# Digital Transformation Journeys in a Digitized Reality

# Jurgen Janssens

QSpin, Belgium

# INTRODUCTION

Big Data and Digital Transformation are hot topics since several years.

Big Data are large volumes of data from one or more sources, analyzed through innovative information processing to develop insights, resulting in better business decisions and process adaptation<sup>1</sup>. Estimates of Turner, Reinsel and Gantz (2014) expect human and machine data to increase to 40ZB by 2020.

Digital Transformation implies often Big Data powered changes (Mayhem, Saleh, & Williams, 2016). Whereas concrete outcomes of the latter are booming, Digital Transformation is still seen as a faraway future. Nowadays, however, companies and organizations should not ask themselves anymore how to prepare for the upcoming Digitization, but how to adapt to and in today's Digitized/ Digitizing World.

To get there, they need to understand how to evolve by embracing new technological potential and by looking through the blurring frontiers between offline and online reality. They have to take changing habits and continuously transforming customer segments into account. They have to look beyond the mere 'product' and 'selling to customers' angle (Richter, & Wee, 2016). To keep their value, companies, organizations and even governments need to understand that mental mobility of people and their data-stimulated ecosystem have turned people's need for products in a need for shaped services.

This has a significant impact on the strategic vision. Typically, this requires a new way of working adapted to the redefined borders between reactivity and proactivity, and to the attention for real-time service and contextual adaptation. An organic compromise has to be found that answers the need for creative freedom and the need for an environment where management and development of human capabilities are possible in a structured way.

This article will shed light on core components for Digital Transformation. Concrete methodologies will also be analyzed that can guide the process of reviewing company fundamentals in the Digital Reality.

It will be explained that human means and data power need to be developed to develop a company's digitally quantified intuition<sup>2</sup> and to get most out of the customer journey.

Altogether, this article will illustrate that the success of Digital Transformation goes through integrating technological possibilities and dynamic customer journeys in the corporate DNA. It will require a new internal perspectives on projects, and create a new dynamic that, in the end, will allow people, companies and public and private organizations to be in the driving seat of this Fourth Industrial Revolution.

## BACKGROUND

Reflections about Digitization and Digital Transformation exist since several years, also on intergovernmental level<sup>3</sup>. With technology developments in various fields amplifying one another, this will continue. It will lay the foundation for a revolution more all-encompassing than anything seen so far (Schwab, & Samans, 2016).

There are several risks if the dynamic is not engineered and managed correctly.

First of all, companies need to be aware that Digital is not an add-on, but the very essence of the transformation journey to remain in the game (Henke, Libarikian, & Wiseman, 2016). It involves a change in leadership, new business models, and an increased use of technology to improve the customer experience. It is only by integrating this Digital backbone that Digital strategies can have a lasting effect. Digital is one of the main reasons half of the companies on the Fortune 500 have disappeared since 2000 (Nanterme, 2016). Failing to understand its functioning can thus lead to companies losing their relevancy.

Traditionally, Digital Transformation is covered from separate angles.

Certain sources analyze the impact of technology on job markets and human employability (Van Driessche, 2014). Others focus more on specific pieces of the corporate landscape – ranging from the need to extend the CxO suite with a Digital Officer, to the development of a new way of thinking, or the analysis of managerial choices to be made for techn(olog)ical transition.

Solely focusing on subsections risks to lead to an incomplete integration of the Digital dynamic. At best, the initiative will be an intermediary step. At worst, it will create a negative spiral that funnels means, time and potential - a risk further reinforced by the speed at which Digital is unfolding.

On the methodological level, a similar tendency can be observed. Agile frameworks like scrum<sup>4</sup> or Kanban<sup>5</sup> ensure guidance of essential aspects for agile product delivery (Galen, 2013). It is however less common to have agile covered for more profound transformations like those observed in the Digital Age.

The author wants to bring the components of the Digital journey together. Shaping their complementarity should open the possibilities of a new way of thinking about customers, organizations and projects, about shaping service and product delivery, about interacting with the ecosystem and about creating value.

## SOLUTIONS AND RECOMMENDATIONS

# Changing Ecosystems, Dynamic Needs

Companies are continuously challenged to raise the bar, or to reinvent themselves. Digital Transformation is seen as one of the means to get there. This transformation is already well underway. Early 2016, the World Economic Forum in Davos called it the Fourth Industrial Revolution (Schwab & Samans, 2016):

Today, we are at the beginning of a Fourth Industrial Revolution. Developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing and biotechnology, to name just a few, are all building on and amplifying one another. (...) While the impending change holds great promise, the patterns of consumption, production and employment created by it also pose major challenges requiring proactive adaptation by corporations, governments and individuals.

Besides the semantical discussion to call it Digital Transformation or Fourth Industrial Revolution, facts are there that illustrate the vastness of this evolution (Carter, 2015). The world's largest taxi firm, Uber, owns no cars. The world's most popular media company, Facebook, creates barely content. The world's largest accommodation provider, Airbnb, owns no property. So, vast changes are already ongoing.

In fact, private and public actors have already interwoven Digital in everyone's day-to-day. The British government, for instance, is coached by scientific experts of the Behavioural Insights Team<sup>6</sup>, amongst others to improve processes like the reduction of late paid taxes (Van Leemputten, 2016).

This is also true for private companies. Thanks to PlayStation, Sony's revenue is growing for services like the selling of data to game producers. These data allow third parties to understand 10 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/digital-transformation-journeys-in-a-digitizedreality/183781

# **Related Content**

#### Change Management: The Need for a Systems Approach

Harry Kogetsidis (2013). International Journal of Information Technologies and Systems Approach (pp. 1-12).

www.irma-international.org/article/change-management/78903

# The Role of Management Consultants in Long-Term ERP Customization Trajectories: A Case from the Italian Local Government

Gian Marco Campagnolo (2012). Phenomenology, Organizational Politics, and IT Design: The Social Study of Information Systems (pp. 176-195).

www.irma-international.org/chapter/role-management-consultants-long-term/64684

#### Mobile Virtual Reality to Enhance Subjective Well-Being

Federica Pallavicini, Luca Morganti, Barbara Diana, Olivia Realdon, Valentino Zurloniand Fabrizia Mantovani (2018). *Encyclopedia of Information Science and Technology, Fourth Edition (pp. 6223-6233).* www.irma-international.org/chapter/mobile-virtual-reality-to-enhance-subjective-well-being/184320

An Efficient Clustering in MANETs with Minimum Communication and Reclustering Overhead

Mohd Yaseen Mirand Satyabrata Das (2017). International Journal of Rough Sets and Data Analysis (pp. 101-114).

www.irma-international.org/article/an-efficient-clustering-in-manets-with-minimum-communication-and-reclusteringoverhead/186861

#### Mobile Health (mHealth)

Muhammad Anshariand Mohammad Nabil Almunawar (2015). *Encyclopedia of Information Science and Technology, Third Edition (pp. 5607-5614).* 

www.irma-international.org/chapter/mobile-health-mhealth/113014