

## Patterns of Digitization Survey

### Overview:

Patterns of Digitization survey describes the major issues of a business transformation and calls out how the effectiveness, efficiency, and sustainability of the new business model is ensured. For example, an organization can apply the Business Transformation Framework to help break down the process of business transformation into four main areas to manage: transformation strategy, transformation design, transformation delivery, and governance and leadership. Addressing each component of the framework provides the scaffolding necessary to sustain new business transformation initiatives like digital transformation. Transformation strategy establishes the foundations for success and defines the strategic initiatives needed to attain the company's future purpose. Transformation design defines the future business system, the new organizational characteristics and work patterns needed to support it, and the specific design activities needed to implement them. Transformation delivery addresses the mindset and organizational culture companies need to adopt, so they can implement the criteria established in transformation design. Governance and leadership play an important role in that business leaders must provide guidance along the transformation journey, communicate the vision across the organization, and attempt to reduce employee resistance, which frequently occurs in organizations asked to adopt a new strategy and culture simultaneously. Industry partners engaged in digital transformation helped develop and vet the research model and research questions. The research model assumes a top-down, senior management-led, holistic transformation approach.

We consider digital transformation to be a significant change in the basic pattern of how organizations create value. We are making this survey available for researchers to advance thought leadership on this topic.

**Survey results are published in our paper titled**  
**Patterns of Digitization A Practical Guide to Digital Transformation by Paul Mugge, Haroon Abbu, Timothy L. Michaelis, Alexander Kwiatkowski & Gerhard Gudergan**

### You may cite this article and the survey instrument:

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## Page 1

Dear Participant,

Since the introduction of information technologies and process automatization, no other development had greater impact and led to bigger challenges and opportunities at the same time for entire industries than the digital transformation. Digital transformation is aiming at rethinking the role and value of data and putting this in the core of business strategy and operations. It is already starting to reshape entire segments of our society and industries of every type: communication, retail, and increasingly healthcare, medicine, agriculture, and manufacturing. Few companies seem to reach front-runner-status in the process of digital transformation, where the majority seem to lag behind.

The objective of this survey is to obtain answers to the most important research question; how can these companies accelerate the process of repositioning and reshaping their business and enter into the digital economy?

We are looking for the best practices and patterns for different types of companies and industries; including identifying state-of-the-art approaches at both the corporate and functional level. We propose that companies follow a transformation roadmap in order to become digital businesses. The roadmap consists of three strategic phases: 1.) To initiate the transformation, 2.) A corresponding design phase required to shape the new business system, followed by 3.) The phase needed to scale the new business model. (See Patterns of the Digital Transformation Process figure below.)

This study focuses on the first two of these phases – the Initiation Strategy and Design Strategy. With your valuable support, we are trying to identify patterns of best practices in these phases to help companies begin the development of a successful digital transformation roadmap.

As an appreciation for your participation in this study, we will develop a personalized benchmark for participants who fully complete the survey.

We very much appreciate your support, many thanks for your efforts in advance!

FIR and CIMS

# Patterns of the Digital Transformation Process

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## Company Profile / Characteristics

### 1. Company Profile

#### 1.1 What is the size of your company [number of employees]?

\*

1 - 10

10 - 199

200 - 1.000

> 1.000

#### 1.2 What Industry sector would you classify your firm?

\*

Automotive and Suppliers

Agriculture, Agribusiness and Biosciences

Construction and Real Estate

Consulting and Services

Chemicals and Pharma

Education

Energy and Gas

Government

Health Care

Industrial Waste

Finance and Insurance

Retail and Wholesale

IT and Communication

Mechanical Engineering

Manufacturing

Transport and Logistics

Public Administration

Other



## 1.6 What geographic region best captures the location of your firm?

\*

Americas       Europe       Asia       Africa       Oceania

## 1.7 How old is your firm?

\*

0 - 2 years       3 - 6 years       7 - 15 years       16 - 50 years       > 50 years

## 1.8 How many years has your firm been working towards digitization?

\*

0 - 1 years       1 - 3 years       3 - 5 years       5 - 10 years       > 10 years

## 2. Initiation Strategies

In considering your company. Which of the following Initiation Strategies do you rate as the most successful for the digital transformation process? Please rate every Initiation Strategy.

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### 2.1 Merger & Acquisition (outside in):

Short information: Acquiring or merging with a company that holds key resources to facilitate the digital transformation process by integrating knowledge, products/services, and partnership/networks from the acquired to the acquiring organization.

Do you have experience with this Initiation Strategy? \*

Yes       No

\*

	Not Successful	Slightly Successful	Moderately Successful	Successful	Highly Successful	I Don't Know
Merger & Acquisition (outside in): Rate your success.	<input type="radio"/>					

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## 2.2 Digital Spin-off (inside out):

Short information: Creating a corporate spin-off to gain speed and agility in an entrepreneurial and dynamic setting that is independent from static and complex business processes of its parent company. Main target is to develop new digital products, smart services or business models that help in the digital transformation of its parent company.

