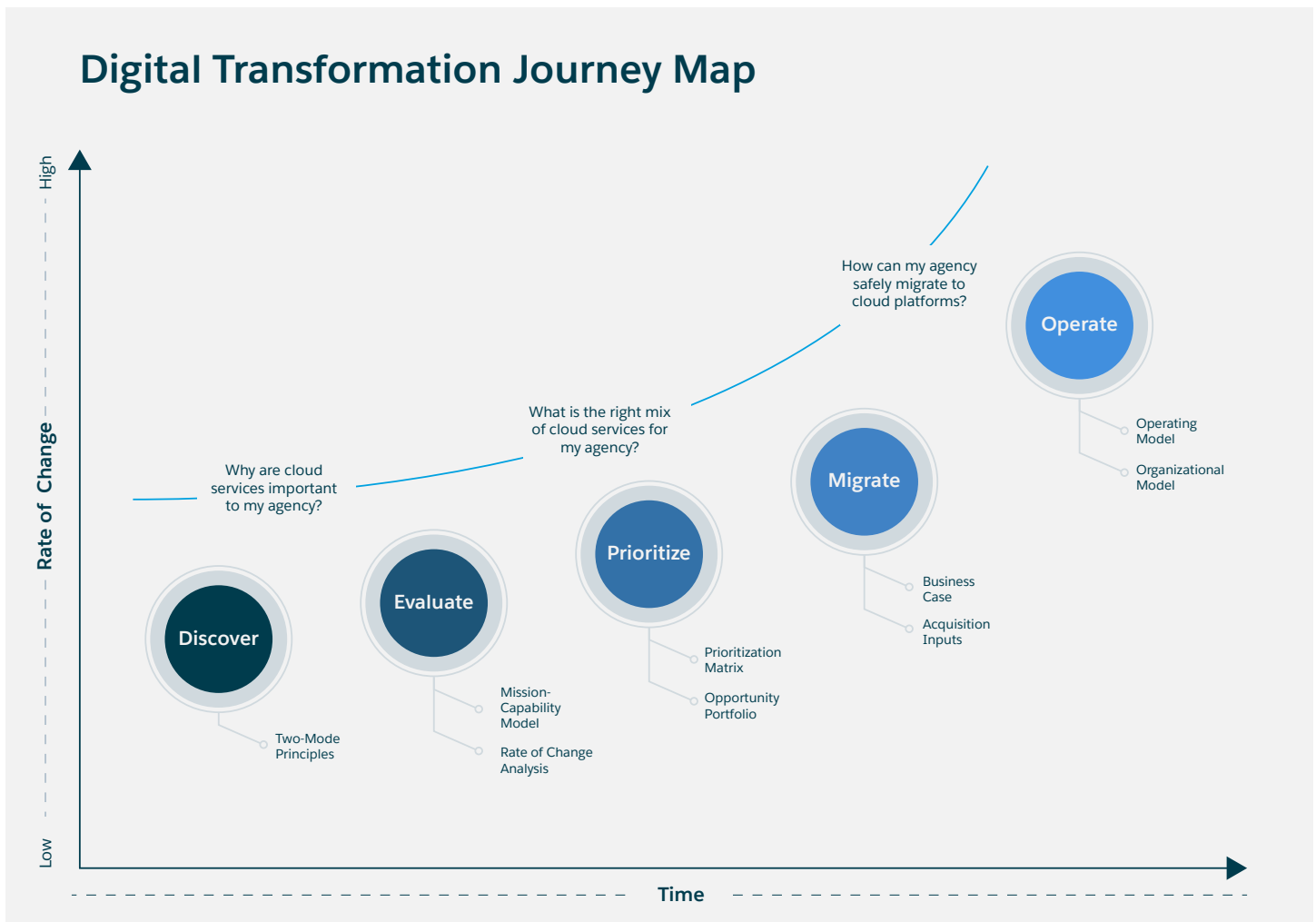
The decision to use cloud services is not a strategy in and of itself. A successful cloud transformation requires tactical planning of what to move and when, plus long-term changes in culture and operating models.

Salesforce provides the expertise and offerings you need to create a strategic roadmap that helps ensure that the IT platforms and services you choose and implement will facilitate your broader business and workplace transformation initiatives. We work with you to achieve your digital transformation goals by following a five-step, business-driven plan.

Whether you’re responsible for a few applications or thousands of enterprise systems, we can help you migrate to the cloud—safely and effectively—regardless of where you are on your journey. As part of our five-step plan, we’ll help you explore and answer:

- **Why are cloud services important to my agency?** After pinpointing your organization’s current and future business objectives, we’ll help you discern what needs to change from an IT-service perspective to effectively meet those goals and unlock innovation.
- **What is the right mix of cloud services for my agency?** Instead of just lifting and shifting architecture to the cloud, or adopting cloud services based solely on ease and cost, we help you map applications to the most appropriate cloud service, whether IaaS, PaaS, aPaaS, hpaPaaS, or SaaS.
- **How can my agency safely migrate to cloud platforms?** Salesforce can provide the expertise and guidance to help you gain executive support and methodically transition to cloud services in a way that reduces risk and facilitates long-term outcomes.

Digital Transformation Journey Map



Discover

In this critical first step, we help you create a solid foundational plan for your digital transformation by understanding where you are on your digital-transformation journey. This includes knowing what applications and systems are in place across your enterprise.

