

2023 EDUCAUSE Horizon Action Plan: Data Governance

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Jenay Robert and Betsy Reinitz, *2023 Horizon Action Plan: Data Governance*
(Boulder, CO: EDUCAUSE, 2023)

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EDUCAUSE

EDUCAUSE is a higher education technology association and the largest community of IT leaders and professionals committed to advancing higher education. Technology, IT roles and responsibilities, and higher education are dynamically changing. Formed in 1998, EDUCAUSE supports those who lead, manage, and use information technology to anticipate and adapt to these changes, advancing strategic IT decision-making at every level within higher education. EDUCAUSE is a global nonprofit organization whose members include U.S. and international higher education institutions, corporations, not-for-profit organizations, and K-12 institutions. With a community of more than 100,000 individuals at member organizations located around the world, EDUCAUSE encourages diversity in perspective, opinion, and representation. For more information, please visit [educause.edu](https://www.educause.edu).

In this age of digital work and life, data are undeniably as valuable as tangible currency. More data are collected, analyzed, and stored now than at any other time in history. Data processes play a foundational role in just about every professional discipline, and data stakeholders all over the world are grappling with modernizing and optimizing data governance policies and practices. In this rapidly evolving landscape, what challenges will higher education face, and how will we rise to meet those challenges? How can we leverage our individual and collective expertise to create innovative and durable data governance solutions?

A panel of higher education data and analytics experts from a range of institutions in the United States and Canada met to tackle these questions, focusing on their hopes for the state of higher education in 10 years. Using a 10-year horizon provides the data and analytics community an opportunity to consider significant advancements in society, technology, politics, the economy, and the environment, without looking so far into the future that any projections become unrealistic. Building on the trends, technologies, and practices described in the *2022 EDUCAUSE Horizon Report: Data and Analytics Edition*, the panel crafted its vision of the future along with practical action items the data and analytics community can employ to make this future a reality.

Activity: Imagine Future You

Imagining the future can be challenging. Our day-to-day lives require us to be cognizant of the present, considering threats and opportunities that already exist around us. Take a minute to jump-start your creativity and foresight by answering the following questions:

- What will your life look like 10 years from today? Envision your home, hobbies, family, and friends.
- What will your work look like 10 years from today? Envision your work space, daily activities, and colleagues.

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EDUCAUSE defines *data governance* as the processes, policies, and goals for managing institutional data, typically including policies and standards for data access, data quality, security and privacy compliance, and retention and archiving. Data governance fosters collaboration, transparency, and communication throughout the institution. It defines roles and responsibilities for managing data and assigns accountability to specific groups or individuals within the institution.

GOALS FOR OUR FUTURE STATE

Asked to describe the goals and elements of higher education data governance that they would like to see 10 years from now, panelists collaboratively constructed the preferred future described below.

Culture

Institutional data culture supports transparency, collaboration, engagement, and adoption. Access to data and decision support is equitable within and across institutions. This supportive data culture is foundational to data literacy, fluency, and expertise and leads to user-friendly tools such as searchable databases of reports, dashboards, and other resources.

All stakeholders have a better understanding of general data security, privacy, and ownership. Increased empathy and data literacy support patience and space for the time and resources needed in proper data practices. Further, data literacy prepares stakeholders to encounter challenges and resolve conflict using data governance frameworks.

Data governance is located in a central, enterprise-wide unit. This unit is led by a chief data and analytics officer (CDAO) or equivalent, and reporting lines are appropriate to ensure the resourcing, progress, and success of data governance. This structure signals the legitimacy and importance of data governance to the rest of the community and connects the data governance office to all relevant partners and stakeholders, including those outside that central office.

Data governance and data assets have cabinet-level accountability. Data governance is included in institutional strategic plans, and data governance is not seen as an afterthought in strategies, systems, and architecture. Stakeholders understand *why* data governance is important and necessary, viewing data as institutional assets on par with money.

Workforce

Data governance and literacy are formally codified in job roles and responsibilities. This ensures cooperation and support in data management, data explanation, and data processes that may be subject to change. Further, this stipulation provides an evaluation pathway by which staff can be recognized and rewarded for their data governance duties.

Training related to data management, processes, and responsibilities is included in onboarding for all technology staff. Institutions provide effective resourcing, training, and professional services on institutional and industry data standards, including master data management (MDM) and reference data management (RDM) tools and applications to create community buy-in and momentum in data practices.

Each major institutional data source has a designated data governance authority (e.g., data steward, data liaison). Capacity analysis is routinely conducted to ensure that those responsible for data governance are not overwhelmed with work and that the institution is appropriately staffed.

