

Digital Essentials

Key Takeaways

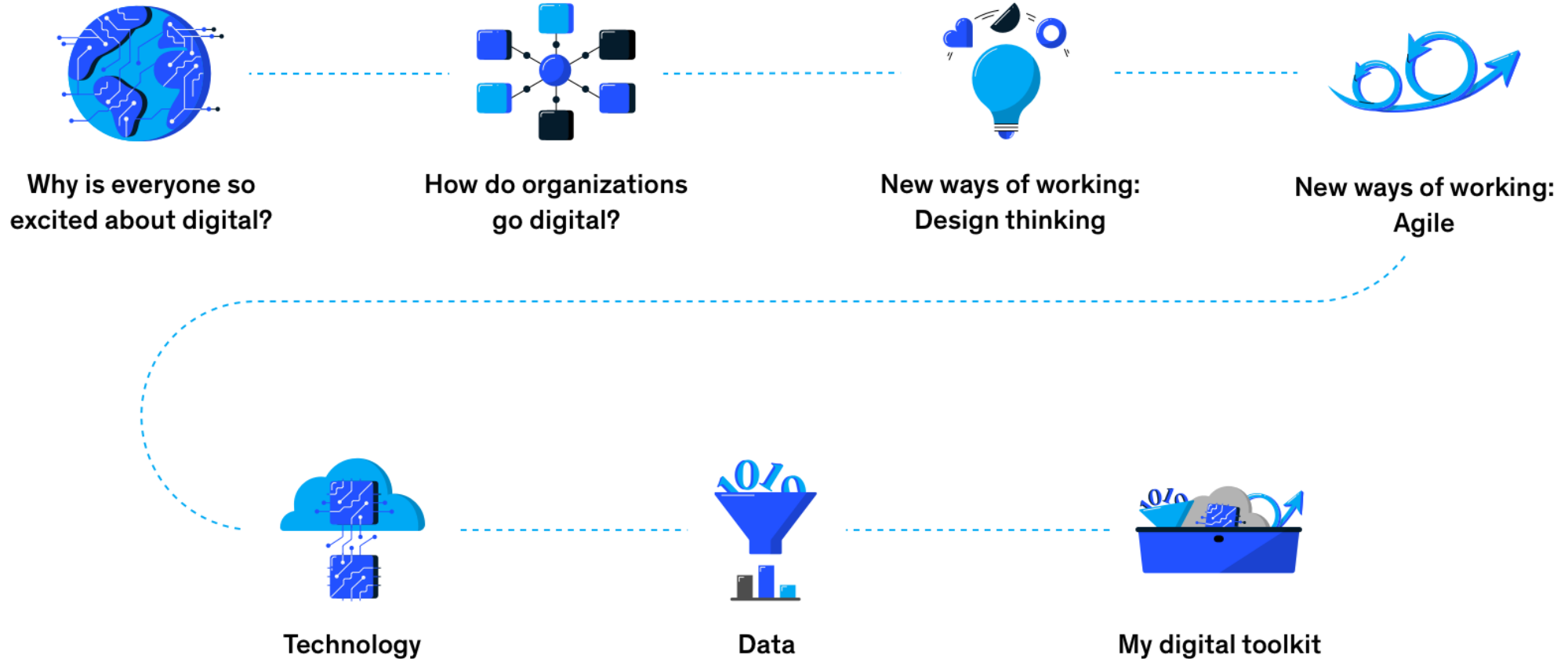


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Digital Essentials

Your learning journey



Course 1: Why is everyone so excited about digital?

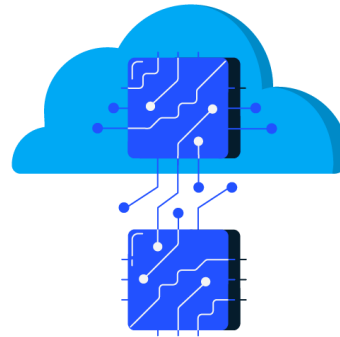
What do we mean by “digital”?

