KFUPM BUSINESS SCHOOL
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MIS 393

Digital Transformation in Business

Digital Transformation Resources and Capabilities

Objectives

- Understand the Factors Accelerating Digital Innovation.
- Learn the Importance of Experimentation to drive Digital Innovate.
- Define Organizational Culture and Digital-Ready Culture
- Understand the Challenges of Digital Transformation in Legacy Companies.
- Learn the Importance of People & Talent in Four Key Areas.

Capability → Accelerating Digital Innovation

- **Digital innovation** → creating new products, services, processes, or business models using digital technologies. It emphasizes novelty and creativity, introducing something that didn't exist before or significantly improving what already exists.

- Digital innovation is a component or subset of digital transformation. You might introduce various digital innovations (like new technologies, platforms, or processes) as part of your broader digital transformation journey.

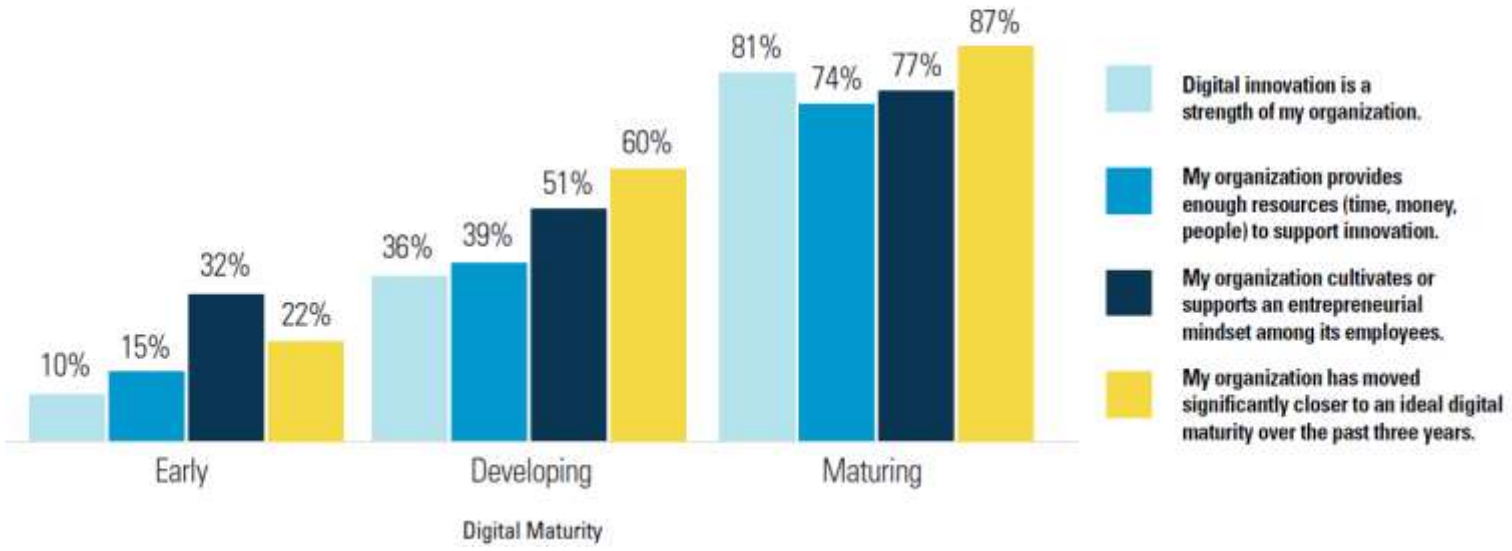
Capability → Accelerating Digital Innovation

- Digitally maturing organizations differ from their less mature counterparts, particularly in their approaches to innovation.
- Not only that, digitally maturing companies are not only innovating more, but they are innovating in fundamentally different ways.
- Achieving such level of high digital innovation requires following certain strategies to stay ahead in the competitive digital landscape.

FIGURE 2: FOSTERING DIGITAL INNOVATION

Digitally maturing companies are more successful at driving innovation than their less mature counterparts.

