12 Digital Transformation in the Event Industry

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Learning outcomes

Upon completing this chapter, the reader will be able to discuss the following:

☐ Basic concepts of digital technologies and digital transformation (DT)

☐ Digital transformation roadmap

☐ Digital transformation mastery

☐ Social, mobility, analytics, cloud (SMAC) technologies for DT

☐ SMAC technologies for event industry

☐ How to manage event registration using smart contract blockchain

Digital transformation background

Digital transformation (DT) is becoming an important topic for organisations and industries around the world (Kaufman & Horton, 2015; Von Leipzig et al., 2017). It is anticipated that some organisations will be unable to adapt easily to the new digital era, and executives are struggling to understand how digital transformation affects their organisations. Digital transformation is not only about investing in digital technology but refers to how organisations restructure themselves to adapt and shift organisational culture to enable developments that exploit technology and bring their businesses to new growth rates. Digital transformation has also appeared in the event industry, presenting digital solutions to optimise the event management process.

The basic idea of the digital transformation comes from the blending of personal and corporate information environments and integrates the transformative effect of new digital technologies such as social, mobile,

analytics, cloud and the Internet of Things (Kane et al., 2015.). A broad definition describes it as the integration of digital technologies and business processes into a digital economy (Liu et al., 2011). A similarly broad view holds that the use of technology can radically improve a business's performance or impact (Westerman et al., 2014a).

A more detailed understanding considers digital transformation as the use of these technologies to influence three organisational dimensions: *externally* with an emphasis on digitally enhancing the customer experience and changing its life cycle; *internally* influencing business activities, decision-making processes and organisational structures; and *holistically*, where all business divisions and functions are affected, often leading to completely new business models (Kaufman & Horton 2015). In general, scholars have come to agree that the digital transformation is associated with a fundamental shift in achieving superior performance and that it takes into account the internal, external and holistic constants. In addition, a digital business strategy is required for digital transformation in the event industry, reshaping the existing business models. Digital business strategy is defined as:

> *"the application of digital technologies to business models to form new differentiating business capabilities. In the future, all business strategy will be digital strategy"* (Liferay, n.d.)

The digital business relies on technology to improve organisational quality, either through new technologies or revision of current processes. It must be known that digital business is both a theory and practice; a digital business will ultimately lead to a concrete plan or roadmap.

The nature of the digital transformation, as described in the literature, suggests that its degree of complexity exceeds that of previous computer-capable transformations. This is supported by the fact that DT is considered as one of the biggest challenges in all sectors in recent years, without exception, and despite the fact that companies recognize the importance, they still face multiple obstacles preventing them from starting, let alone benefiting, from digital transformation (Von Leipzig et al., 2017). They strive to gain business benefits from new digital technologies, as competing priorities lead to the list of common speed disturbances (Fitzgerald et al., 2013; Kane et al., 2015.). This may be due to the lack of clarity about the various available options and elements that managers need to consider in their transformation approach. Fitzgerald et al. (2013) suggest that a significant minority of companies have managed to develop the right management and technology skills to achieve the transformational effects of new digital technologies. In addition, they suggest that today's businesses face additional leadership and institutional challenges. Leadership challenges include a lack of urgency, vision and direction, while institutional ones are

linked to older workers' attitudes, heritage, innovation fatigue and politics. Institutional challenges can best be explained by the fact that most transformational technologies involve a degree of resistance to change, manifested by the behaviour of some members who refuse to accept the new situation (Lawton 2015). This cultural barrier is often underestimated and usually not recognized by companies (Von Leipzig et al., 2017).

Digital transformation roadmap

First wave of digital transformation

In the 1980s, the first digital transformation began, with the introduction of information technology into people's lives, but also of further automation through electronics. The Internet entered the professional life of people and computers became their main tool. Globally, access to information has become easy and fast. Many processes were automated, and, in many cases, human labour was substituted. The process of developing new technologies, such as artificial intelligence and deep learning, intensified and eventually became the backbone of the second digital transformation.

Second wave of digital transformation

The technical integration of cyber physical systems (CPS) into production and administration, and the use of the 'Internet of Things' (IoT) and services in the same processes essentially marked the beginning of the second digital transformation. This term also refers to the consequences in the way of production of goods and services, in the sources of value creation (information becomes a source of power and wealth), in business models, as well as in the reorganisation of work. The CPS concretizes Internet connections between people around the world, machines, products, objects and Information and Communication Technology systems. The introduction of Artificial Intelligence (AI) in the service sector may be the hallmark of the 'fourth industrial revolution'. CPS are the core of industry 4.0. Industry 4.0 is the current trend of automation in the field of production technologies and it combines digital technologies with production methods. More specifically, it includes CPS, cloud computing, IoT and cognitive computing.

From the second digital transformation wave flow many changes, which are briefly mentioned below:

♦ Changes in production processes and distribution networks of products and services. Multinational companies control the data they use to facilitate the production and distribution of products and services,

♦ Changes in the way markets and businesses are organized, with the utilization of extensive local and international inter-company networks,