By viewing IT in two modes of operation, **Traditional** at one extreme and **Agile** at the other, you can plan your cloud migration in a strategic way. That's because this bimodal model brings clarity about the purpose of processes and technologies. As a result, you have the information you need to get the most from your investments as you encounter major decisions along your cloud transformation journey.

To help rate each technology, we'll use the following principles as guidelines for analysis. Most organizations have a mixture of traditional and agile technologies, and many fall in between the two extremes.

<h2>Mode 1 or Traditional</h2> <p>are processes and technologies that rarely change. They require IT staff to focus on technical maintenance.</p>	<h2>Mode 2 or Agile</h2> <p>are processes and technologies designed to support business outcomes. They allow IT staff to focus on innovation.</p>
<p>Own refers to technologies that you purchase, deploy, and manage on-premises.</p>	<p>Rent refers to infrastructure, platforms, and services that you engage from a third party.</p>
<p>Monolithic systems are siloed components based on proprietary or unsupported technologies that constrain change.</p>	<p>Integrated platforms include technologies and processes that interoperate to boost efficiency and support change.</p>
<p>Rehost means you keep the same IT strategy for systems—whether on-premises or a refresh in the cloud.</p>	<p>Replace means you re-evaluate and choose the best possible technologies to achieve your goals and improve services.</p>
<p>Network security refers to a focus on securing your enterprise’s digital perimeter.</p>	<p>Data security refers to a focus on securing information, so it’s protected from unauthorized access whether it resides behind your firewalls or on remote systems or devices.</p>
<p>Waterfall refers to traditional design processes with established steps that must be completed in a linear progression. Revisions occur after the entire project is complete.</p>	<p>Agile refers to modern design processes that take incremental, iterative approaches to rapidly complete smaller projects that are brought together to create a finished product.</p>
<p>Capital planning is required when you own and operate your own IT. Purchases are based on today’s requirements and tomorrow’s projections.</p>	<p>Demand planning allows you to provision technologies based on today’s requirements. As demand changes, you provision or de-provision services accordingly.</p>
<p>IT as a provider means IT staff spend most of their time designing, implementing, managing, and troubleshooting hardware and software. The result is an infrastructure with many standalone systems, each implemented to support a specific business need.</p>	<p>IT as a broker is a model where IT staff collaborate, often from a center of excellence, to choose cloud services. The result is a cohesive and extensible cloud platform that supports the organization’s overall requirements and vision, consistently and effectively.</p>

After the bimodal analysis, you’ll have established the guardrails for your digital transformation journey and have a good understanding of the obstacles that are blocking innovation. These insights are important to regularly revisit over time so you stay on track and achieve your vision.

Evaluate

This step gathers critical business insight about the business capabilities your IT supports, identifying each one and its underlying technologies, and whether they are meeting business needs. By identifying individual business capabilities, we can help ensure that each one is supported by the optimal IT platform(s). This is an important distinction because, in many cases, organizations can realize greater value from systems running on hybrid-cloud models that include a mixture of on-premises and cloud-based IT. For example, it might make more sense to keep the database for a legacy application in your data center but migrate its front-end application platform and user interface to an hpaPaaS solution.

“We knew that if we wanted to keep pace with our customers, we had to deliver what they needed, and we had to think differently about how we were doing our work.”

Christine Binnicker
Deputy CIO for the City and County
of Denver, Technology Services

Build a mission-capability model

To define your agency’s business processes and capabilities, we work with you to build a **mission-capability model** that identifies:

- **Agency operations** that you must do to stay in business, such as financial resource management and human-capital management.
- **Mission execution** or the services you deliver and requirements you must meet in the course of doing business, such as ensuring regulatory compliance, tracking inventory, and facilitating high levels of customer satisfaction from your call center.
- **Strategic enablers** that are critical to effectively deliver all underlying capabilities, including customer relationships, strategy and change, and employee collaboration.

Sample Government Mission-Capability Model



Note: Government-wide mission-capability model is adapted from Federal Enterprise Architecture Framework

Segment by rate of change

After we establish the mission-capability model, we'll determine the **rate of change** for each business capability and associated application.

Rate of change measures the expected speed of business-process evolution and the degree of action from IT staff to update infrastructure, applications, or supporting services. It takes into account an application's ability to meet business requirements, such as regulatory or policy requirements, end user change requests, or release schedules. IT considerations such as security, availability levels, and maintainability also contribute to a process's score for rate of change.

For example, employees at your organization may use a spreadsheet and email program to support your status-report business process. There is little need for change here because there isn't much

opportunity to innovate this process in ways that will improve customer services. Therefore, this process would be ranked low on the rate-of-change scale.

On the flip side, developers at your organization who are working on a new business offering that facilitates self-service permit filing might be using legacy systems to support the development of new customer services. In this example, there's a massive opportunity for innovation. Developers could deliver the kind of service customers expect in less time by focusing their time and energy on creating the new solution using highly extensible cloud services instead of being constrained by slow provisioning cycles, inflexible technologies, and high software-license costs.

