Aleksandrs Popovs Zane Drinke

BUSINESS ARCHITECTURE FRAMEWORK FOR DIGITAL TRANSFORMATION





Aleksandrs Popovs Zane Drinke

BUSINESS ARCHITECTURE FRAMEWORK FOR DIGITAL TRANSFORMATION

Monograph



UDK 658

Dr480

Aleksandrs Popovs, Zane Drinke

Business Architecture Framework For Digital Transformation

Series "Uzņēmējdarbības bibliotēka" [Business Library] No. 80

This monograph has been recommended for publication by the Council of Science of Turiba University (minutes No. 21/2024, 19.11.2024.)

Reviewers

Dr.oec. Rosita Zvirgzdina, professor, Turiba University, Latvia

Doc. JURr. Ing. Jana Majerova, PhD, Ambis University, Czech Republic

The image on the front cover page was created using the AI program freepik.com and the author A. Popov's image on the back cover was created using the DaVinci - AI Image Generator.

ISBN 978-9934-543-54-8

- © SIA "Biznesa augstskola Turība", 2025, 154 pp.
- © Popovs, A., 2025
- © Driņķe, Z., 2025

Publisher "Biznesa augstskola *Turība*"

E-mail: izdevnieciba@turiba.lv

Contents

| Introd | uction | . 4 |
|-------------|---|-----|
| 1. THI | EORETICAL ASPECTS OF BUSINESS ARCHITECTURE FOR | |
| DIGIT | AL TRANSFORMATIONS | .9 |
| 1.1 | Digital Transformations Concept | . 9 |
| 1.2 | Digital Transformations during Change and Uncertainty | 20 |
| 1.3 | Digital Transformations for Sustainability | 22 |
| 1.4 | Business Architecture for Digital Transformations | 34 |
| 1.5 | Digital Transformations empowered by SAP solutions | 13 |
| 2. FRA | MEWORK STRUCTURE AND KEY ELEMENTS FOR | |
| DIGIT | AL TRANSFORMATION6 | 54 |
| 2.1 | A-Phase Research: Assessing the Digitalization Level | |
| | of SMEs in the Baltic Region | 54 |
| 2.2 | B-Phase Research: Digital Maturity for SAP-Running | |
| | Companies in the Baltics | 30 |
| 2.3 | C-Phase Research: 360° View on Comprehensive Digital | |
| | Transformation Process | 33 |
| 2.4 | D-Phase Research: Internal Challenges and Enablers | |
| | for Digital Transformation10 | 00 |
| 2.5 | E-Phase Research: End-to-End Process and Value Drivers 12 | 10 |
| 3. BUS | SINESS ARCHITECTURE FRAMEWORK11 | 15 |
| Conclusions | | 33 |
| References | | 37 |

Introduction

How can businesses drive growth in an era of constant disruption? This question often takes center stage in organizational change strategies, not only in Latvia or the Baltics, but globally. After decades working in business and Digital Transformation advisory, and engaging with both enterprise stakeholders and external consultants, the author of this study has observed a consistent pattern: even defining a business strategy can be a daunting task for many stakeholders, especially when it comes to laying out a Digital Transformation roadmap aligned with the company's vision and business objectives. This challenge is particularly pressing as research from Forbes and other leading opinion makers has shown that more than 70% of company executives expect the next five years to be more critical than the last 50, due to the rapidly changing business environment driven by shifts in culture, behavior, and technology.

We are navigating complex and uncertain times and the need for Digital Transformation has become undeniable in supporting businesses through these transitions and helping them adapt to new realities, especially in response to the recent crises. These challenges have accelerated the urgency for Digital Transformation across industries. When we speak about Digital Transformation, it's not just about the latest technologies – though many cutting-edge solutions are now readily available with attractive Return of Investment (ROI) and short deployment times – but about a comprehensive business transformation, fueled and empowered by digital tools. Digital Transformation is defined by the widespread diffusion of digital technology and the need for organizations to continuously adapt to a fast-evolving environment, often marked by episodic bursts of change that drive further continuous transformation.