(Percentage of respondents who agree or strongly agree)



Capability → Accelerating Digital Innovation

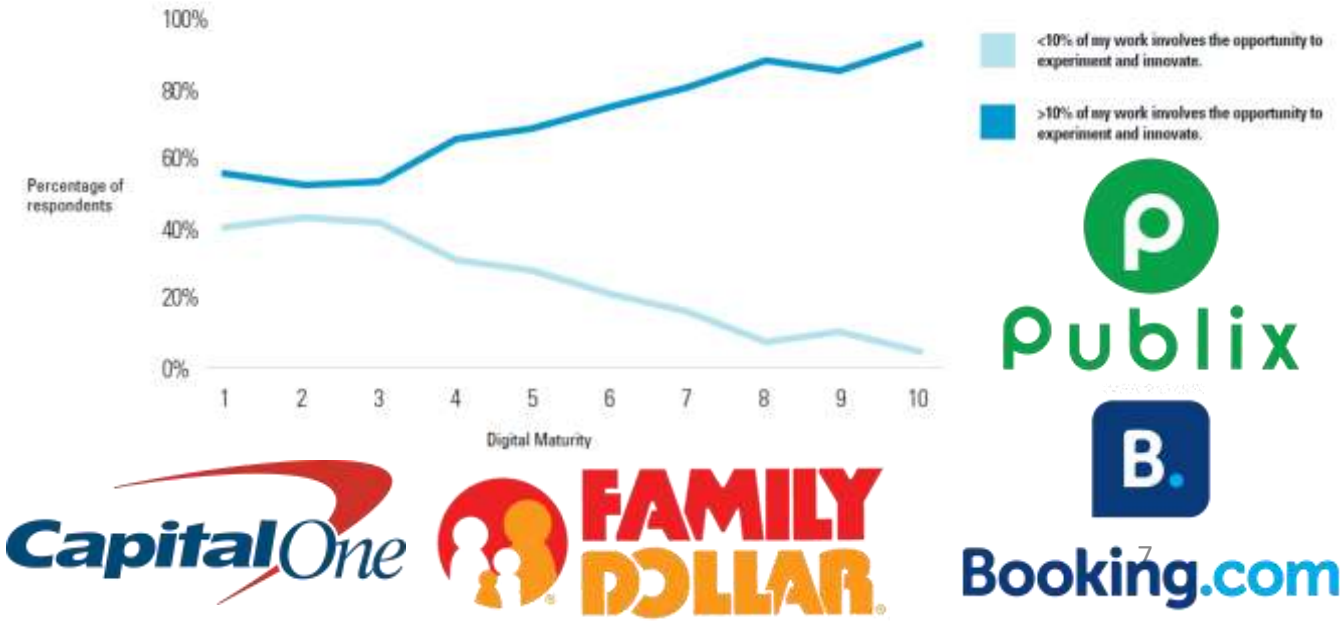
Approaches to Innovation:

- **Innovating at Higher Rates in Digitally Maturing Companies:**
  - Digitally maturing companies embrace innovation as a core value, with innovation occurring across all departments.
  - These companies invest heavily in digital infrastructure and employee training, ensuring continuous improvement.
  - **Example**: A retail giant implemented a digital inventory system that reduced order fulfillment time by 40%.

About Innovation & Experimentations

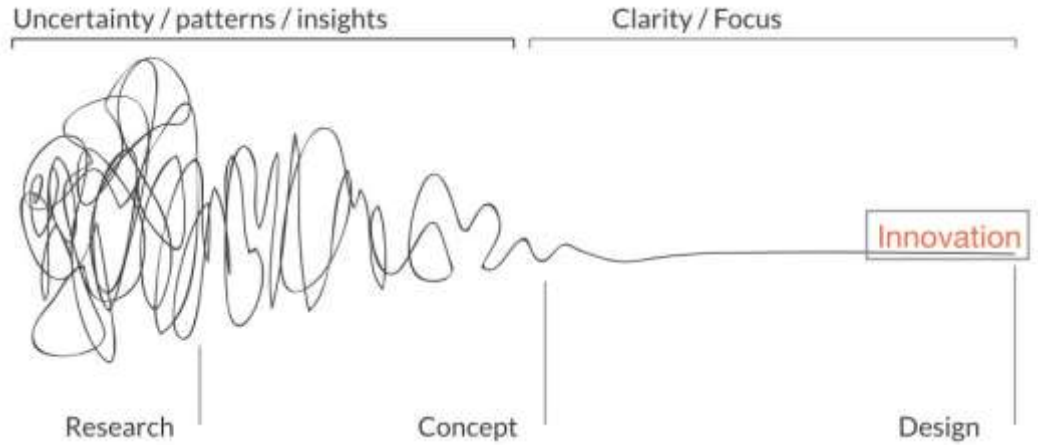
Approaches to Innovation:

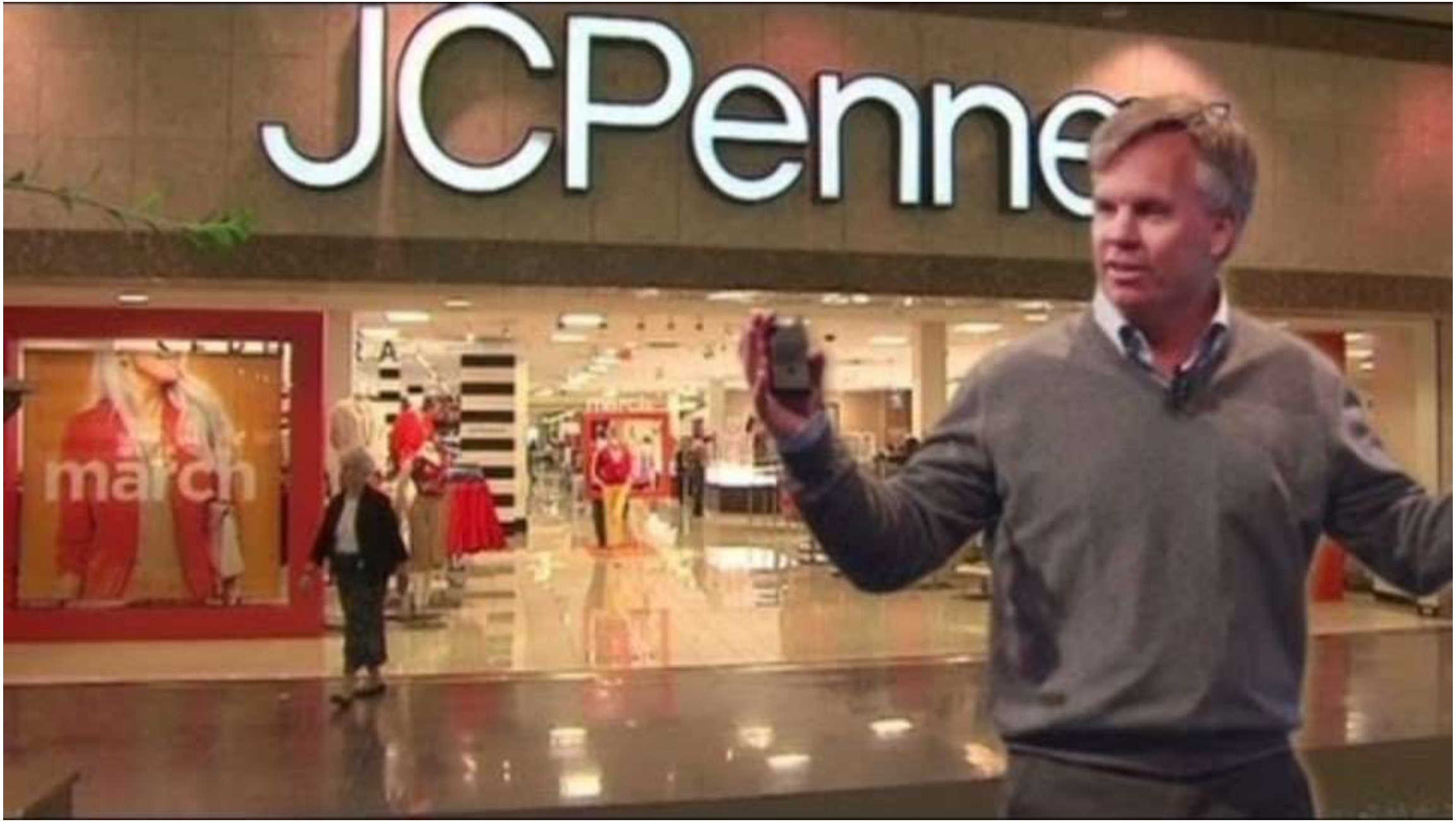
- **Empowering Employees to Innovate:**
  - Employees at every level are empowered to innovate in their roles, regardless of their department.
  - They are given the time and resources to experiment, increasing job satisfaction and creativity.
  - **Example**: Customer service reps suggested an AI tool that reduced handling time by 30%.