Processes

Institution-wide policy defines data governance and why it matters. This policy provides “teeth” to data governance efforts and creates accountability loops within the institution.

National standards govern vendor transparency in data tools and services being sold to higher education. All tools and services have business glossaries, data dictionaries, data catalogs, metadata repositories, and user guides to determine data attributes. All units that procure software are required to ensure that third-party vendors have transparent data practices and adhere to national standards. Purchasing activities are appropriately linked to data governance processes, including due consideration of data privacy protections relevant to expected usage of tools and services.

Data systems are streamlined and integrated across the institution. Integration breaks silos and supports collaboration across data domains. Data-change processes require workflow approvals to protect data architecture that impacts the whole organization. Enterprise technology and systems architecture support institution-wide data governance.

Panelists generated a list of actions for the data governance community to arrive at this preferred future in 10 years. Every institution has its own unique needs and challenges, but the community as a whole can work together to effect change. From large, cultural shifts to smaller workforce and operational changes, any stakeholder can find a way to contribute to progress.

CULTURE

MORE IMPACTFUL

- Adopt a value system built on transparency, privacy, and security and continuously communicate how activities align to these values. Balance transparency with data literacy and analytical capacity so that users are aware of and comfortable with data governance practices. Help stakeholders understand that data are assets on par with financial capital.
- Regularly track progress, and communicate with your community about the accomplishments of data governance projects to give visibility to what investments in data governance have achieved. Effective change management will celebrate wins to boost morale and minimize stakeholder confusion and change fatigue.
- Foster and facilitate institutional patience around data governance. Data governance is an ongoing, permanent program that continually evolves and adapts to address institutional needs in ever-changing IT and data landscapes. Even in a state of maturity, data governance will continue to support conflict resolution as new questions arise. Clearly communicate vision, goals, and detailed plans of action to drive buy-in.
- Provide financial support for data governance efforts that enhance institutional outcomes. Advocate for dedicated data governance funding, including investments in tools, data practitioner roles, and continuous professional development. Ongoing support for data governance will protect efforts from degradation and help the institution keep pace with industry standards.

LESS IMPACTFUL

- Focus on both institutional and unit-level data governance to build trust. Incorporate the human element, focusing on building trust with stakeholders. A culture of trust minimizes friction in data governance processes.
- Employ minimum viable product (MVP) approaches to quickly produce deliverables. Implement incremental action items to build momentum and protect progress from being stifled by consultation and framework-building.
- Integrate data governance into institutional future-proofing strategies, leveraging data governance as a tool to propel the institution into the future. Emphasize the capacity of data governance to eliminate silos of data systems and support innovation.

WORKFORCE

MORE IMPACTFUL

LESS IMPACTFUL

- Orient and train data governance roles (e.g., trustees, stewards, custodians) across all institutional lines of business and functional areas in the leading practices of stewardship, rights and responsibilities, and processes for collaborating with central data units. Front-load this effort by unifying the compliance-oriented components of data governance (e.g., legal, privacy, security) so that they play a central role in future efforts.
- Establish a subset of data practitioners who specialize in cultivating data literacy, data training, and data system awareness to support faculty and staff in their own data literacy journeys.
- Collaborate with HR and data governance stakeholders (e.g., legal, finance, IT, and IR) to discuss minimum expectations for job roles and duties related to data and data governance. Codify these expectations in job descriptions, including those for executive roles. The formal integration of data governance into job roles allows for focus, clarity, and dedicated time and effort. Be sure to avoid an unrealistic expansion of job duties, removing other responsibilities if necessary.
- Work with professional associations for training and support in developing key data governance policies and procedures and to design professional development for leadership across the institution.
- Set an ethos of minimizing the number of tools for data use and analysis. Guide users to common platforms and skills, building a community of practice and breaking down data silos. Form a group of data allies to support and leverage documentation tools.

