



Informed workforces create modern, productive government operations

Three characteristics of a learning ecosystem every federal agency needs

Modern workforces require effective learning and development infrastructures

More than 2 million civilian employees work for the U.S. federal government at home and overseas.¹ The challenges are attracting and retaining workers with the right skills needed for these organizations to continue achieving their missions with shrinking budgets and a competitive talent race. Retirement rates among civilian employees increased 1.78 percent from fiscal years 2015 to 2019.² Only about 7 percent of full-time federal employees are under the age of 30 and almost three in four young people who left federal jobs in 2019 served fewer than two years.³ Younger employees have different priorities. Fifty-five percent of Gen Z employees (ages 18-24) in a cross-industry survey reported they plan to pursue a new job with almost one-third of those citing lack of professional development as the main reason.⁴ These talent trends are prime motivation for federal agencies to improve their learning environments to help build and retain a modern workforce.

In the 2022 Federal Workforce Priorities Report, the U.S. Office of Personnel Management identifies eight priorities to stimulate productivity and organizational success. One is recruitment, succession planning, and knowledge transfer. The report recognizes the value of passing down retiring workers' knowledge, insight, and experience and the need to prioritize robust recruitment strategies, particularly with underrepresented groups.⁵ These priorities should add to the motivation for agency leaders to modernize the organization's **learning ecosystem**.

This article **explores the three characteristics of a healthy learning ecosystem** while examining an example to help federal chief learning officers, learning strategists, and anyone involved in the learning process improve your organization's learning environment.

Why modern government is important

Government agencies in the U.S. must modernize in order to keep up with changing user needs, regulations, and health and public safety requirements. Leaders of modern governments rethink business processes and service delivery models to more effectively achieve their mission. This article is one of a series that features how modernizing affects the government workforce and the user experience, improves security and public trust, and accelerates the digital journey. KPMG team members offer insights intended to help guide governments in their modernization efforts to encompass all processes, technologies, policies, and the workforce so each works together to create connected, powered, and trusted organizations.



¹ Source: Performance.gov, "Summary of Progress," November 2022.

² Source: U.S. Office of Personnel Management, "Retirement Statistics & Trend Analysis," 2020.

³ Source: Partnership for Public Service, "2020-2021 Impact Report," August 2021.

⁴ Source: Ragan Communications, Idalia Dillard, "Tips for reaching, recruiting and retaining top talent," August 20, 2021.

⁵ Source: U.S. Office of Personnel Management, "2022 Federal Workforce Priorities Report," January 30, 2023.





Learning ecosystem: A holistic view and approach to meeting an organization's learning and development needs

This multidimensional system provides informal and formal learning, considers the needs of the workforce, and uses a dynamic approach to tackle multiple priorities. It seeks to empower learners and encourage a growth mindset. People make up a learning ecosystem and culture influences it. A learning ecosystem compares to a biological ecosystem, "a geographic area where plants, animals, and other organisms, as well as weather and landscapes, work together to form a bubble of life."⁶ Imagine a learning "bubble of life" with a system of tangible (people, technology) and intangible (culture, vision, strategy) components integrated to upskill, reskill, and develop talent to meet an organization's needs.

You *have* a learning system. How do you know it works?

Whether it was formed intentionally or not, every organization has a learning ecosystem.⁷ A learning ecosystem is made up of the technology, strategy, and culture that must fit together as the system matures to serve its population of learners. When the ecosystem integrates its learning and development function alongside integrated tools, it begins to mature. In a mature system, all dependencies within the learning ecosystem work harmoniously to achieve goals, as illustrated in the Learning Ecosystem Maturity Model.

Learning Ecosystem Maturity Model



Source: Training Industry, Rose Benedicks, "Learning Ecosystems: What are they, and what can they do for you?," June 25, 2018.

Notice in this model how the learning ecosystem evolves as it matures:

- **Ad Hoc:** The learning ecosystem has no structure, alignment to a learning strategy, or established learning and development function.
- **Functional:** The learning ecosystem has a loosely defined structure and foggy alignment to a learning strategy with no standard performance or health metrics.
- **Performing:** The learning ecosystem has some structure and alignment to a learning strategy with performance/health metrics reporting on current state.
- **Advanced:** The learning ecosystem has a solid, human-centric structure. It aligns to a learning strategy with performance/health metrics reporting on the current state with actions defined and well communicated. It lacks a strong learning culture of support.

⁶ Source: National Geographic Resource Library, "Encyclopedic Entry: Ecosystem," February 7, 2023.

