Brunel University London

IT Strategy in the Era of Digital Transformation: Case Higher Education

EUNIS 2019

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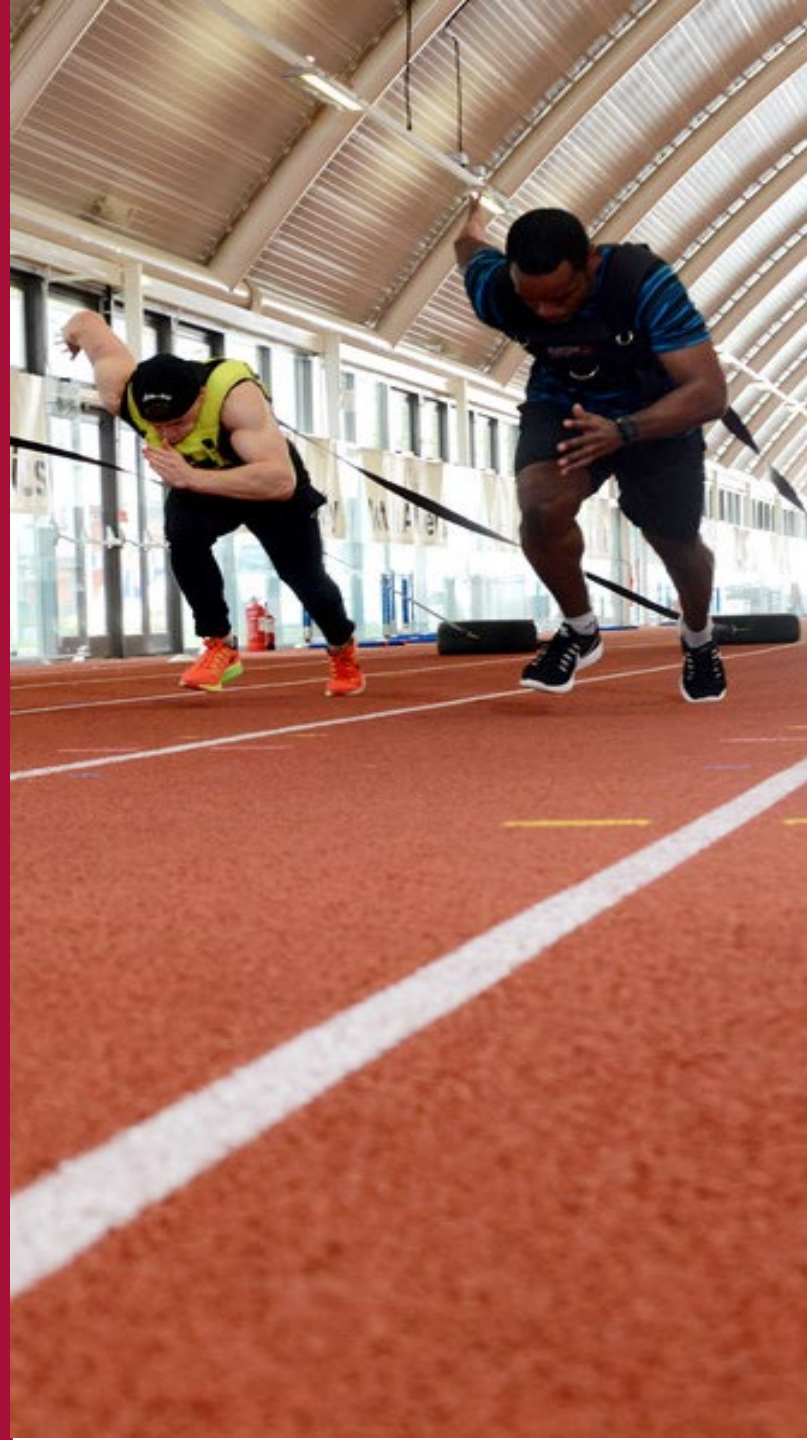

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Context: IT strategy defines how IT creates value for the organisation. Digital transformation changes the role of IT and, consequently, digital strategy must address new aspects of value creation

