Project Management and Digital Transformation

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Abstract: The Foundation of their corporate strategy must now include digital integration for businesses across all sectors to succeed. Modern management approaches to thinking are necessary in light of the key management issue that is the digitalization. Against this background, this article will focus on the development and application of digitalisation in project management and provide suggestions for the subsequent development of project governance.

Keywords: Project Management; Digital Transformation; Digital Project; Digital Economy; Development

Introduction

The demand for project management experts is expanding in the modern age, where the speed of digital transformation is quickening and project management is becoming more and more popular globally year after year in all spheres of human endeavor. Project management is widely regarded as a sophisticated organizational and cognitive environment for the successful completion of a variety of projects, and this scenario is wholly justified.

The state of the global economy, technological advancements as well as emerging fields of knowledge, all have a significant impact on how project management techniques develop in the twenty-first century[1]. The digitalization of the economy is one of the major trends currently affecting society in general. This article will focus on the application of digitalization to project management.

1. The development of Digital transformation (DT)

Digital transformation (DT) is a fascinating phenomenon that is discussed openly on scientific venues, in the public, in business conferences, and even in a wide range of informal encounters[2]. This issue has become one of the most hotly debated in view of the rapid surge in digital technology utilization. Everyone else and practically all functional sectors are impacted by DT. Various scientific studies have examined how it affects organizational management by acting as a change agent, enabling businesses to capitalize on new opportunities, incorporating digital technologies, and even assisting in the rebuilding and enhancement of company processes. DT mainly relates to new digital tools and strategic organizational shifts, but contemporary discussions focus on individual and group skills in the areas of communicating and creativity. Science studies topics like entrepreneurs, digital production, marketing strategies and communities, or digital disruption in addition to technological advances and products.
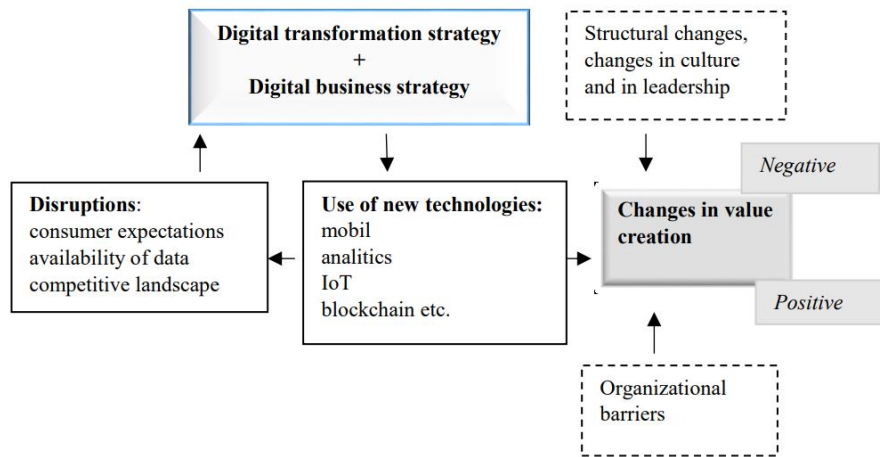
Figure 1: DT – basic components of definition

Digital innovation and digital media are two key components of DT. The term "digital transformation" (DT) refers to organizational changes brought about by the advancement of digital technology solutions. It includes both the use of existing digital techniques to enhance current systems and the investigation of emerging digital advancements that may alter the institution's business strategy. The utilization of the phrase "transformation" indicates that the institution must go further than fully functioning thinking; it must seriously reconsider the cohesiveness of activities aimed at taking advantage of possibilities and averting threats brought on by new digital technologies. The adoption of new technologies is still only one aspect of DT, according to Matt [3] , since managers must also figure out how to profit on creative economic models, goods, and procedures that alter consumers' experiences and comprehension of their aspirations.

2. The influence of digitalization on project management

Previous studies have shown that DT has a major impact on not only the technology employed but also on customer service, tactics, procedures, and staff expectations and behaviors. The effect of DT on project planning would seem unaddressable in this situation. Nevertheless, a wide range of these effects can be seen, from the expansion of project activities brought about through the use of transformative leadership processes, to modifications in management methodologies, particularly the growing importance of agile methodology, to changes in how specific processes, like teamwork and communication, are applied significantly changes thanks to digital technology.

Previous studies have shown that DT has a major impact on not only the technology employed but also on client relations, tactics, procedures, and staff expectations and beliefs. The effect of DT on program management would seem unaddressable in this situation[4]. Nevertheless, a wide range of these effects can be seen, from the expansion of project tasks brought about by the use of transformative leadership processes , to modifications in management approaches, particularly the growing importance of agile methodologies, to adjustments in how specific processes, like teamwork and communication, are executed. Workers, for instance, are more likely to utilize vocabulary related to project management, viewing projects as a permanent component of the company's current operation rather than as one-time endeavors. The standards for assigning funds have changed because they are now allotted to individual projects instead of remaining as part of the company as a whole.