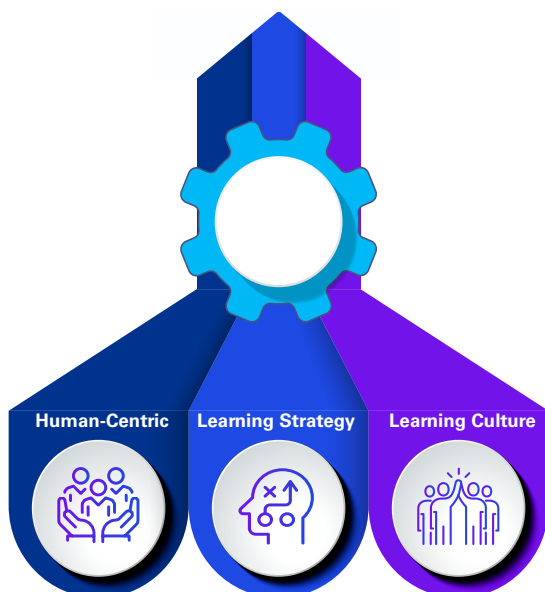
⁷ Source: Training Industry, Rose Benedicks, "Learning Ecosystems: What are they, and what can they do for you?," June 25, 2018.



Three characteristics of a healthy learning ecosystem

We believe a viable, agile learning ecosystem has three common characteristics: **human-centered**, rooted in a solid **learning strategy**, and supported by an empowering **learning culture**.

Learning Ecosystem



Tour a federal agency's learning ecosystem maturity process

A large worldwide federal agency recognizes the need to build and maintain a succession plan that captures its long-term employees' knowledge and insights and provide upskilling and career development opportunities. Its leaders want to recruit new talent and strive to empower employees to be lifelong learners. Employees can use learning management systems (LMS), but the process to access their learning is confusing. Certification and training requirements vary and do not easily transfer between agency units making upward mobility difficult. In an annual talent experience survey, employees express how access to training is inconsistent and nonintuitive. Those interested in growth report training is a source of stress, lacks feedback capability, and does not feel inclusive. The agency establishes an online, in-house university to drive employee development, career growth, and retention.



Human-centered

Human-centered design puts the person at the center of what is being designed. An effective learning ecosystem should be personalized to how and when learners will use the system and consider technology use and accessibility. Organizations should also keep the overall business strategy in mind while mapping out learning paths.

Personalized learning

When constructing a human-centric learning program, give the learner control over their learning journey. With this autonomy, learners can personalize the order and method of training and take a more active role in their personal learning process. People can apply learned skills through coaching and mentoring or generate or curate content to contribute to others' learning.

Consider how the organization's unique workforce interacts with each other, technology, and with resources in the field. Can the training environment simulate natural interaction? For example, if workers typically perform in groups in the field, a cooperative learning experience that mimics the real-world environment is an effective method to acquire knowledge and skills.

Technology considerations

Technology enables personalized learning via the choice of platform and learning modalities. Does your LMS or learning experience platform (LXP) support personalized, self-directed learning tracks? Does it deliver content when and how learners can use it?

Future learning experiences incorporate innovative technologies including social learning platforms, immersive experiences, mobile-first design, and learning at the point of need and in the flow of work. As work requirements evolve, how and when people learn must be as adaptive and diverse as the workforce. In our KPMG learning ecosystem, employees can select skill-building pathways targeted to their service network, specialty area, and individual interests. The firm will add a credentialing tool for badges and a gamification technique to validate acquired skills and motivate individuals to accumulate a learning repertoire.

Accessibility

One in four adults in the U.S. lives with a disability⁸ that can impact the learning experience, which is why accessibility is both a critical tangible and intangible component of the human-centered learning ecosystem. Accessibility has expanded to include historically underrepresented populations or those subject to discrimination because of identity, race, or background. Can learners see themselves in the images, videos, and/or characters in the training materials? If yes, can the learner meaningfully connect with the storytelling or scenario being presented?

Accessible learning ecosystems reach a wider audience and help ensure an experience where all learners can learn. The learning ecosystem and content included in it must reflect the preferences, experiences, needs, and limitations of diverse learners. It must incorporate training representative of a diverse audience and be accessible for all learners.



Is it human-centered?

The agency's university uses leading-edge technology. Employees can take courses on-demand in various formats. There are so many choices, but no guidance on where to begin or how to progress without learning paths mapped to expectations and competencies.

When evaluating or designing a learning ecosystem, ask these questions to help ensure it is human-centered:

- Is the learning ecosystem personalized to how learners will use it? Is it easy to navigate?
- Is the content accessible for all learners? Does it reflect the preferences of a diverse workforce?
- Does the system provide a voice and a choice for the learner? Are there personalized paths linked to competencies?
- Is the learning ecosystem designed with flexibility and convenience in mind (i.e., mobile learning, microlearning)?
- Can learners identify training based on current role, interest, or career path?

⁸ Source: Centers for Disease Control and Prevention, "Disability Impacts All of Us," January 5, 2023.