Digital is data, technologies, and new ways of working that can help us maximize value.



Data

How do new approaches to collecting and analyzing data help us better understand the people we serve, make better decisions faster, and develop new solutions?



Technology

How do new technologies help accelerate impact and solve problems at work?



Ways of working

How do new ways of working enable us to meet people's needs better and more quickly?

Course 1: Why is everyone so excited about digital?

How does digital help organizations?



Digital helps you make better decisions more quickly, and create more impact



Digital helps you collaborate better and design more seamless processes



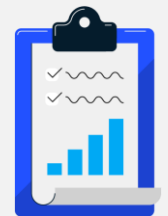
Digital helps you focus on the parts of your job that you find most important



Digital helps you innovate new products, services, lines of business, and ways to work

Creating value

All of these benefits increase an organization's value—monetary and non-monetary. Digital can improve the customer experience and employee satisfaction, while it increases sales and reduces costs and risks. Digital can dramatically reduce manual work, giving staff and the organization more resources to innovate and delight customers.



Course 2: How do organizations go digital?

The six building blocks for going digital

Strategy



It's important to understand why digital is critical as an organization works to achieve its goals. This includes a compelling vision and a feasible roadmap towards that vision.

Capabilities



People and skills

Organizations may be able to hire new people with the right skills, but they can often help current employees master those skills or learn to do things differently.



New ways of working

New ways of working enable faster and more user-centered work. These new approaches can include creating teams with a range of expertise who collaborate closely on frequent cycles of testing and improvement.



Technology

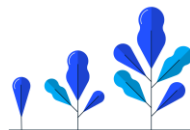
Modern technology enables better user experience and faster launches of new products and features. Technological tools for communication, collaboration, and connection also enable new ways of working.



Data

Organizations with clear strategies and processes for handling data can use analytics to unlock significant value. Data should be accessible so that everyone in the organization can use it to make better decisions.

Adoption and scaling



The full value of digital is achieved when only digital is embedded in the entire organization.

Course 3: New ways of working – Design thinking

The design thinking process

Discover

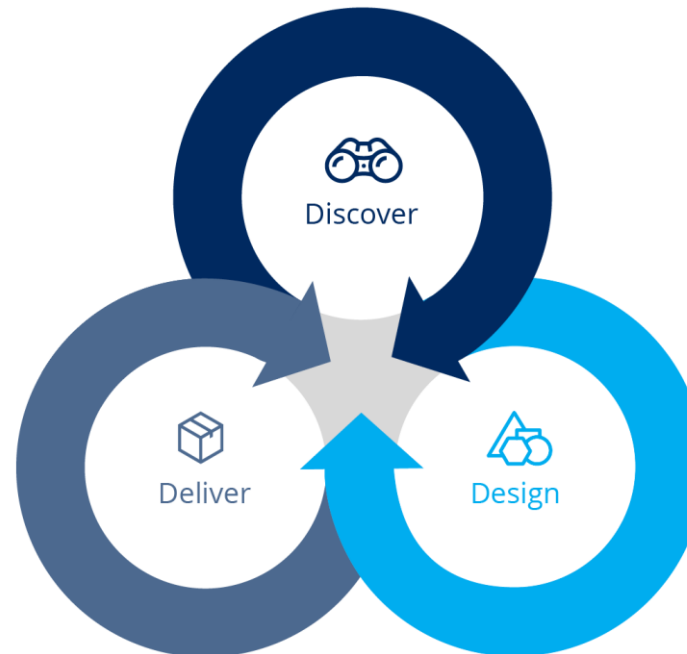
In this stage, we focus on customer research. We might:

- Review quantitative data, such as industry reports and statistics
- Interview, survey, or observe end users to better understand their needs, challenges, desires, and contexts