The technical change might be the subject of the evaluation on the effects of DT. DT-related initiatives are frequently referred to by the extremely general term "IT projects." These have been maintained mostly using an agile strategy for the past 20 years [5]. With the adoption of new technology across all project-based businesses, traditional rules are being broken and more quick and agile forms of organization are made possible [6]. Agile methodologies are not only starting to be accepted as standard in the software development industry; they are also giving different firms the impetus to combine different project management techniques. Project management procedures shift as a result of DT. It is usual to use transportable hardware, cloud services, or constructed and managed for file storage, information seeking automation, and prototype and simulation tasks. This includes how relationships with clients or receivers of the project product are evolving, for instance as a result of cloud-based technology. For instance, the application of BIM in building

projects has grown in popularity as a result of project advantages like time savings, improved collaboration, lower costs, and a reduced need[7].

3. Case study: Make NPRA as an example

In order to streamline the inefficient bureaucratic process of renewing driving licences for highly qualified heavy truckers and drivers 80 years of age or older, the Norwegian Public Roads Administration (NPRA) and three other government agencies entered into a partnership in a digital transformation project in 2016. The project's goal is to create a mobile application for drivers that notifies them when their licenses need to be renewed. The option to carry a totally digital driving permit or a real one would subsequently be available to drivers. The NPRA would run more efficiently as a result of the transformation phase being digitalized, and the process would require fewer staff members and fewer working hours. Additionally, GPS would be more efficient because it would take less time to complete health certifications.
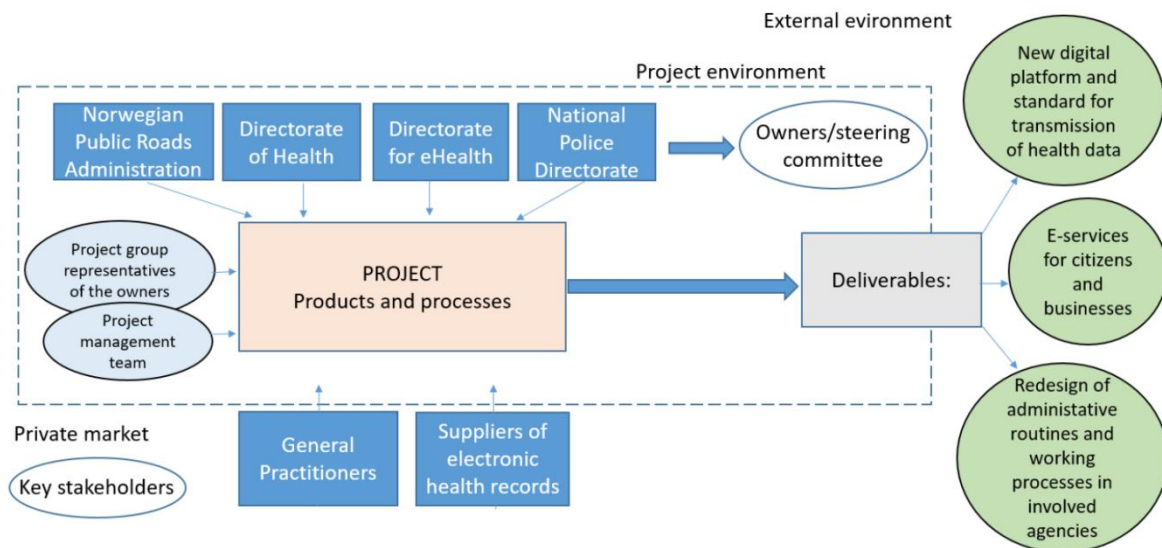

Figure 2: Overview of the case project

The NPRA needed to work with the medical community and the authority because both have major shares in the administration of the driver's new license procedure in order to provide seamless digital services for citizens and companies and to streamline the inefficient beaurocratic handling of the process (see Fig. 2). The Director of Health and the Directorate for eHealth are both a part of the healthcare industry. The former is in charge of the medical oversight of the health certificate that general practitioners must complete, whilst the latter is in charge of the digital transformation of the Norwegian healthcare industry. Administrative duties in regard to violations of the Road Traffic Act have historically been handled by the NPD, which is the entity responsible for issuing driver's licenses. The NPD, which is responsible for issuing driver's licenses, has historically been in charge of handling administrative matters relating to violations of the Road Traffic Act, such as when drivers' health certificates are out of date or when the Act is not being followed. The NPD was enticed to join the case study by the chance to delegate administrative duties and authority to the NPRA, decrease the number of public entities participating, and aid in expediting the license application procedure.

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