Rate-of-Change analysis

Rate of Change	Action	Meaning
High	Innovate	Your Mode 2 capabilities that are unable to meet business requirements today or in the immediate future unless they're migrated to a more flexible cloud-based platform.
Medium	Differentiate	Your business processes and services that fall on the spectrum between Mode 1 (Traditional) and Mode 2 (Agile). They meet business requirements today, but, as time goes on, they require more effort and money to do so.
Low	Maintain	Your Mode 1 (Traditional) business processes and services that meet your business requirements today with minimal effort and investment. They will be able to support your business requirements over the next three to five years.

Map applications to the mission-capability model

After determining the rate of change for every business process, we finalize the mission-capability model. It records your findings by listing all your business processes in a chart that's segmented into the three possible categories for rate of change.

In the following example, you can see why it's important to map business capabilities' rate of change versus technologies' rate of change. The customer identified five business capabilities that were supported by one application. If it had just rated the application's rate of change, it would have mapped the application to a single cloud service. However, during this exercise, the customer found that three of the capabilities supported by the legacy application required little change (Manage Payroll, Manage Performance, and Manage Benefits & Compensation). The Track Processes capability needed some change, and the Manage Recruiting & Staffing capability required urgent change. Instead of ripping and replacing its entire application investment, the customer decided to continue using its solution to support its low and medium rate-of-change processes, and to migrate its high-rate-of-change process to the Salesforce hpaPaaS offering. By doing so, the customer could meet its business requirements and improve innovation where required, plus minimize capital costs and boost the ROI of existing systems that can still support requirements.



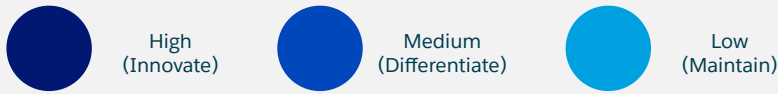
Salesforce customers see a 70 percent increase in time to market.



IDC Report
April 2014

Sample Government Rate-Of-Change Model

Rate of Change



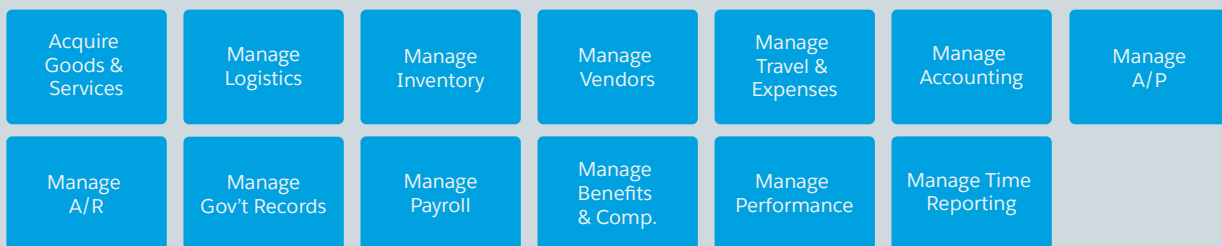
High Rate of Change – Innovate – Saas



Medium Rate of Change – Differentiate – hpaPaaS



Low Rate of Change – Maintain – PaaS/IaaS/On-Prem



Prioritize

In this step, we'll help you identify the most compelling and appropriate cloud-migration candidates, and we'll determine which type of cloud service will best support it.

Quantify the technical debt

First, we'll help you determine the **technical debt** of each business process—or the amount of time, money, and energy you spend on the IT that supports it. Technical debt often translates into a high amount of budget allocated to operations and maintenance of the IT investment. Along with rate of change, the amount of technical debt will help inform your approach and budget for digital transformation projects.

Prioritize opportunities

Next, we'll group business processes into the following **four priority categories** by analyzing their technical debt and rate of change:

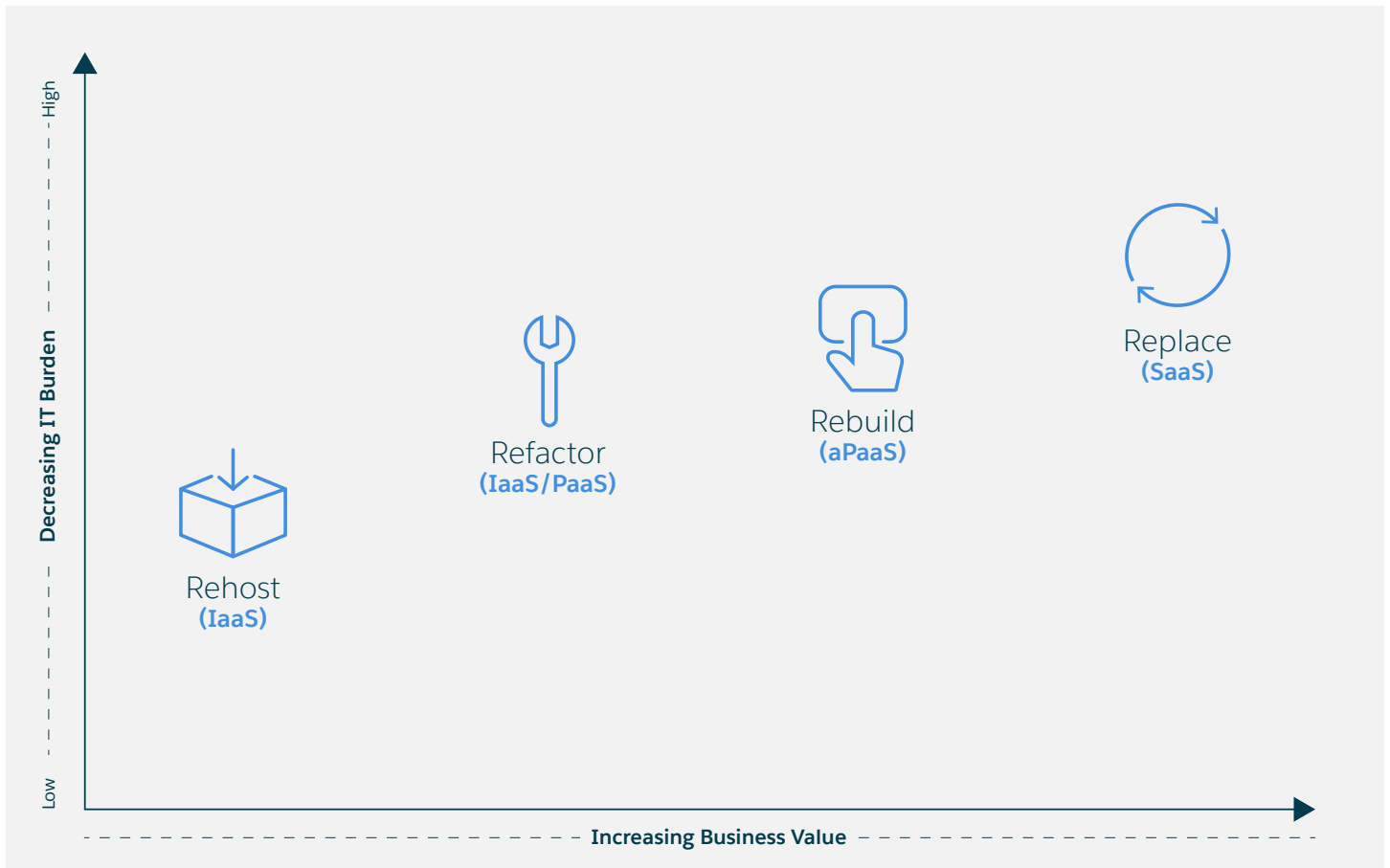
- **Cloud Pilot Projects** include applications and processes with low technical debt but higher rates of change. These are often ideal candidates for initial, small-scale cloud pilot projects. Low technical debt means it's less costly to build and test new cloud-based options while existing solutions are still in production. In addition, because these applications and processes involve higher rates of change or are associated with unmet business needs, improvements realized by a migration to the right cloud service can translate into rapid return on investment and greater innovation, spurring momentum for enterprise-level cloud projects.
- **Cloud Platform Opportunities** include those business processes and applications with the highest levels of technical debt and the greatest rates of change. Your organization requires and will realize the fastest time to value by focusing most of your resources on rebuilding and replacing these applications and processes using cloud services.

- **Technical Refresh Initiatives** are more expensive business processes and applications that have low rates of change. To reduce costs, these are often ideal candidates to lift and shift to a cloud service such as IaaS. In your plan, we can help you determine if these processes warrant immediate investment, or if your agency will realize greater value from pilot projects or new platform investments.
- **Defer** includes applications and processes with low technical debt and rate of change, so they will be the last ones you migrate to cloud services.

Apply the best cloud pathway

After we've established the technical debt associated with each process and assigned it a priority level, we'll work with you to create a **tactical pathway to the cloud**. Specifically, we'll map each business process to the cloud service—IaaS, PaaS, aPaaS, hpaPaaS, or SaaS—that will facilitate the best outcomes in terms of meeting the capability requirements. Options can include:

1. **Rehosting** or lifting and shifting an application or service to a similar infrastructure in the cloud, such as an IaaS service that provides a virtual server.
2. **Refactoring** an application or service using IaaS. This is common in hybrid-cloud solutions where customers might re-deploy an ASP.NET app as a Microsoft Azure Web App, and keep other parts of the application on-premises.
3. **Rebuilding** an application or service in the cloud using IaaS, PaaS, aPaaS, or hpaPaaS.
4. **Replacing** an application or service with a SaaS offering, such as Microsoft Office 365.