About Innovation & Experimentations

- With experimentation, organizations can tap into the power of **high-velocity incrementalism** .
- Even though the business world glorifies disruptive ideas, most progress is achieved by implementing hundreds or thousands of minor improvements that can have a big cumulative impact.
- An enabler is the new digital revolution and technologies that came with it.
- **Experimentation help businesses answer questions like:**
  - How can we begin to innovate if we don't know what customers want and are willing to pay for?
  - How do we direct our organization's resources wisely?
  - How can we distinguish between cause and effect?
  - How can we reduce uncertainty in our decision making?





https://www.youtube.com/watch?v=jm-xkqCaL2E

About Innovation & Experimentations

Famous Predictions of Customer Behavior

"[The iPhone is] the most expensive phone in the world, and it doesn't appeal to business customers because it doesn't have a keyboard, which makes it not a very good e-mail machine."

—Microsoft CEO Steve Ballmer (2007)

"People have told us over and over and over again, they don't want to rent their music . . . they don't want subscriptions."

—Apple CEO Steve Jobs (2003)

"Television won't be able to hold on to any market it captures after the first six months. People will soon get tired of staring at a plywood box every night."

—Attributed to 20th Century Fox studio head Darryl F. Zanuck (1946)

- **Why ideas and business changes fail?**
  - Most managers operate in a world where they lack sufficient data or relevant experience to inform their innovation decisions.
  - Historical data provides clues only about past behavior, not about how customers might react to future changes.
  - Oftentimes, too, managers rely on their intuition— but ideas that are truly innovative typically go against experience.
- Still, managers can discover whether a change in product, service, or business model will succeed. They can do that by subjecting it to a **rigorous experiment**.

https://www.youtube.com/watch?v=97h6ECZnf9o

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Capability → Accelerating Digital Innovation

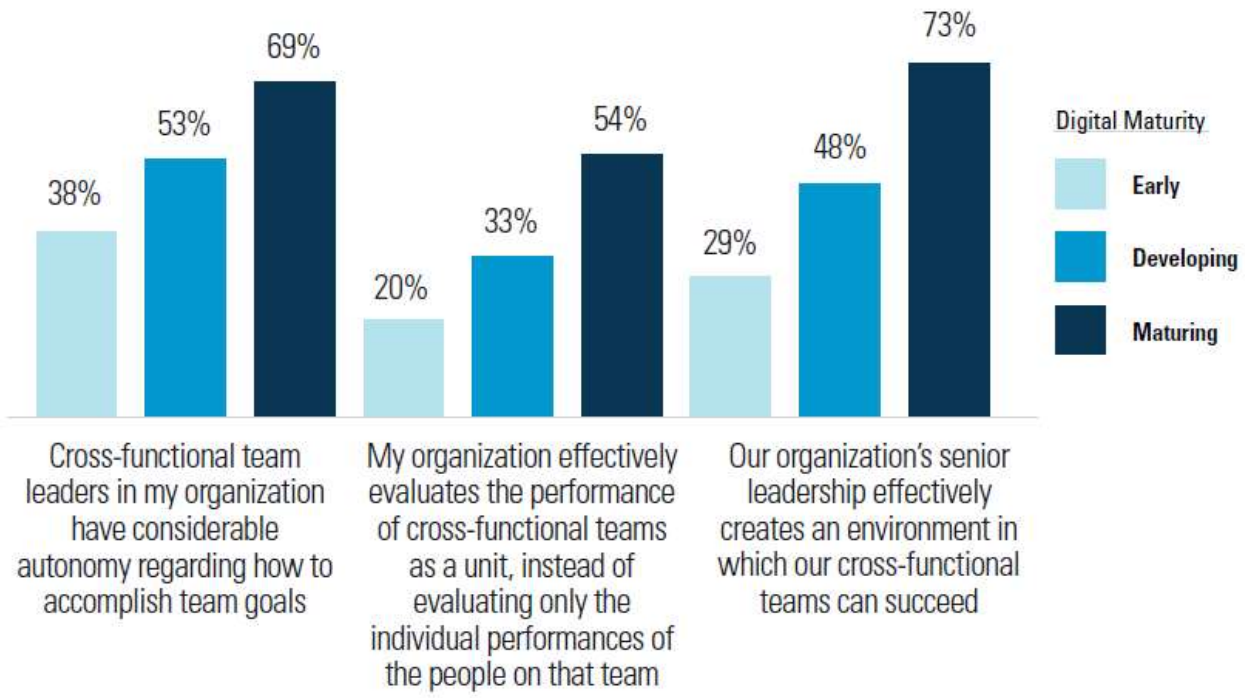
Approaches to Innovation:

- **Collaborating with External Partners for Innovation:**
  - Digitally maturing companies form collaborative partnerships with external organizations.
  - These partnerships often rely on mutual trust, allowing companies to quickly adapt.
  - **Example**: A large insurance company partnered with a startup to develop AI-driven insurance claims processing, reducing operational costs.

Capability → Accelerating Digital Innovation

FIGURE 5: HALLMARKS OF DIGITALLY MATURING TEAMS

Digitally maturing organizations operate cross-functional teams differently than early-stage companies. *(Percentage of respondents who agree or strongly agree)*



Approaches to Innovation:

- **Cross-Functional Teams Driving Innovation:**
  - Cross-functional teams are empowered to experiment, iterate, and learn from failures.
  - They are often measured as a unit, promoting a collaborative, results-focused environment.
  - **Example**: A car manufacturer's cross-functional team developed an electric vehicle prototype, launching ahead of competitors.

Capability → Accelerating Digital Innovation

Approaches to Innovation:

- **Balancing Agility with Governance:**
  - Greater agility requires strong governance to ensure innovation aligns with company values.
  - Ethical guardrails are used to govern autonomous teams and protect long-term goals.
  - **Example**: A tech firm implemented ethical guidelines for AI development to avoid biases in algorithms.

Capability → Accelerating Digital Innovation

Approaches to Innovation:

- **Predictions for Future Strength in Digital Maturity:**
  - Maturing companies are more optimistic about their future and ability to adapt to digital disruption.
  - They believe in their capacity to navigate market trends and invest in digital tools and culture.
  - Example: A traditional media company transitioned to a digital subscription model, increasing revenue while competitors struggled.

Capability → Culture in Traditional Organizations

What is Culture?

- **Culture** is often described as "the way we do things around here." It's a set of shared values, norms, and behaviors that guide how people interact and make decisions within an organization.
- **Culture** is present in both the explicit values stated by management and the unspoken behaviors practiced by employees. It plays a critical role in shaping the organization's identity, performance, and adaptability.
- **Example:**
  - In a traditional manufacturing company, culture may prioritize efficiency, hierarchy, and process stability.
  - However, in a digital startup, culture often values speed, innovation, and autonomy. Both can be effective in different contexts, but successful digital transformation requires blending these approaches.

Capability → Culture in Traditional Organizations

Digital-Ready Culture:

- **Digital-ready culture** refers to the set of values, behaviors, and practices that enable organizations to embrace and thrive in digital transformation.
- It's not just about technology; it's about shifting the mindset of employees and leadership.
- A digital-ready culture is flexible, agile, and promotes constant innovation while maintaining core organizational strengths.
- **Example:**
  - A global manufacturing company shifted its culture by introducing digital training programs that empowered even factory floor workers to propose process improvements, resulting in a 20% increase in operational efficiency.

Capability → Culture in Traditional Organizations

Overcoming Challenges in Legacy Companies:

- Culture change is the most significant challenge for legacy companies during digital transformation, as it involves becoming agile without losing what made the company successful in the first place.
- Leadership must navigate employee resistance and fear of change while fostering a more collaborative and innovative work environment.
- **Example:**
  - A European bank introduced digital tools to improve customer service but maintained its long-standing commitment to data privacy and regulatory compliance, ensuring customer trust while becoming more agile.