Deliver

In this phase, we implement, typically in short, iterative cycles that allow us to get feedback from users and refine our approaches. We should:

- Define achievable, measurable goals
- Use small-scale launches such as pilots or beta testing to gain new insights
- Continuously improve the design



Design

In this phase, we generate and test ideas. We use prototypes and models to:

- Collect feedback from users and refine our approach
- Rapidly identify critical risks and challenges
- Uncover incorrect assumptions
- Validate and improve the design

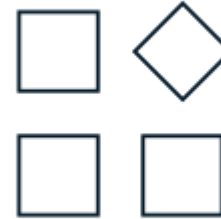
Course 4: New ways of working - Agile

Four fundamental principles of Agile



Focus on end users

Connect early with users (internal or external) to gain insights and develop solutions that really fit their needs or solve their problems. You can use design thinking, such as creating user personas and analyzing user journeys.



Drive continuous value

Focus on the end goal, starting small and working incrementally to create the most valuable elements first. Your team should have concrete ways to measure success.



Be team-oriented

Work in small teams with experts across relevant functions. The team is responsible for the solution and empowered to make decisions—leaders have removed cumbersome approval processes and other roadblocks.



Experiment and learn quickly

Work in short test-and-learn cycles to create the right product, service, or process—remaining flexible without consuming lots of resources.

Course 4: New ways of working - Agile

Agile sprints

Use sprints of 1 to 3 weeks to keep projects manageable, flexible, and on time.



1. Scope

Align on the goal for this sprint and criteria for success. What did you learn from previous sprints that affects your design of the solution? How will you measure progress?



2. Sprint backlog

Create a backlog—a prioritized list of all tasks that need to be completed during the sprint.



3. Backlog refinement

Decide which tasks fit within this sprint. Prioritize them based on their impact in achieving the sprint goal and how easy they are to complete.



4. Allocation

Allocate work based on team capacity.



5. Retrospective

At the end of each sprint, review progress, collect feedback, and apply what you learn to the next sprint.

Course 5: Technology

Using technology to unlock value

Beyond improving everyday life, new and emerging technologies help organizations move faster, make fewer errors, and generate insights for better decision-making and better product and experience design.

Key technologies and their applications

“We need secure and accurate proof of identity.”

Biometrics

A biometric scanner can verify a user’s identity based on a fingerprint, retinal scan, or facial recognition. Biometric verification is used in high-security applications such as in airports and government IDs because it replaces manual verification and cannot be counterfeited.



“We need to speed up back-office processes and reduce errors.”

Robotic process automation (RPA)

RPA can automate many routine activities, such as gathering and recoding data. An RPA application can open and control other applications to pull information from forms or websites, copy and consolidate data into new locations, send emails, and handle other tasks.



“We need our software and programs to understand people.”

Natural language processing (NLP)

This form of artificial intelligence helps computers interpret written or spoken language to extract data or instructions. NLP is behind virtual assistants, online translation services, chatbots, speech recognition, and many other applications.



“We need to recognize patterns more quickly and make more accurate predictions in highly complex situations.”

Artificial intelligence/Machine learning

Artificial intelligence, or AI, imitates human intelligence. Machine learning, one kind of AI, uses analytical algorithms to find patterns in massive amounts of data. These systems can improve over time as they are trained on new sets of data or new success conditions.



“We need to scale our services worldwide, quickly and efficiently.”

Cloud

The cloud replaces an internally managed data center. It allows an organization to outsource IT infrastructure to a third party who offers on-demand service and data access. This can help the organization scale up services seamlessly and access data from anywhere.



“We need our devices to understand each other.”

Connected devices

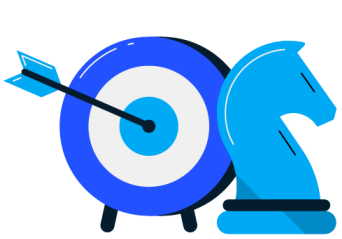
Connected devices are physical objects that use the internet to connect with each other. They are widely used in manufacturing and industrial contexts to improve safety, reduce downtime, and increase efficiency. Their use is rising in home security, self-driving vehicles, and other applications.