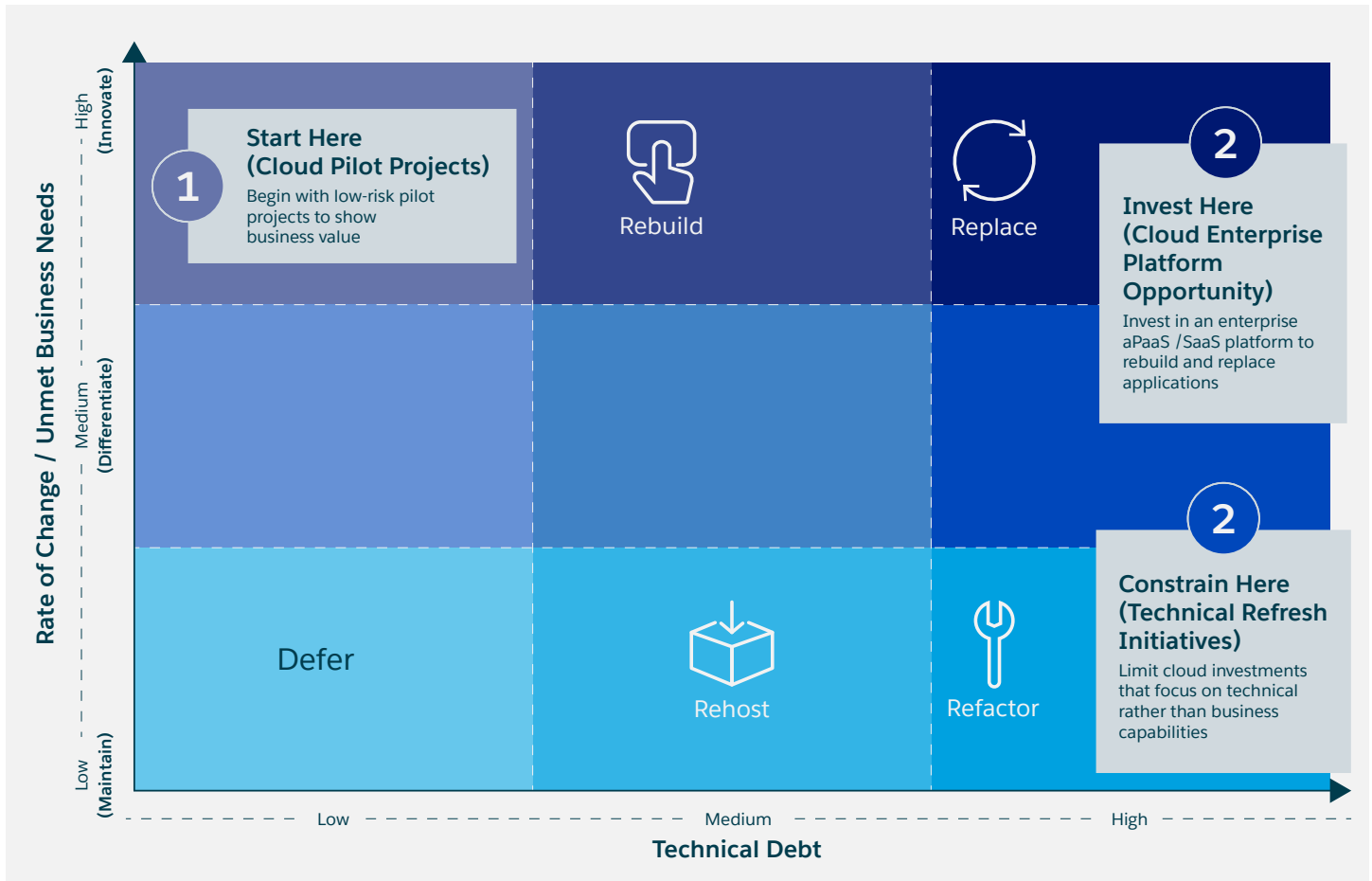
Mapping business processes to the most appropriate cloud services is important because many organizations mistakenly equate cloud with IaaS—or hosted infrastructure. As a result, they will perform a “two-hop” cloud migration, where they initially move applications and systems to IaaS, and then later discover they can improve innovation and return on investment by migrating many of those same systems to a different type of cloud service such as aPaaS or hpaPaaS. As you begin to rebuild and replace more legacy systems with cloud-based services, you can increase business value and decrease IT burden.

Did you know?
 You can reduce contract duplication and administration costs by taking advantage of the Salesforce Implementation, Integration, and Support Services (SISS) Blanket Purchase Agreement (BPA).

Bringing it all together

At the end of the prioritization phase, you'll have a clear map that indicates the sequence of steps you should take to migrate all business capabilities to the cloud. You'll also have the supporting data behind your strategy, including technical debt and rate of change.

Most often, the best approach is to start by migrating some smaller business processes to the cloud as pilot projects. Then, invest in cloud platform opportunities that deliver the greatest ROI for customers. And finally, to maximize available resources for higher-ROI projects, agencies typically find it best to delay the migration of business processes that will remain fairly static whether they're supported by IT on-premises or in the cloud.

