

Digital Transformation Maturity of Electronic Sports Businesses

Subjects: **Others**

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Digital transformation has become the top priority for 80% of sports companies worldwide, but statistics show that between 70 and 95% of all digital transformation projects fail due to the significant and varied challenges that sports businesses face during the digital transformation process. This is because strategy, not digital technology, drives digital transformation, and without a mature digital transformation model, success is unlikely. Moreover, the digital transformation model of developing and developed countries is not the same, and it cannot be adopted as a blueprint.

digital transformation

digital maturity

electronic sports businesses

digital resilience

1. Introduction

Digital transformation has become a vital aspect in many fields of life, including electronic sports businesses, because it is the basis of supporting flexible and adaptive changes in operational processes and information systems ^[1]; leads to improved efficiency and productivity ^[2]; makes it easy to enter new markets ^[3]; recognizes the emergence of threats and opportunities caused by the dynamism and rapid change of the business environment ^[2]; leads to automated processes, reduces costs, and improves decision making ^[4]; causes innovation ^[4]; follows strategic change ^[5]; improves the customer experience ^[6]; and ultimately improves the value proposition for the customer and creates new revenue channels ^[7].

Therefore, many industries have taken steps in this direction in order to gain the benefits of these developments. Meanwhile, the sports industry has been one of the greatest users of these new technologies due to the ever-growing need for using digital solutions ^[8], so that digital transformation has become the main priority of 80% of sports companies around the world ^[9]. For example, GoPro initially offered a camera that was suitable for filming action sports; then, this company reached millions of people around the world by using its brand and taking advantage of social media and providing user-friendly software ^[10]. Such digital innovations are not limited to social media; Roger Goodell, the National Football League (NFL), also introduced the NFL's roadmap to enhance the in-stadium experience using digital technologies ^[11]. Stadium operators are beginning to digitize their stadiums by offering smartphone applications that allow spectators, the media, and other stakeholders such as sponsors to communicate with each other and create value. For example, the San Francisco 49ers app provides an opportunity for fans to order food and drinks, communicate with other fans, access real-time statistics, and see traffic patterns inside and outside the stadium ^[12]. This means that sports businesses are increasingly trying to create new ideas and have come to the conclusion that new technologies will help them develop products and services ^[8].

2. Digital Transformation

In the research literature, digitization, digitalization, and digital transformation are concepts that are sometimes used interchangeably even though these concepts do not have a single definition ^{[13][14]}. Digitalization is the process of converting analog information into digital encoded information ^[15], which occurred with the widespread emergence of computers ^[16]. Digitalization is a phenomenon that describes the use of digital technologies, for example, when companies use computers to facilitate work processes and do not adopt them only for traditional uses ^[17]. Therefore, digitization is related to the use of

digital technologies in organizational settings and increasing the workforce [16]. On the other hand, digital transformation is a radical process of change that is carried out using the pre-introduced innovations [18][19]. Also, digital transformation is the process of imposing changes in the use of digital technologies or the development of new digital business models and a dramatic change in the functioning of an organization or a country centered on transformative technologies [20][21][22]. In addition, it means the integration of digital technologies in all different segments of a business, which changes the working procedures and provides value for the customers [23]. Therefore, in this study, digital transformation in electronic sports businesses refers to a cultural, organizational, and operational change that involves the intelligent integration of digital technologies, processes, and competencies at all levels, resulting in a convergence of these elements towards a strategic direction. The findings of a case study indicate that the number of published studies focusing on digital transformation in sports marketing has increased steadily since 2016 and reached its peak in 2020. Most of these studies have been published in sports communication journals, such as the International Journal of Sports Communication and Communication and Sport. The majority of studies have utilized a quantitative or qualitative approach, and more than half of them have been conducted in the United States. These studies have primarily focused on sports media, electronic sports, fantasy sports, and other digital innovations, such as smartphone applications [16]. There is no research that examined the digital transformation with an emphasis on electronic sports businesses. However, in the few studies conducted by Yang and his colleagues, by analyzing the digital transformation in Chinese traditional companies of sporting goods in tandem with the COVID-19 pandemic crisis and examining the role of digital transformation in coping with this problem, they found that the relevant businesses can increase their knowledge management capabilities and flexibility, allowing a higher level of performance [24].

3. Digital Maturity

Organizations are trying to successfully implement digital transformation in order to achieve sustainable success in their operations. This requires evaluating the organization's current digital maturity levels based on several dimensions and employing the best approach for this evaluation and creating a launching pad to implement digital transformation and use the digital maturity models [25]. Digital maturity is closely related to digital transformation and is defined by Gökalp and Martinez as a state in which the digital technology of a unit has changed its activities, skills interaction, and business frameworks [26]. Hägg and Sandhu [27] call it a situation where a transformation has occurred in an organization that has succeeded in solving problems related to digital business prospects [27]. Schumacher and his colleagues define maturity as a complete provision or an ideal, which indicates the developing stages of a system [28]. Teichert uses the term digital transformation maturity to specify that the relationship between digital transformation and digital maturity includes technological and managerial components [29]. Cargiov and his colleagues have defined the maturity of digital transformation as the degree of an organization's readiness and capacity to change the strategy, business model, technology, products and services, internal and external processes, organizational structure, and company culture using digital technologies [6]. Based on these definitions, digital maturity can be summarized as a critical indicator that shows the adaptive performance of digital transformation [25].

In the field of sports, the digital maturity model can be used to evaluate the digital readiness of sports organizations such as clubs, leagues, and federations. This model can help them understand their strengths and weaknesses in terms of digital capabilities and create a road map for digital transformation [30]. However, there are few empirical studies that have focused on the maturity of digital transformation in sports and the sports industry and have identified the enablers and achievements of digital transformation in this context. In one of the few studies conducted in this field, Kitocompent and his colleagues showed in research entitled "Proposed framework of digital maturity dimension for sports media in Thailand: review and comparative analysis" that there are eight characteristics that are used in the most common maturity models: culture, technology, organization, customer, strategy, operations, innovation, and data analysis [31]. Wijnen also believes that strategy, culture, data, technology, processes, and people are important pillars around which the maturity of digital transformation in sports

revolves [30]. In addition, Wylie and Palmer state that the maturity of digital transformation in sports leads to increased digital capabilities, creating a digital advantage, increasing agility, innovation, and greater participation, creating personalized products and services to improve sports experiences [32].

4. Electronic Businesses

E-business can be defined as the use of the Internet for networking and enabling business processes, e-commerce, organizational communication, and collaboration within a company and with its customers, suppliers, and other stakeholders. E-businesses use the Internet, intranets, extranets, and other networks to support their business processes [33]. Electronic sports businesses are online retailers that specialize in sports-related goods and services. These retailers offer a wide range of products (including sports clothing, sports equipment, tickets to sports events) and sports services (including sports content production) [34]. There are also businesses that provide sports-related products and services on the Internet or produce sports-related information and content [34]. Therefore, electronic sports businesses refer to online businesses that specialize in selling products and services related to digital sports and use digital technologies to reach a wider audience, improve customer experience, and simplify operations.

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