Digitalization is having a profound impact on both business and society. Traditional business models are rapidly giving way to new approaches driven by digital products and services. Organizations that fail to adapt to this new reality risk being outcompeted or replaced by more agile and technologically advanced counterparts. On the other hand, businesses that embrace Digital Transformation with an open and adaptive mindset can significantly enhance their ability to respond to a changing world.

Numerous studies have shown that non-digital companies are facing stagnation, while those that embrace digital tools are seeing significant gains in productivity. Evidence of digitalization's benefits can be found across a wide range of industries. For example, the adoption rate of digital solutions in e-commerce stands at 95%, while the Banking and Finance sector has reached 93%, and the healthcare industry has embraced digital transformation at a rate of 92%. More importantly, 56% of CEOs attribute increased revenues directly to digitalization.

The rapid rise in publications surrounding Digital Transformation reflects the growing interest in the topic, with the number of research articles increasing each year. Digital Transformation is becoming a strategic imperative for businesses across numerous sectors, and the European Commission has made Digital Transformation a priority through initiatives like the Digital Transformation Scoreboard and the Digital Transformation Monitor has also launched projects aimed at helping policymakers understand and foster Digital Transformation to ensure their economies thrive in a digital and data-driven world.

The shift towards digital is also evident in the enterprise valuations seen in major indices like the S&P 500. Not long ago, the most valuable companies were in industries like mining and finance, but

today, tech giants such as Apple, Alphabet, and Amazon dominate the rankings.

However, companies exploring Digital Transformation often find themselves faced with an overwhelming collection of models, business cases, and architectural frameworks, all of which illustrate the complexity of change management. For those without experience in transformation programs, this can make the entire process seem intimidating and slow down their adoption of digital technologies. On the flip side, companies that remain stuck in traditional ways of operating, claiming that no changes are needed, are setting themselves up for long-term failure. The recent global crisis has forced even the most resistant companies to reconsider their stance on transformation and explore how digital tools can help them stay competitive.

Ensuring a successful Digital Transformation requires a clear framework that guides businesses through both the planning and execution phases. This is where a Business Architecture Framework, a component of Enterprise Architecture, becomes critical. Introduced by J.A. Zachman in 1987, EA is a holistic approach that aligns a company's business strategy with its technology and infrastructure. Over time, various EA frameworks have been developed to address the unique needs of different organizations.

Enterprise Architecture integrates various aspects of a business – strategy, information, services, applications, and technology – ensuring they align with the company's vision and mission. A key function of Enterprise Architecture, and specifically the Business Architecture component, is to maintain this alignment, enabling the company to meet its objectives through collaboration between business and technology stakeholders.

Business Architecture provides a two-step process: first, it describes the current state of the business (as-is), and then it defines

the desired future state (to-be). Given the complexity of large-scale Digital Transformation initiatives, these transformations should ideally be implemented incrementally, using best practices to guide the process, and adjusting the as-is processes to the new to-be framework. No single, generic Enterprise Architecture or Business Architecture model can apply to all organizations, which is why each company must tailor these frameworks to their specific needs.

A successful Digital Transformation begins with a clear understanding of both the market and the organization, along with a business strategy that is aligned with the transformation's goals. However, one of the most significant challenges for stakeholders is selecting the right indicators to measure success. Identifying precise Key Performance Indicators (KPIs) is crucial for evaluating the business processes and tracking performance against the transformation's objectives. Aligning KPIs with business goals and processes requires the structured approach provided by Enterprise Architecture and Business Architecture frameworks, ensuring that all stakeholders are working toward the same objectives and measuring the same value.

While there is extensive research on topics such as Digital Maturity, Digital Transformation, Enterprise Architecture, Business Architecture, and business Key Performance Indicators, most studies tend to focus on individual aspects of these areas and often fail to present a holistic view, typically calibrating existing frameworks that are too complex and cumbersome for key stakeholders to make fast, informed decisions. This limitation becomes particularly evident when businesses require agile solutions for rapid Digital Transformation, which demands streamlined, decision-friendly frameworks that address both strategic goals and operational realities.

The further content aims to address this gap by developing a tailored framework that builds a transformation roadmap. It focuses on aligning business priorities, driving value through clearly defined KPIs, and offering a user-friendly framework that facilitates rapid decision-making.