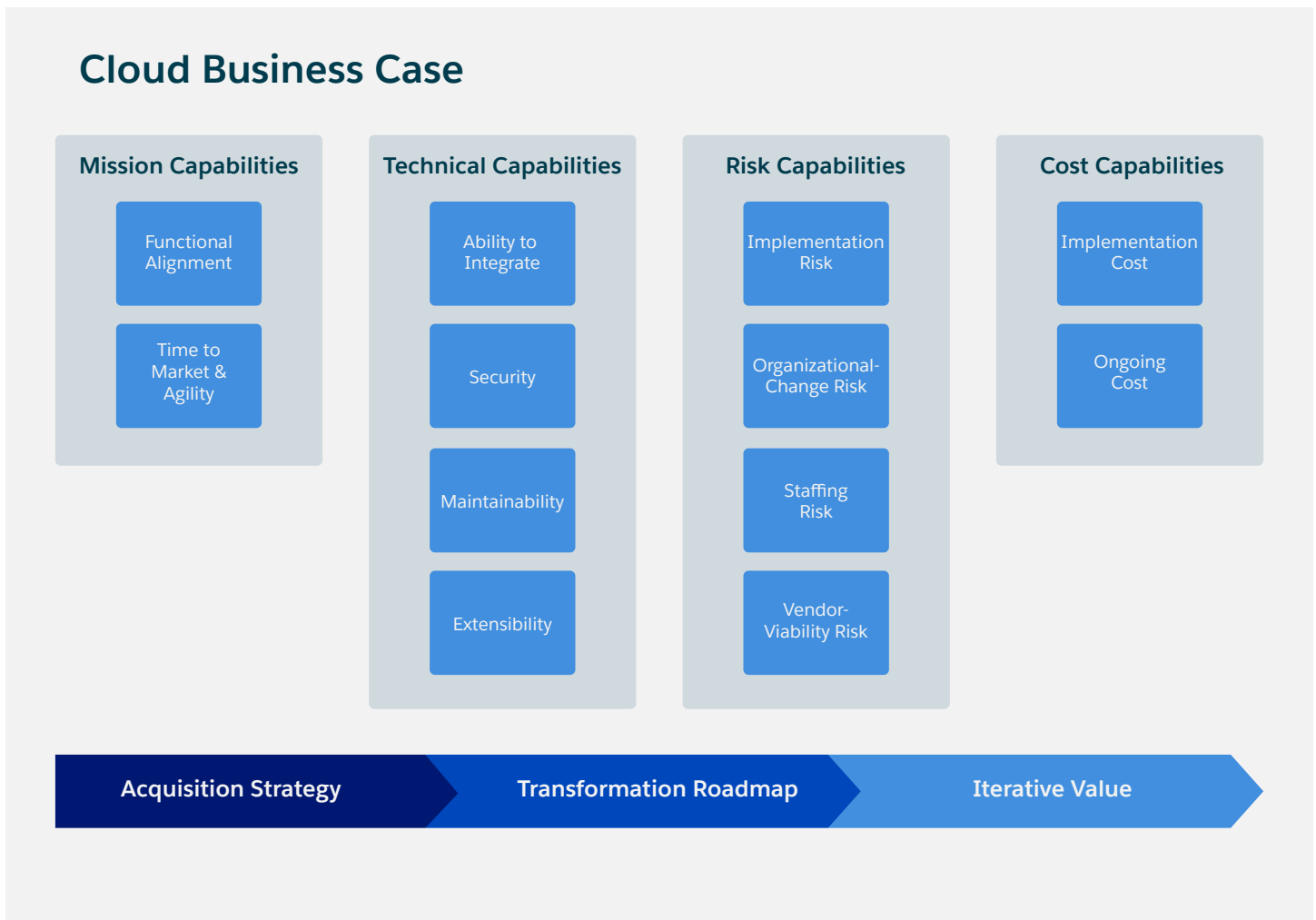


Migrate

Equipped with a solid roadmap that outlines your pathway to the cloud, we can help you gain executive support and begin your migration.