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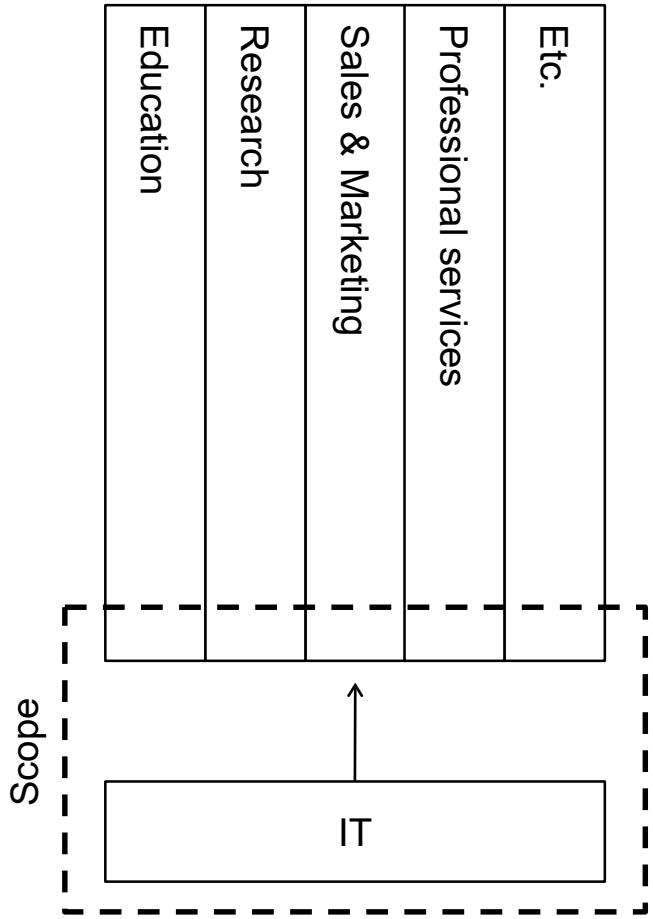
- Digital strategy template
- Example digital strategy (“strategy on a page”)
- Summary

New requirements for digital strategies

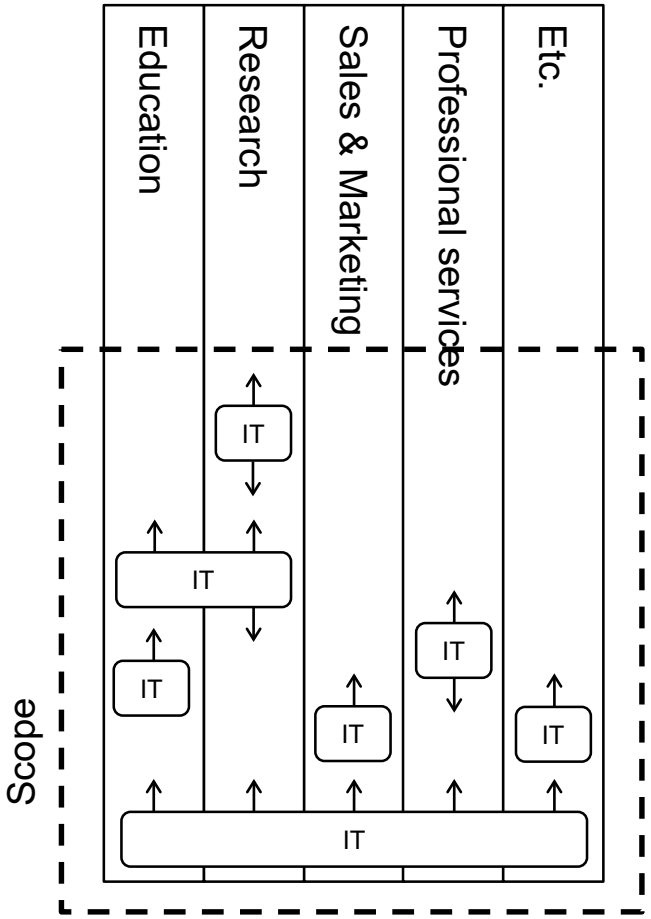
- **Wider use of technology.** IT must be considered in the relevant business context.
- **New role of technology.** Digital technologies may become indispensable and, unlike before, may even drive the business direction.
- **Business development.** Digital is increasingly important for differentiation and innovation.
- **Integration across the organisation.** Digital solutions span across organizational boundaries. IT becomes a process and technology integrator
- **People and structures.** Business and leadership roles require knowledge on IT and IT people are must have deep understanding of the core business. Individual roles become blurred.
- **Culture.** Digital transformation require changes in behaviour in the entire organisation (e.g. automation and self-service) and the strategy needs to tie cultural and digital elements together.

New scope for digital strategies

Traditional IT strategy



Digital strategy



Digital capabilities

A *business capability* refers to the capacity, materials and expertise required to perform a core business function.

A *digital capability* refers to a business capability that is needed to operate successfully in a digital world.

An IT strategy defined in terms of digital capabilities addresses all aspects (e.g. people, processes, tools, other resources) of the relevant key business capabilities independent of organisational or other boundaries.