Course 6: Data

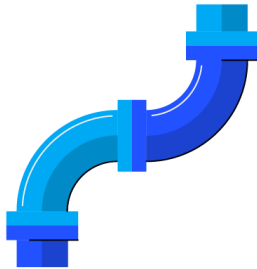
Five key components of data

A holistic approach to data includes five components: data strategy, data architecture, data governance, data culture, and data ethics.



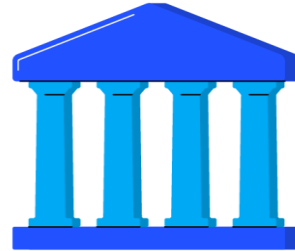
Data strategy

Data strategy identifies the organization's overall approach to data sources and formats, including a strategic plan to build data capabilities.



Data architecture

Data architecture refers to the “pipes” that generate, store, integrate, and distribute the data that enables an experience.



Data governance

Data governance includes organizational processes and guidelines to manage data and maintain quality.



Data ethics

Data ethics refers to regulations and policy guardrails when dealing with data—especially personal data.



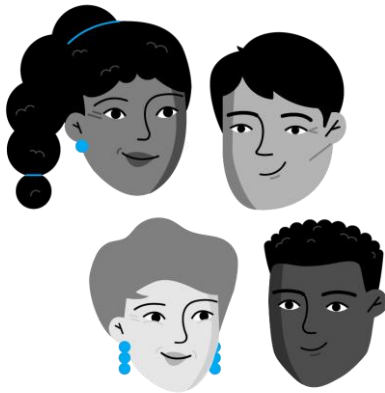
Data culture

Data culture reflects employees’ mindsets as they use data to make decisions. In a healthy data culture, people treat data as a strategic asset, and they visualize, gather, analyze, and interpret data to achieve organizational objectives.

Course 7: My digital toolkit

Digital practices thus far

Over the course of this program, you've gotten an overview of the critical components of going digital. You already understand these three digital practices.



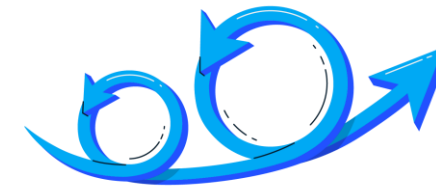
Prioritize end users

Apply user-centric design principles in your day-to-day work.



Challenge your views with data-driven analysis

Consider possible sources of data, data quality, and appropriate uses of data when generating insights.



Iterate and learn

Apply an iterative “test-and-learn” approach to projects at work.

Course 7: My digital toolkit

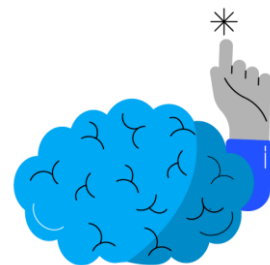
Four components of your toolkit

Your digital toolkit will support you in expanding your digital knowledge and skills even after this program ends.



Build upon digital literacy concepts

You already know why and how organizations go digital. You've seen how new ways of working, technology, and data can help organizations deliver more value. After this course, reach out to your organization's learning managers to find out about additional opportunities to deepen your expertise.



Shift your mindsets to achieve your goals

By shifting your mindsets, you can change the way you learn and overcome challenges. For example, in the new ways of working courses, you learned why it's important to stay curious and impact-focused, by centering the end user.



Join a community to deepen learning

Research shows that participating in a learning community improves people's ability to make progress. The colleagues enrolled in this course are part of your professional learning community. Reach out to them to discuss how you can use what you've learned.



Create your personal action plan

By reflecting on the path you've taken, and by connecting what you've learned to your goals, you can more clearly establish your action plan and identify next steps.

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