IT Strategy Follows Digitalization

B

Thomas Ochs
Villeroy & Boch, Germany

Ute Anna Riemann *SAP SE, Germany*

INTRODUCTION

Digitalization is one of the most powerful and important phenomenon than any technology innovation before (Nordstöm, 2015). Digitalization has an enormous value and with it everything has the capability to change (Salo, 2006). With the ability of changing the way, products and services are consumed by the suppliers, consumers and partners completely different ways traditional industries being blurred (Rai, A., Pavlou, Im, & Du, 2012; Ray, Muhana, & Barney, 2005; Sambamurthy, Bharadwaj, & Grover, 2003).

In this sense the question of a new IT strategy emerges as companies need to understand where to invest in digital technology and what it deserves to get the highest value out of this investment. Much of that investment concentrated on applying new technologies to existing products, practices and processes. Going mobile, adding analytics, or extending the online experience are essential considering the transformation of the business with digital, in the face of changing consumer expectations, options and information.

Refining the business and digitalize them is more than just extend the IT strategy with digitization by new functions and processes. Digital is more than a set of technologies. It is about the abilities those technologies create. Digital is the application of information and technology to raise human performance and in this sense the human factor is the essence of digital transformation as it creates the type of value that leads to revenue. In addition – of course - goals for creating efficien-

cies that largely drive down the cost of creating short-term benefits but drain the economy and growth needs to be considered. Digital technology has a transformation potential starting in its silos such mobile, cloud, process, customer, supply chain, etc. (Rai, Pavlou, Im, & Du, 2012; Klein, & Rai, 2009; Saraf, Langdon, & Gosain, 2007; D'Adderio, 2001). Now it is the time to go down to the essence of the IT strategy asking the question how can a business win using information and technology raising human performance.

DIGITALIZATION

Background

Currently we see a lot of information addressing the topic of digitalization. Beyond the pure buzz-word a lot of previously effective and useful assumptions, structures and procedures have to be adapted to become successful in the new digitalized world. Our chapter focuses on the company's IT and highlights in detail what the required changes in its various levels and dimensions for corporate IT are to meet the new digital requirements. The idea of our chapter is to make the relevant levels and dimensions transparent, outline how the various elements interfere with each other and how this transforms the corporate IT in regards to its positions and importance of the company, the structure and processes within an IT organization and the requirements towards agility and skills.

DOI: 10.4018/978-1-5225-2255-3.ch075

What Does Digitalization Mean?

As a trend, the substantial growth in the output in the recent years has changed. What is now of importance for many firms is the adoption of 'customer orientation through the reengineering of the value proposition of the desires and expectations declared by customers. This requires an increases for of collaboration, information sharing and flexibility (Jarach, 2002). In that sense the digitalization creates new patterns of action for the companies and especially for the IT. In simplified terms, the digitalization impacts the IT in various ways which should be reflected in an appropriate IT strategy, IT organization and IT processes. The impact the digitalization has towards the IT is huge as digital tools is to increase the coordination and adaptation possibilities since many organizations are reaching for the goal that is changing. The coordination with help of IT is possible if initial investments and adaptations to IT are made. The focus is on simple product, service and money exchange rather than knowledge or informational exchange. To move into this new digital era as a traditional organization it is necessary to accelerate the digitization of business processes that goes should go beyond simply automating an existing process. Processes must be re-invented, including cutting the number of steps required, reducing the number of documents, developing automated decision making, and dealing with regulatory and fraud issues. In parallel the operating models, organizational structures, and roles need to be redesigned to match the reinvented processes. Data models have to be adjusted and rebuilt to enable better decision making, performance tracking, and customer insights. Real-time reports and dashboards on digital-process performance permit managers to address problems before they become critical. All this is just not possible once the IT stays in their traditional role!

Why Does Digitalization Force a New IT Strategy?

One of the biggest challenges for mainly every company in today's times and thus as well for any internal IT is the digital transformation that will have a massive impact on all businesses and business areas. This impact has a high importance not only for companies emerged in the digital age but as well for companies of the old economy and does have relevance for the business models, new competitors and competitions as well as chances and risks that have to be considered due to the new networks and digital possibilities.

To succeed in this new digital era a clearly formulated digital corporate strategy is a fundamental pre-requisite - all business areas need to learn to think and act "truly digital". The setting and tracing of a digital agenda needs to have top priority in every area of a company. In addition any company need to find an answer to the question how the existing business model will be affected and possibly change or have to be adapted due to the digital transformation.

The digitalization itself demands for a superior and strategic IT view – just not the pettiness in which we often remain. IT conveys a certain importance in this sense as with the right use of the new IT capabilities new chances and strategic competitive advantages can be generated (Agarwal, & Lucas, 2005). This consequently means that the thesis of Nicolas G. Carr from 2003 "IT doesn't matter" (Carr, 2003) is disconfirmed.

The power of a digital IT strategy lies in its scope and objectives. Therefore the question to be answered is how an Information Technology (IT) strategy should be developed.

While the IT strategy basically regulate the longer term deployment of information and communication systems of a company, it is difficult to define general rules for formulating them. In the

13 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/it-strategy-follows-digitalization/183799

Related Content

Estimation and Convergence Analysis of Traffic Structure Efficiency Based on an Undesirable Epsilon-Based Measure Model

Xudong Cao, Chenchen Chen, Lejia Zhangand Li Pan (2024). *International Journal of Information Technologies and Systems Approach (pp. 1-25).*

www.irma-international.org/article/estimation-and-convergence-analysis-of-traffic-structure-efficiency-based-on-anundesirable-epsilon-based-measure-model/332798

Automatic Pattern Proposition in Transformation Life Cycle

Mahsa Sadat Panahandehand Bahman Zamani (2017). *International Journal of Information Technologies and Systems Approach (pp. 1-16).*

www.irma-international.org/article/automatic-pattern-proposition-in-transformation-life-cycle/178220

Assessment Approach of Enterprise Readiness to Digital Transformation

Anna Zotovaand Valentina Mantulenko (2019). *Educational and Social Dimensions of Digital Transformation in Organizations (pp. 145-173).*

www.irma-international.org/chapter/assessment-approach-of-enterprise-readiness-to-digital-transformation/215140

Aspect-Oriented Programming

Vladimir O. Safonov (2015). Encyclopedia of Information Science and Technology, Third Edition (pp. 7037-7045).

www.irma-international.org/chapter/aspect-oriented-programming/112402

Organizational Adoption of Sentiment Analytics in Social Media Networks: Insights From a Systematic Literature Review

Mohammad Daradkeh (2022). International Journal of Information Technologies and Systems Approach (pp. 1-29).

www.irma-international.org/article/organizational-adoption-of-sentiment-analytics-in-social-media-networks/307023