Capability → Culture in Traditional Organizations

The Four Key Values of Digital Culture:

1. **Impact**: Creating meaningful and scalable outcomes, typically through revolutionary changes that transform how people and organizations interact.
   - Amazon and Uber have transformed industries with their high-impact digital solutions, reshaping customer experiences and entire markets.
2. **Speed**: Being agile and responsive to rapidly changing market conditions and customer demands.
   - Tesla's ability to rapidly iterate and launch software updates for its vehicles demonstrates how speed in product development and delivery can provide a competitive edge.
3. **Openness**: Transparency, collaboration, and inclusivity in an organization. It encourages employees to challenge the status quo and fosters a culture of sharing information and ideas across departments and with external partners.
   - Google have cultivated open cultures where employees are encouraged to share their ideas, fail fast, and learn from their experiments, resulting in a constant stream of innovation.
4. **Autonomy**: Gives employees the freedom to make decisions and take actions without waiting for approval at every step. This empowers individuals and teams to experiment, innovate, and take ownership of their work.
   - At Spotify, product development teams have high autonomy to innovate and experiment with features independently, which speeds up the innovation process and fosters accountability.

Capability → Culture in Traditional Organizations

Maintaining Integrity and Stability in Digital Transformation:

- Companies can innovate without sacrificing stability and integrity. It's about balancing new digital practices with legacy systems that promote reliability and trust.
- Companies should preserve core values like customer trust, ethical business practices, and operational stability while embracing the flexibility and agility of digital practices.
- **Example:**
  - A tech company restructured its customer service department to incorporate AI while still offering personal, human customer support for complex issues, maintaining customer satisfaction and trust.

Capability → Talent (People) in Key Areas

Digital Transformation and Key Talent Areas:

- **Successful digital transformation hinges on assembling the right talent in four key areas: technology, data, process, and organizational change capability.**
  - Technology drives transformation by introducing cutting-edge tools.
  - Data is the lifeblood of innovation, guiding decision-making and enabling new capabilities.
  - Process improvements align the organization toward customer needs and enable efficiency.
  - Organizational change capability is crucial to managing human aspects like leadership and collaboration during transformation.

- **Each area is interconnected, and talent across these domains must work together to ensure success.**
  - Without the right talent and leadership in these areas, transformation efforts are likely to fail.

Capability → Talent (People) in Key Areas

Technology – The Engine of Digital Transformation:

- Technology is the foundation of digital transformation, enabling businesses to innovate, automate, and scale operations. However, legacy systems (technical debt) and a lack of integration often hold companies back.

- Companies need technologists with deep expertise who can integrate new tools like AI, IoT, and blockchain into the business.

- IT departments must rebuild trust and demonstrate the value of technology to business leaders, moving beyond simply "keeping the lights on."

Capability → Talent (People) in Key Areas

Data – The Fuel for Digital Innovation:

- High-quality data is critical for digital transformation, yet many organizations suffer from poor data quality and a lack of proper data governance.
- Companies must address the quality of their data, integrate diverse data sources, and utilize both structured and unstructured data to drive insights.

- Data talent must work closely with front-line employees to ensure data is created and used correctly throughout the organization.

Capability → Talent (People) in Key Areas

Process – The Guidance System for Transformation:

- Effective process management ensures that digital transformation is more than just incremental improvements. It requires a rethinking of how organizations meet customer needs and manage workflows across silos.

- A strong process mindset aligns the organization towards customer-centric outcomes, helping to break down silos and create seamless, end-to-end solutions.
- Leaders in this domain need to know when to push for radical reengineering versus incremental improvement.

Capability → Talent (People) in Key Areas

Organizational Change Capability – The Landing Gear of Transformation:

- Organizational change capability encompasses leadership, teamwork, emotional intelligence, and change management, which are vital to executing digital transformation.
- This domain focuses on managing the human aspects of transformation, ensuring that people at all levels embrace new ways of working and collaborate effectively.

- Leaders must communicate a clear vision, foster collaboration, and address resistance to change.