PROCESSES

MORE IMPACTFUL

- Craft a comprehensive, high-level, and flexible data policy and strategy for the institution with executive sponsorship. Be sure the policy is flexible enough to adjust to changing circumstances but is also concrete enough to drive real change. Plan for the unplanned, and have a process in place that allows for exceptions so that frameworks and policies do not create limitations and barriers.
- Work with senior leaders (e.g., chief compliance officer) to create ground-level data governance policies rooted in targeted plans and specific actions. Include policies guiding minimum standards for executive data governance and management. Specify actions senior leadership should take to set expectations, and regularly report progress to ensure policy sufficiency.
- Create data-related requirements and capabilities for system procurements (including no-cost systems). Ensure that appropriate data discovery and governance decision-making occurs before purchase and before implementation.
- Create a repository of recommended practices, including exemplary institutions, systems, and vendors. Work with professional associations to bolster the validity of the database with a branded website, awards, certification programs, etc.
- Have a documented business practice for onboarding new systems and tools to ensure institutional awareness of the metadata and architecture of the service or tool. Catalog these documents for institutional usage, and be sure they are consistent with existing institutional portfolio management tools.
- Track and assess internal maturity in all areas of data literacy, analysis, management, governance, and business operations.
- Collaborate with professional associations to develop data governance roadmaps that contain recommended actions and financial capacity analysis tools to document institutional spending and commitment.
- Bring together vendors and consumers to identify the gaps between product offerings and stakeholder needs related to data governance and management. Bridging the gap between vendors and consumers will improve consistency in vendor expectations and support the institution-wide alignment of systems.

LESS IMPACTFUL

- Create a data classification schema early so that it can serve as a touchstone for talking consistently about data security, privacy, and importance. Don't assume that existing data classification practices align with the objectives of your data governance program. Differentiate between essential and nonessential data, and generate classifications of data that support both data controls and equitable access to data.
- Conduct an ROI analysis on existing data, and identify quantifiable risks for data failures for the organization.
- Architect the institutional ecosystem of information systems so that differentiation is minimized and efficiency and consistency are maximized. Determine dependencies and order of operations, and provide centralized decision support services so that they are available to all units, supporting consistency in data usage and access rights management.

Envisioning the future we want is an important element of action planning, but real progress can only be made when individuals like you make things happen. Use the following activities to solidify your vision of the future and make plans to take action.

Activity: Understand Your Institution's Needs

The best plan of action always starts with understanding the starting line. Use this activity to explore the needs and interests of stakeholders at your institution.

- Make a list of key stakeholders at your institution who will be interested in shaping the future of data governance. Consider a wide range of perspectives from a variety of operational units, being sure to include stakeholders who work with data across the full data life cycle.
- Select a sample of individuals from your list and talk to them about the present and future state of data governance at your institution. Some guiding questions are:
 - » What is our current state of data governance?
 - » How do we currently support data governance?
 - » What are our biggest challenges related to data governance?
 - » What are our greatest assets related to data governance?
 - » Why is data governance important for our institution?
- Take notes on key takeaways from your conversations. Include references for resources and documents such as websites and institutional policies.
- Reflect on your findings and consider how they align with the findings in this report. Is your institutional vision aligned with our panelists' ideas? Are there individuals at your institution who are ready to take some of the actions described in this report?
- Make a plan for next steps. Leverage actions that you can take at no cost and with no or minimal approval. Usually, this starts with identifying key members of your professional network who can partner with you. Consider stakeholders who are ready to hit the ground running, colleagues who already have considerable influence and can break down barriers, and colleagues or units that might be resistant to change and need help seeing your vision.

Your Role in the Future of Data Governance

As you embark on the journey, consider the following questions:

- What role do you want to take in these plans?
- How will you attend to culture, workforce, and processes?
- What is the current state of data governance at your institution, and where will your institution be 10 years from now?