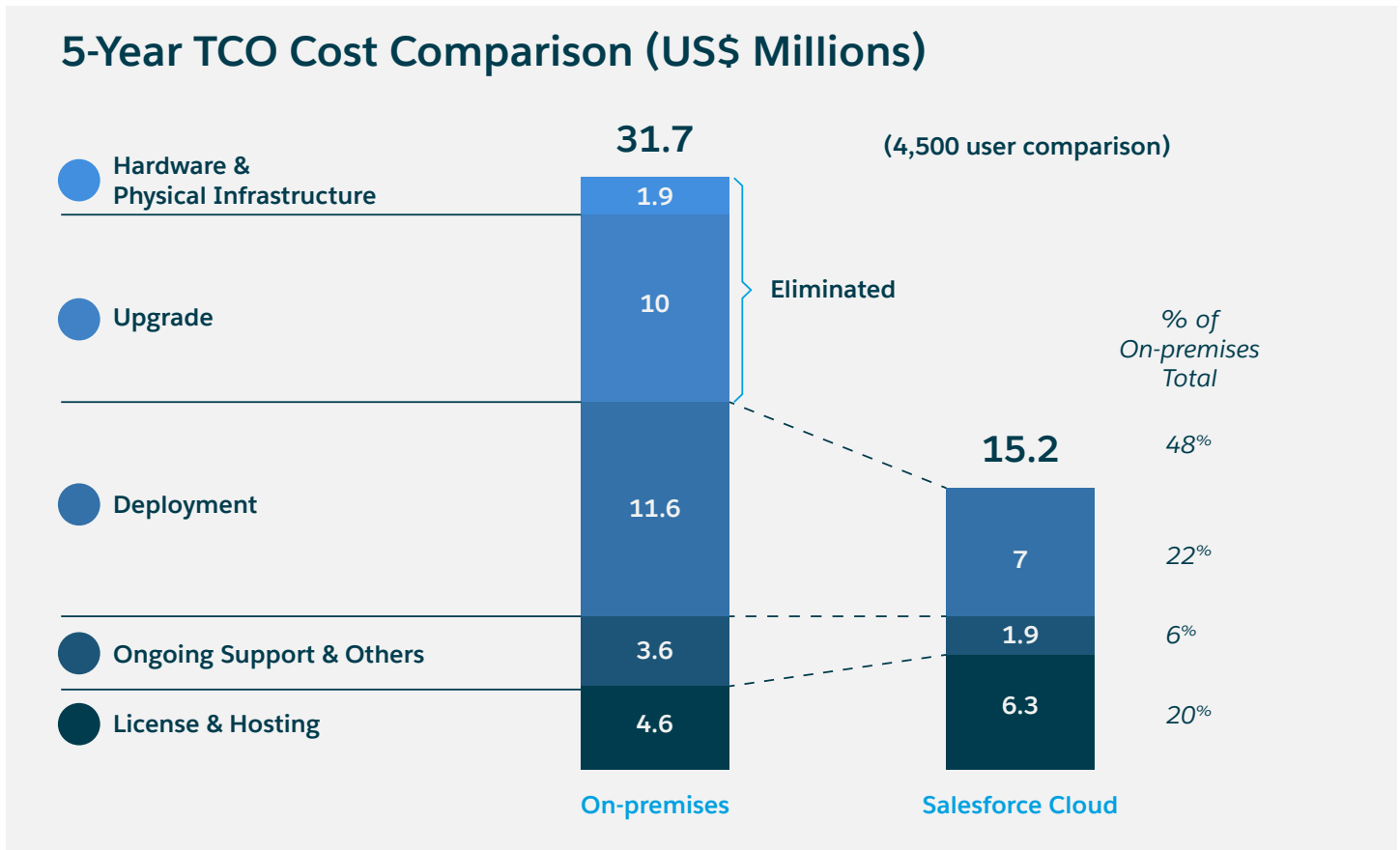
Building a business case

Working with you as a digital strategy advisor, we can help you compile all required information, such as mission capabilities, technical capabilities, risk profiles, and cost analysis, to create a business case for your digital transformation that meets your agency's requirements. Using a collaborative, data-driven management approach for planning your cloud migration makes it easier to build a business case that's defensible and inspirational, so you can move forward with confidence.



Establishing an acquisition plan

Based on best practices, we can help you build an acquisition plan that supports your guidelines and minimizes costs. In this example, an agency found it could save millions of dollars by migrating the services that support 4,500 users from legacy systems to the Salesforce aPaaS offering.



Creating a contract for agile development

To innovate today, agencies need to replace linear development methodologies with agile frameworks. An approach that plans for iterations of the solution—with stakeholders guided through short cycles of improvement—is more likely to lead to quick wins than setting formal waterfall-style gates for the project that curb progress with linear stages. When Salesforce helps design implementations, we outline three key elements in the cycles of transformation:

- **Optimizing**—An outcome-focused approach to discovery and requirements-gathering that accounts for multiple solution-iteration paths.

- **Advocating**—A method of sharing and promoting solution iterations to stakeholders to obtain validation, increase insights, and initiate change management.
- **Strategizing**—A collaborative approach to delivering successful iterations while gaining support for further enhancements and extensions of your cloud transformation.

Contracting for agile development supports long-term goals for facilitating continuous improvement and mitigating the impact of the rate of change by enhancing transformed applications further, and enabling the expansion of digital transformation to include other applications.

Operate

As you begin your digital cloud transformation journey, your IT organization will need to transition from being a technology provider to being a service broker. In this new role, you'll quickly reach a tipping point where change management becomes as important as the technologies you're changing. We help you **establish a cloud brokerage Center of Excellence (CoE)** so you can build a consistent approach to managing both cloud solutions and organizational change.

To guide decisions made by the CoE, we collaborate with you to create a model to **govern cloud decisions**. Finally, throughout our relationship, we continually provide you with the resources and frameworks you need to **evolve your processes and culture** as stakeholders and end users across your organization learn to navigate the paradigm shifts in operating models that digital transformation entails.

