Digital Business Transformation and Strategy: What do we know so far?

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Motivation for this Research
Digital Transformation Foundations

Why?  Seeks to understand the context of digital transformation

What?  Seeks to understand the content of digital transformation

How?  Seeks to understand digital transformation from a strategy lens and explores its content and process
# Methodology
## Systematic Literature Review

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>digital*</td>
<td>used as a main construct to cover digital and its derivatives (i.e. digitally, digitalization)</td>
</tr>
<tr>
<td>“information technology”</td>
<td>to cover the preceding information technology era (i.e. IT, IS, ICT)</td>
</tr>
<tr>
<td>transformation</td>
<td>used as a main construct to cover transformation</td>
</tr>
<tr>
<td>“organizational change”</td>
<td>used as a synonym to business level transformation and covers English and American writing styles</td>
</tr>
<tr>
<td>strategy*</td>
<td>used as a main construct and covers strategy and its derivatives (i.e. strategically, strategies)</td>
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</table>

- Scopus
- Web of Science
- Google Scholar
- Snowballing
- Books

- All years to 2017
- Company-Level
- Business Studies
- Management Studies
- English Sources
- Answering 3 RQs

95 Publications
Synthesis Framework

Transformation Context

Why?
- IT-enabled Transformation
  - Internal Drivers
  - External Drivers
- Digital Transformation
  - Internal Drivers
  - External Drivers

Transformation Content

What?
- IT-enabled Transformation
- Digital Transformation
  - Transformation Levels
  - Transformation Dimensions

Transformation Process

How?
- Digital Transformation
  - Strategy Content
    - Decision Areas
  - Strategy Process
    - Types, Paths, Configurations, Participants, Frameworks
Key Contributions

• The context of digital transformation in companies
• The content of digital transformation in companies
• The strategy process of digital transformation in companies
• Defining Digital Transformation Strategies
• Positioning digital transformation within technology-enabled transformations
• Key Characteristics of digital transformation
Digital Transformation Context
*Why do companies digitally transform?*

Emphasis in the literature is placed on two key drivers: **customer expectations** and the emergence of **competitive start-ups**
Digital Transformation Content

*What do companies digitally transform?*

**Business Model**

*Firm Value Chain*

**Transformation**

Operational Element:
- Operations/Processes
- Decision-Making

Human Element:
- People
- Culture

**Impact**

**Entire Value System**

**Transformation**

Customer Element:
- Customer Experience
- Products / Services

Network Element:
- Integrated
- Value Networks
Digital Transformation Strategy Content

What are the decision areas to consider?

Digital Transformation Strategy Content

- Business
- Technological
- Customers

Managerial | Organizational | Structural | Operational

Business Level Content
- to compete in the business

Functional Level Content
- to contribute to the competitive advantage of the business
Digital Transformation Strategy Process

How do companies digitally transform?

Strategy Types: focusing on the Customer

Customer Engagement Strategy

- Focuses on building customer loyalty through superior, innovative, personalized and integrated customer experience
- Aims to create a seamless omnichannel customer experience

Digital Solution Strategy

- Reformulates a company’s value proposition through the integration of products, services and data
- Characterised by R&D efforts to anticipate rather than respond to customer needs

(Ross, 2017)
Digital Transformation Strategy Process

How do companies digitally transform?

Strategy Types: focusing on managerial tactics

- Spin-Off
- Leader
- Expert Opinion
- Trial and Error
- Recruitment
- Direct Sales
- Step-by-Step
- Partnership and Ecosystem
- Visionary Top Management

(Kaltenecker et al, 2015)
Digital Transformation Strategy Process

How do companies digitally transform?

Strategy Frameworks:

<table>
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<tr>
<th>Phase</th>
<th>Description</th>
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<tr>
<td>Initiation</td>
<td>Understanding digitalization opportunities, threats and impact</td>
</tr>
<tr>
<td>Ideation</td>
<td>Imagining transformation dimensions as options for the business</td>
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<tr>
<td>Assessment</td>
<td>Evaluating digital readiness levels and identifying gaps</td>
</tr>
<tr>
<td>Engagement</td>
<td>Communicating the vision and integrating necessary people</td>
</tr>
<tr>
<td>Implementation</td>
<td>Proceeding with the action plan in various domains</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Validating and optimizing the action plan continuously</td>
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Digital Transformation Strategy Definition

A digital transformation strategy is a company-spanning strategy that is formulated to enable a company to incorporate the opportunities of the digital economy by leveraging digital resources and capabilities, and digitally transforming along multiple business dimensions: operational, customer-focused and business models.

- Recognizes the fusion between the business strategy and IT strategy;
- Translates the digital layer of a business strategy to the various functional strategies and acts as a missing link;
- Provides specific transformational guidelines to reach the future state; and
- Considers broader organizational restructuring requirements and acquisitions.
Key Insights: Positioning Digital Transformation

We propose:

• The degree of complexity of digital transformation exceeds that of previous IT-enabled transformation as it takes a revolutionary approach to fundamentally change the discussed dimensions
• The range of potential impact and benefits arising from digital transformation are also higher and have a clear external impact crossing traditional organisational boundaries

(Adapted from Venkatraman, 1994)
Key Insights: Distinctive Features of Digital Transformation
### Key Insights: Distinctive Features of Digital Transformation

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<tr>
<th>Technology</th>
<th>Product</th>
<th>Value Chain</th>
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<td>Re-programmability</td>
<td>Physical component</td>
<td>Reshaping VC:</td>
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<td>Data Homogenization</td>
<td>Smart component</td>
<td>• Design</td>
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<td>Mobility</td>
<td>Connectivity component</td>
<td>• Manufacturing</td>
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<td>Ubiquitous connectivity</td>
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<td>• Smart Factories</td>
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<th>Customers</th>
<th>Networks</th>
<th>Internal Structures</th>
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<td>Digital interaction</td>
<td>Increased cooperation</td>
<td>Governance</td>
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<td>Digital distribution</td>
<td>Co-specialised investments</td>
<td>New Roles</td>
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<td>Ubiquitous digital reach</td>
<td>Long-term repeated interactions</td>
<td>Cross-functional Teams</td>
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**Technology**
- Re-programmability
- Data Homogenization
- Mobility
- Ubiquitous connectivity

**Product**
- Physical component
- Smart component
- Connectivity component

**Value Chain**
- Reshaping VC:
  - Design
  - Manufacturing
  - Smart Factories
  - Marketing & Sales
  - After Sales

**Customers**
- Digital interaction
- Digital distribution
- Ubiquitous digital reach

**Networks**
- Increased cooperation
- Co-specialised investments
- Long-term repeated interactions

**Internal Structures**
- Governance
- New Roles
- Cross-functional Teams
- Bimodal IT
Thank You

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