Do you have experience with this Initiation Strategy? \*

Yes

No

\*

	Not Successful	Slightly Successful	Moderately Successful	Successful	Highly Successful	I Don't Know
Digital Spin-Off (inside out): Rate your success.	<input type="radio"/>					

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## 2.3 Internal Digital Hub (Inside in):

Short information: Creation of a new internal division / department, which is able to make its own decisions while staying connected with the leading organizational management of the company. Its main purposes are to provide a platform to connect people from cross-functional areas of the company to explore the field of digitalization opportunities and to enhance employee satisfaction and thereby their productivity whilst freeing the organization to focus on its core competencies.

Do you have experience with this Initiation Strategy? \*

Yes

No

\*

	Not Successful	Slightly Successful	Moderately Successful	Successful	Highly Successful	I Don't Know
Internal Digital Hub (inside in) :Rate your success.	<input type="radio"/>					

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## 2.4 Ecosystem Development:

Short information: Framing / Developing its own Ecosystem of key partners like suppliers, customers and collaborative partners. This approach aims at generating a unified digitalization state-of-the-art across the whole value chain to reduce organizational costs or to enhance flexibility.

Do you have experience with this Initiation Strategy? \*

Yes

No

\*

	Not Successful	Slightly Successful	Moderately Successful	Successful	Highly Successful	I Don't Know
Ecosystem Development: Rate your success.	<input type="radio"/>					

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## 2.5 Internal Evolution (inolution):

Short information: Digital transformation in incremental steps without (or just by slight degree) changing established structures, processes and systems. This process has little resistance and is experienced with a slow speed of transformation.





company do I  
search for?]  
- Create long  
list and  
systematically  
reduce  
possible buys  
after  
conducting a  
strategic due  
diligence

## 2. Transaction Specification

- Conduct  
operational  
due diligence,  
for Startups  
and  
companies  
with a strong IP  
or  
technological  
focus, conduct  
an intellectual  
capital due  
diligence  
(ICDD) or  
human capital  
due diligence  
(HCDD)  
- Conduct  
pricing based  
on financial  
due diligence  
for assets &  
intangibles



## 3. Integration -Decision about structural integration in parent organization (full integration vs.

interdependent  
subsidiary-  
Clarify  
interaction  
mode:  
Knowledge  
transfer, set  
prerequisites  
for scaling  
phase













### 3.7 Digital Joint Venture (competence in)

\*

	Not Relevant	Slightly Relevant	Moderately Relevant	Relevant	Highly Relevant	I Don't Know
<b>1. Gap identification</b> - Identify the lack of competencies, resources, connections, intellectual property, etc. to successfully transform into a digital business	<input type="radio"/>					
<b>2. Partner screening and initiation</b> - Screen for relevant partners using a defined screening strategy.- Define the goals of the future partnership with a clear strategic value for all partners.	<input type="radio"/>					
<b>3. Joint Venture Ramp up</b> - Define the operative working structures and processes.	<input type="radio"/>					

### 3. Design Strategies

Based on your previous answers in section 2, this section is left blank on purpose, please proceed to the next section.

### 4. Design Philosophies, Communication, Leadership

#### 4.1 Design philosophies



changing requirements (e.g. Development sprints, Scrum).

We generate new ideas for products and services by open communication and idea exchange with customers, suppliers and business partners (e.g. Open innovation)

We value employees' ideas and provide them space (time and resources) to develop the best of these ideas into new business opportunities for our company.

In our company, novelty is encouraged.

Employees find work meaningful and controllable.



### 4.3 Communication

Communication is the formal and informal rules and behaviors of how information is exchanged between individuals and/or organizations. \*

	0% (Never)	25% (of the time)	50% (of the time)	75% (of the time)	100% (of the time)	I don't know
Our communication is transparent across the organization.	<input type="radio"/>					
Internal experts are recognized and consulted, regardless of their position and function within the organization.	<input type="radio"/>					
We communicate openly and are goal-oriented without hierarchical restrictions.	<input type="radio"/>					
We use modern communication technologies, internally (e.g. social intranet, internal blogs, podcasts etc.).	<input type="radio"/>					

### 5. Characteristics of functional units

#### 5.1 The digital Transformation process is changing the self-perception of functional units (depending on organizational characteristics)

Provide the name of your business function/department \*

Yes

No

I don't know

Was your functional group established for the express purpose of enabling a digital transformation?

Are major market trends (political, economic, societal, technological, environmental and legal) routinely monitored and shared with employees?

Does your function have a strategy which addresses the opportunities and threats inherent in these trends?

Is the strategy broadly communicated to department employees?

Does the strategy include acquiring or developing new digital capabilities?

Are the organization's KPI (key performance indicators) tied to the attainment of these capabilities and resulting benefits to the organization at large?

We actively invest in training employees to develop the

knowledge,  
skills, and  
abilities  
necessary to  
survive in the  
Digital  
Transformation



## 6. Enabling Technologies for the Digital Transformation Process

### 6.1 Select the technologies that your organization is deploying for their digital business (select all that apply)

#### Connectivity

Broadband

Cloud (5G)

#### Digital Customer Interaction

Mobile Internet/Apps

Social Networks

#### Automation

Additive Manufacturing

Robotics

#### Digital Data

Wearables

Advanced Analytics (Descriptive, Diagnostic, Prescriptive etc.)

Internet of Things

Artificial Intelligence

## Tracking

Identification (RFID)

Localization (GPS)

## Remote

Condition Monitoring and Remote Systems

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**Thank you very much for your participation.**