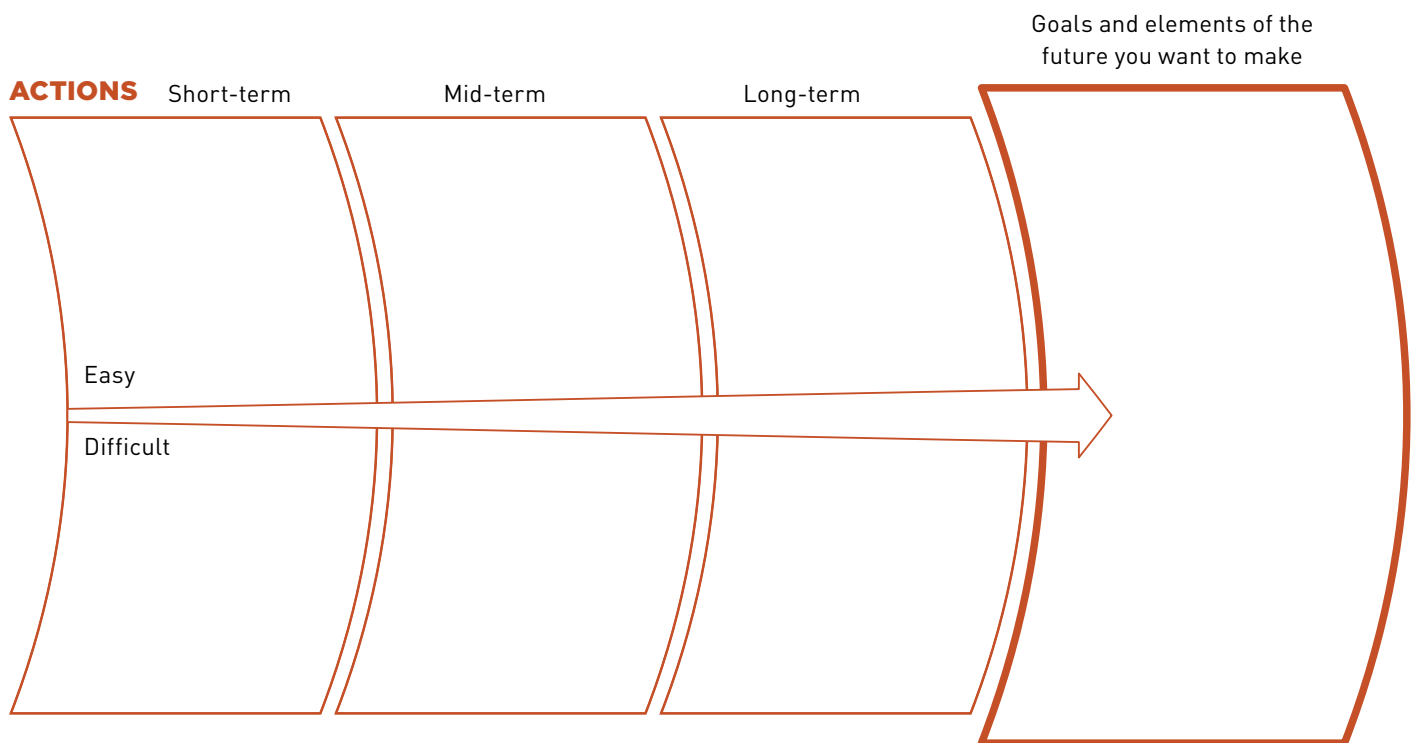
Activity: Build an Action Roadmap

Now that you have a clear picture of where you are, where you want to go, and who is going to help, you're ready to develop an Action Roadmap (adapted from the [Institute for the Future](#)). This activity is best accomplished collaboratively, so consider working with some of the individuals you identified in the activity Understand Your Institution's Needs. Start with the right side of this tool, describing the goals and elements of *your* preferred future, using the future described in this report as inspiration. Then, review the findings you generated with Understand Your Institution's Needs and describe the short-, mid-, and long-term actions that will carry you from today's reality to the future you want to see.

More Resources for Action Planning

- [2022 EDUCAUSE Horizon Report | Data and Analytics Edition](#)
- [Analytics Institutional Self Assessment](#)
- [Data Governance Community Group](#)
- [Understanding and Developing a Data-Informed Culture](#)
- [Learning Lab | Data Governance Essentials](#)

BUILD AN ACTION ROADMAP



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This *2023 Horizon Action Plan: Data Governance* is grounded in the perspectives and knowledge of an expert panel of practitioners and thought leaders from across the United States and Canada who represent the higher education data and analytics community. The members of this group were sought out for their varied viewpoints, as well as their contributions and leadership within their domain. The panel reflects the current state of the higher education data governance profession, with members representing a range of institution types. Dependent as the *Horizon Report* efforts are on the voices of its panel, every effort was made to ensure those voices were diverse and that each could uniquely enrich the group's work.

For the Data Governance Action Plan we adopted and adapted different components of the Institute for the Future (IFTF) foresight methodology. First, we asked panelists to review the trends, technologies and practices, and scenarios from the *2022 EDUCAUSE Horizon Report: Data and Analytics Edition* and to describe their own vision of the preferred future of data governance. Second, panelists were directed to list the threats and opportunities that might imperil or bring momentum to their preferred future and to brainstorm possible actions in response to those threats and opportunities. Third, panelists were asked to collectively and collaboratively rate the potential impact of and effort required for each action. The data produced as a result of these efforts have been used to create the action plan featured in this report.

EDUCAUSE staff provided group facilitation and technical support but minimal influence on the content of the panel's inputs and discussions. This was done to reduce the potential introduction of bias into the results and to allow for this organized group of experts themselves to discuss and converge on a set of actions for the future, based on their own expertise and knowledge.

The panel discussions were held remotely on December 1, 2022, by Zoom.

EXPERT PANEL ROSTER

We would like to acknowledge and express our deepest gratitude to the panel of experts listed below, who were responsible for generating all of the big ideas summarized throughout this resource. Their brilliant thinking and rich discussions were the foundation of this work, and this resource simply would not exist had it not been for their dedication to this project and their passion for serving higher education.

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