Supports the learning strategy

A healthy learning ecosystem supports the organization's strategic priorities. It is the infrastructure that carries out the learning and development strategy, actions, and metrics. Modern organizations link learning and development to the organization's vision, mission, and goals and maintain a return on investment.

Learning ecosystems must rely on data to inform how the workforce will use and contribute to its success. Most LMS and LXP platforms can measure and track training effectiveness and progress to goals. Learning and development initiatives are in place to share knowledge, develop skills, and change behaviors, attitudes, or mindsets. They also develop leadership skills and improve performance. Understanding the initiatives' purposes and the strategic priority behind their components will help determine the right evaluation methods and what data to analyze.

It is important to integrate data points across multiple systems for insight into learning metrics. The more organizations leverage their workforce data, the more empowered their learning and human resources functions will be to shape the employee learning experience. Each function draws insights from qualified data in ways that strengthen the workforce strategy and helps achieve goals.⁹



Does it align with the learning strategy?

The agency's university may have a solid learning strategy, but the organization did not solidly execute it. Without clear learning competencies, employees do not understand how to use the training to be successful or how to advance. Employees miss the connection between the strategy and how to achieve it within the learning ecosystem. The organization must gather data across multiple systems for insight to help the learning ecosystem function with purpose.

Ask these questions to validate your learning strategy is integrated into all components of the learning ecosystem:

- What are the goals to accomplish through the learning provided in the ecosystem?
- Do current learning paths address growth priorities?
- What business needs must training address?
- How is learning linked to the organization's vision, mission, and goals?
- How are links to the vision measured, adjusted, and celebrated?

Read more about how to align your business and learning strategy in our article, [*Put learning and development strategy first*](#).

⁹ Source: KPMG LLP, "The future of learning," 2020.



Learning culture

Learning culture is the way an organization supports acquiring knowledge within the learning ecosystem. Without the right environment and leadership advocacy, the learning ecosystem will not survive. A strong learning culture recognizes how to empower employees to learn freely. The individual desire to improve, upskill, and grow motivates them. It encourages a growth mindset and provides self-directed learning opportunities.

Organizations create learning cultures that focus on their people and facilitate development with various tools and technology. The culture determines what is to be valued and prioritized. If learning and development is a priority, the learning ecosystem will realize it.



Is there an empowering learning culture?

The agency put a lot of thought into designing its university, but it did not create a learning culture to support it. Its employees do not know how to learn, improve, and grow. They see no connection between their learning journey and their individual contribution to the organization's goals. The learning ecosystem does not inspire or motivate them to learn.

This agency wants to encourage a growth mindset. Its university provides various training and certifications, but the organization did not design the infrastructure to completely fulfill the vision. There are many choices, but no path to development. It does not capture insights or connect the individual's development and the business intention. The learning strategy's purpose is lost as a result, and its organizational impact is not readily measurable.

Creating a culture of learning that is human-centered, embraces new technologies, and encourages lifelong learning requires addressing these questions:

- How do leaders support and encourage a learning mindset among employees?
- Do employees see leadership support consistently applied to employee learning and development?
- Do employees feel empowered to learn freely through self-directed experiences?
- How are employees motivated to learn, improve, and grow?
- Do employees perceive a visible connection between their learning journey and contribution to the organization's goals?



Why does the ecosystem matter?

Learning is a constant, while learning needs and technologies always evolve. In 2023 and beyond, reskilling and upskilling will be integral to adapt to a changing work environment. According to the World Economic Forum, 50 percent of employees will need to be reskilled by 2025.¹⁰ To fulfill this need to reskill and upskill requires a learning strategy that will only bear fruit if nestled within a functioning, actionable learning ecosystem.

Government agencies should put the learning strategy first, and then consider the ways the learning ecosystem can support and sustain a modernized learning approach, deliver the strategy, and maintain incremental value over time. When evolving your learning ecosystem, ask these questions:

- How can we make it more people-centric?
- Does its purpose fit into the overall business strategy?
- How can we encourage growth and sustainment in actionable, realistic ways?
- Have we put our learning strategy first?

¹⁰ Source: World Economic Forum, "The Future of Jobs Report 2020," October 20, 2020.

About KPMG

KPMG has worked with federal, state, and local governments for more than a century, so we know how agencies work. Our team understands the unique issues, pressures, and challenges you encounter in the journey to modernize. We draw on our government operations knowledge to offer methodologies tailored to help you overcome these challenges and work with you from beginning to end to deliver the results that matter.

The KPMG team starts with the business issue before we determine the solution because we understand the ultimate mission. When the way people work changes, our team brings the leading training practices to make sure your employees have the right knowledge and skills. We also help your people get value out of technology while also assisting with cloud, advanced analytics, intelligent automation, and cybersecurity. Our passion is to create value, inspire trust, and help government clients deliver better experiences to workers, citizens, and communities.



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