Digital capabilities can bridge the gap

- **Wider use of technology** → IT elements get blended with business elements
- **New role of technology** → The approach works with different combinations of technology and other elements within a given capability
- **Business development** → When IT elements are discussed always together with the business, it no longer becomes a bottleneck for business development
- **Integration across the organisation** → Capabilities span across the organisation and business/technical integration across the stakeholders is a natural consequence
- **People and structures** → Capabilities reduce the importance of structures and, consequently, people can be more empowered and the MoO can be more flexible
- **Culture** → By combining processes, people and tools together, the approach provides more viewpoints to address cultural issues.

Digital strategy template

1. **The context: external and internal forces**
2. **Digital aspects in the organisation's top level strategy.**
3. **Role of the IT organisation(s), and capabilities that are predominantly IT based.**
4. **Digital capabilities across the organisation**
   - Business centric capabilities
   - Cross-cutting capabilities, e.g. automation and self-service
   - Operational capabilities, e.g. IT partnering and project delivery.
   - Future-looking capabilities, e.g. AI, BI
   - People-related capabilities, digital skills
5. **The implementation**
   - E.g. a holistic programme, group of projects, task force
   - How to manage change
   - Key risks and their mitigation

Capability "mini-strategy"

- Context (why the capability is needed).
- Vision or target (the aim of the capability).
- Required elements, such as people, processes and technologies, and guiding policies.
- Actions to reach the vision (together with risks, governance and other relevant aspects).

Example

2030 vision, Sector changes, Technology changes

Focus on the customer	Digital first	Agility in delivery	Information at the core

- Inspirational education experience through student-centered and technology-rich way of learning
- Broad support for team-based learning and collaborative learning techniques

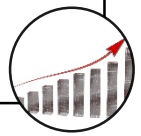
Education and student experience

- Full digital support at all stages of the research process
- Research information systems end-to-end
- Research data management: open access and open data
- Accessible high performance computing

Research excellence

- Digital technologies will enhance our business capabilities and prepare us for new business opportunities
- On-line and blended offering
- Full integration capabilities
- Global partnerships with on-line collaboration

Business Growth



- Seamless integration of the physical and digital campus
- Experimentation of tools for collaboration and sharing
- Virtual digital classrooms and seamless integration of the physical and digital space

Digital Campus

- Seamless services with digital processes: automation, self-service, transparent access to information and functionality
- User-centric service design & service integration

Digital Processes

Information Services

Mission. Information Services will drive and deliver agile and digitally optimised services and solutions in order to enable the Brunel University Community achieve excellence in all that they do.

Vision. We will provide the University with the strategic thought leadership and digital innovation required and set world class standards across the sector.

Digital Specialists. Brunel will have digitally enabled and proficient staff to deliver digital services and projects for serving the future academic needs.

Digital infrastructure. Brunel will have an agile and efficient digital infrastructure with a balanced combination of in-house and outsourced elements. Cloud first will be the guiding principle.

Future Fit Library and digital scholarship. Brunel will create a future fit, efficient library collection strategically aligned to the university's education and research. Scholarly practices will be aligned with modern information technology.

Digital capabilities

Governance
- Business IT
- ICT Projects
- Architecture
- Innovations

People & culture
- Digital literacy
- Learning & teaching
- Collaboration
- Innovation

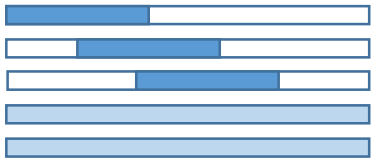
Business support
- Automation and self-service
- Digital content creation
- Cyber security and data privacy
- Digital archives and records

Organisational
- Partnerships – internal & external
- Procurement
- Project delivery
- Financial management
- Information assurance

Future-looking
- Business intelligence and analytics
- Artificial intelligence and emerging technologies

Implemen-tation

Work streams
1. SRS and MI upgrade
2. Digital student experience
3. Digital research support
4. Digital sales and marketing
5. Cultural change



Key risks
1. Traditional culture blocks the development
2. Financial limitations due to other priorities
3. Loss of focus and BAU takes over
4. Unmanaged implementation and disagreement on direction result in sub-optimal results

Summary

- New requirements and scope for digital strategies
- Digital capabilities can bridge the gap
- Digital strategy template
  - The context.
  - Digital aspects in the organisation’s top level strategy.
  - Role of the IT organisation(s), and IT based capabilities.
  - Digital capabilities across the organisation
  - The implementation
- Example from high education

Brunel University London

Thank you

Questions?