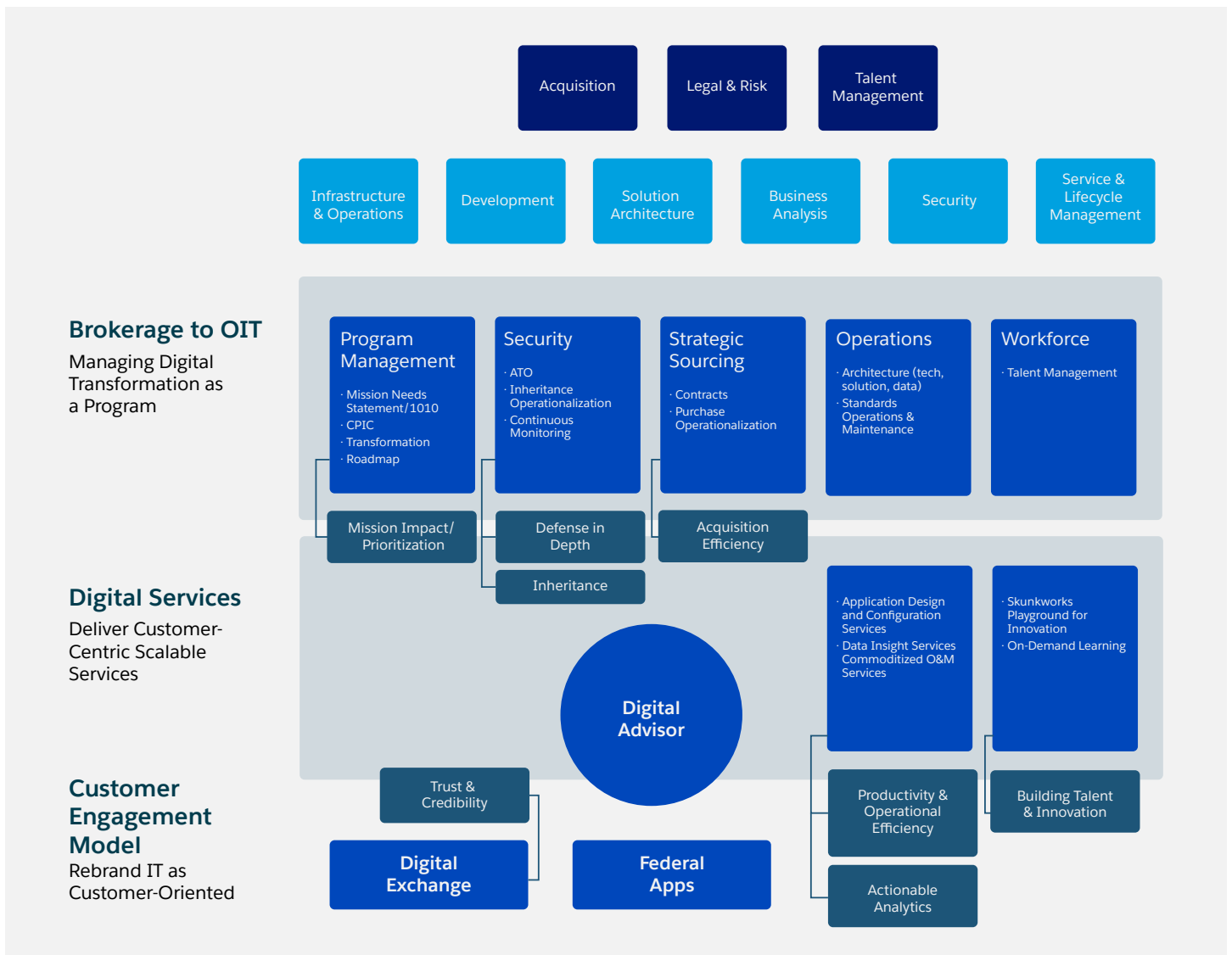
Establish a cloud brokerage CoE

The purpose of your CoE is to ensure all IT-related decisions are consistently made based on best practices that align with your strategic priorities. The CoE governs overall IT workflows including program management, security, strategic sourcing, operations, workforce management, and all development, with three primary layers:

- **Brokerage to Office of Information Technology**—The COE's foundational layer contains the components you'll need to manage digital transformation as a program. They include:
 - Program management artifacts (such as a mission statement/1010, CPIC, and transformation roadmap)
 - Necessary cloud security elements (ATO, inheritance operationalization, and continuous monitoring)

- Governance across strategic sourcing and procurement, operations and architecture, and workforce management and planning
- **Digital services approach**—Building on this foundation is the layer that connects IT to stakeholders via scalable customer-centric services. These services are managed via gatekeepers that Salesforce calls “Digital Advisors,” who are the primary points of contact in IT for stakeholders across your agency. Digital Advisors guide stakeholders through the new model of IT service delivery including application design and configuration services, data and insight services, and commoditized operation and maintenance (O&M) services. They also manage engagement with the new “innovation sandbox” (which some organizations call a “skunkworks”) and on-demand learning portfolio.
- **Customer engagement model**—Finally, you'll need to create a solution or portal that all employees use to get the digital services they need. We help you build this part of your enterprise platform so it's easy to use, secure, and available at any time, using any device.

To be successful, the CoE requires cross-functional involvement from stakeholders across both IT and the organization as a whole. Salesforce can help provide resources for engaging cross-functional roles and documenting the staffing plan.



Govern cloud decisions

Brokering solutions at a high rate of change means an increase in the volume of decisions that IT needs to make regarding cloud solutions across your organization. Salesforce recommends that organizations create a cloud-decision model to ensure continuing success of prioritized investments. This involves putting into action the priority matrix and opportunity portfolio developed during the Prioritize phase, and then enabling the CoE to evaluate which projects should receive funding based on the operationalized matrix. Once the matrix and governance model are in place, Salesforce can also help continuously monitor demand for cloud services as it evolves.

Evolve processes and culture

During your digital transformation, you'll need to navigate a significant shift in the relationship between IT staff and stakeholders. That's because as IT staff evolve from being technology providers who procure and manage individual hardware and software solutions to being **technology brokers** who oversee your agency's platform for innovation, the tone and moments of their interaction with stakeholders will also need to evolve. The end result of this shift is having IT brokers who work with business staff to select and integrate the appropriate services into your cloud platform. In addition, the IT brokers will guide employees through an agile approach to solution development and continuous improvement.

We work with you to identify the major areas of process change that your organization will need to address and then establish the guidelines, processes, and training that will help facilitate this cultural change.

We'll be your guide on your journey to success

Why embark on an unfamiliar journey alone? We have the expertise you need to create a strategic and successful pathway to the cloud that's designed to accelerate time to value, minimize risk, and facilitate long-term success. And because there's no one solution for every challenge, your roadmap will outline when you should migrate business processes to the cloud and how you should take advantage of available cloud services to realize your vision for digital transformation.

Take the next step

Your success is our success, and we have a vested interest in ensuring that you get the most value out of Salesforce.

We can help no matter where you are on your journey. Where are you today?

For more information about our solutions for government, please [visit our website](#).

To connect with us, please call 844-807-8829 or see our [contact information](#).

“The way we work, the way we interact with one another, the way we seek out services – that’s all changing right beneath our feet. You see it every day in the commercial sector, where traditional business models are being uprooted. People are at the point where they want to see the same thing happening across government.”

Jack Belcher
Arlington County CIO