Initialising customer-orientated digital transformation in enterprises


ESB Business School, Reutlingen University, Alteburgstraße 150, 72762, Reutlingen, Germany
Industrial Engineering, Stellenbosch University, Cnr Joubert Street & Banghoek Road, 7600, Stellenbosch, South Africa
Fraunhofer Institute for Industrial Engineering IAO, Nobelstraße 12, 70569, Stuttgart, Germany

Abstract

Digitisation forms a part of Industrie 4.0 and is both threatening, but also providing an opportunity to transform business as we know it; and can make entire business models redundant. Although companies might realise the need to digitise, many are unsure of how to start this digital transformation. This paper addresses the problems and challenges faced in digitisation, and develops a model for initialising digital transformation in enterprises. The model is based on a continuous improvement cycle, and also includes triggers for innovative and digital thinking within the enterprise. The model was successfully validated in the German service sector.

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1. Introduction

“Digital is the main reason just over half of the companies on the Fortune 500 have disappeared since the year 2000” ~ Pierre Nanterme, Accenture CEO. A recent phenomenon, digitisation, has gained a lot of traction and...
completely changed customer behaviour and expectations, and therefore implicitly forced the reinvention of business in order to create and keep customers.

Digitisation forms a significant part of possibly the largest world-wide trend, Industrie 4.0, and threatens to entirely transform organisations and current business models [1, 2].

Customers today no longer only expect companies to respond to their expressed demands, but implicitly expect companies to anticipate and address their future needs before they themselves have realised them. This proactive customer orientation has been found to be the most consistent driver for both customer value and gaining a competitive advantage in this digital era [3]. Manufacturers of the future should, therefore, be more focused on the consumer’s needs and value creation niches within systems [4], named by many as smart service or smart production [5]. Companies that embrace these new demands will succeed, whilst others will disappear entirely. Hamish Nuttall, founder of the digital start-up ‘the Naked Bus’ believes that: “[…] if you don’t reinvent your business, chances are somebody else will” [6]. This paper aims to identify the problems and challenges faced on the road to becoming digital and analyses a new approach for companies to initialise their digital transformation.

2. Digital transformation

Since the purpose of any company is to turn a profit by meeting customer demands, it is crucial to understand how digitisation affects the customer. Hughes [7] addresses some key changes in this changing customer behaviour. Not only are customers less forgiving of mistakes and less loyal to a single company, they are also more informed, communicate more with other customers and are forming ever higher expectations regarding digital service provision that spans across all channels and industries [7]. To add to the increased demands from customers, companies are facing ever tougher competition due to globalisation [8]. Companies in all branches are feeling the pressure to go digital, and know that they need to do so quickly before they are left behind by innovative and digitally-focused competitors and new entrants [9, 10].

2.1. Digital barriers

Although most companies have realised the need to digitise, various challenges are inhibiting them from starting or benefitting from digital transformation [8]. These challenges can occur during all three phases of the digital transformation as defined by McAfee et al. [8], namely the initiation phase, the execution phase, and the coordination phase. Typical barriers mentioned by companies themselves include insufficient IT structures, lack of technical skills, inadequate business processes and high implementation risks and costs [8, 10, 11]. Albrecht [12] addresses possibly the most important cultural barrier which is often underestimated and usually not recognised by companies. This is people’s unwillingness to change, and their indifference to the necessity of a radical change such as digitisation.

The question then becomes: How can companies overcome these obstacles and become digital?

2.2. Digital maturity of an organisation

Azhari et al. [13] provides a maturity model for the digital transformation which clearly depicts the multifaceted depth of digitisation. The maturity model, as shown in Figure 1, is comprised of 8 dimensions of digitisation, namely strategy, leadership, products, operations, culture, people, governance and technology. These dimensions can be fulfilled to varying extents. Five levels of digital maturity are defined according to which companies can classify themselves.

The first level, “unaware”, describes companies in which there is no strategy for digital transformation, nor are there any digital competencies available. These companies do not yet offer any digital products or services, and are missing an overall organisational awareness for the need of digital transformation. Companies classified by the “conceptual” level, are those which offer a few digital products, but are still without a digital strategy. Those with a “defined” level of digitisation, are the companies who are able to consolidate experiences gained from pilot implementations into partial strategies. At this stage, a culture of digital thinking is taking root in the company. The profitability of these partial strategies and the effects of the pilot implementations are assessed and used to develop an overall digital strategy. At this point, where a clear digital strategy is developed, the company falls into the “integrated”
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