

# Unmasking the Drivers and Implementation of Change

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## Abstract

This paper investigates the drivers for, and implementation of, digital transformation projects and organizational change initiatives in 20 companies in the UK. The study follows on previous research based on the Socio-Technical Toolbox [STT], specifically focusing on the activity analysis and employees' experience and participation in the change initiative or digital transformation project.

## Keywords

Change, digital transformation, Covid-19, socio-technical analysis

## 1. Introduction

Many organizations recognize the necessity to transform their operations and work practices in order to stay competitive and relevant, and keep up with the changes in their industry. In recent years, the notion of digital transformation has been extensively discussed and investigated by scholars and business leaders in a variety of different contexts [1]. The process involves the transformation of key business operations due to the implementation of Information Technology/ Information Systems (IT/IS) and impacts original processes and products, in addition to management concepts and organizational structures [2].

At an organizational level, the fundamental differentiator between organizational change initiatives involving the implementation of IT/IS, and digital transformation lies in how the technology, organizational identity, and value proposition of the company interrelates. For instance, digital transformation involves the re-definition of value propositions and hence results in a new organizational identity, whereas organizational change involves the use of technology to support an existing value proposition and implying that an existing organizational identity is reinforced [3].

This short paper sheds light onto the drivers for, and implementation of, digital transformation projects and organizational change initiatives in 20 companies in the UK. It also focuses on the facilitators and illuminates any challenges experienced.

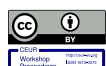
## 2. Background

Digital technologies and innovation have become the basis for creating new properties, values, and products and, therefore, they lay the foundations for gaining competitive advantage or sustaining 'leading edge' competitiveness in several markets. There is an increasing amount of literature on digital transformation and IT organizational change initiatives, attempting to augment our understanding of the topic and its implications.

This study follows on previous research based on the Socio-Technical Toolbox [STT] [4]. The Toolbox is a collection of tools, techniques and pragmatic methods which can be used to support organizational change in practice in IS analysis and design, such as system sustainability, socio-

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technical analysis, activity analysis (based on activity theory), and Holistic Multi-Criteria Benefit Analysis. The main focus of STT is the work-system which is at the core of a desired organizational change. STT is not a methodology; it is a pragmatically grounded collection of socio-technical<sup>1</sup> tools. STT has been used for two decades, equally successfully in public as well as private sector organizations, including micro businesses, SME's, and multinationals.

### 3. Method

#### *Participants*

Participants were chosen using a purposive sampling process based on their role and knowledgeability (i.e. experience and competence) for the study topic. They were all fully employed, were not contract workers or zero hour contract employees, and had to have work experience over 3 years in the company.

These criteria are related to the four social contracts as described by Mumford [5, 6, 7, 8]. Motivation is related to the shared interest and desire to collaborate and solve problems outside of explicit instructions. Essentially, if an individual is not an 'internal' member of the community, or considered as an 'insider', then they are an 'outsider', which is detrimental for the motivation of "going out of their way" to solve problems. Furthermore, it is recognised that it takes some time to develop the required knowledge base and, therefore, a minimum of 3 years experience in the same company was set. If the social contracts are not well supported or fulfilled, this by definition makes the situation and relationship between worker and company sub optimal; and so does not support organizational excellence [4].

Examples of scope companies varied from businesses with less than 5 employees to multinational banks with many thousands of employees. The majority of the companies were British, with a very small proportion being from outside the UK. There were a mixture of public (e.g. School) and private organisations. We note that we are not interested in the type or size of the organization as our main focus is on understanding the change from an employee perspective.

#### *Approach*

The study involved several trainee analysts interviewing one employee each from a selected company (based on available social networks) over a 12 week period. In total, 41 organizations (41 employees) were approached and interviewed. However, this paper focuses on 20 organizations and, therefore, 20 different employees. This is because some employees did not provide in-depth insights into any change that has occurred/ not occurred, which may suggest that they did not prioritise this research and/or were busy with their job role/ other responsibilities. Each interview lasted approximately one hour and was held on a weekly basis (i.e. the same employee was interviewed by the same trainee analyst every week, over a period of 12 weeks).

Although the data were collected by subjects different from those who undertook the analysis, this did not affect the 'immersion' aspect in this qualitative study as both groups worked closely together on a weekly basis to ensure the 'correct' message from the participant was conveyed.

#### *Data Analysis*

Based on the theoretical framework used (i.e. activity theory), a set of initial codes were applied to the data. We also created additional codes, derived from open coding, that added to an understanding of digital transformation and organizational change initiatives. Finally, 'axial' coding was applied to organise and categorise codes into interpretive concepts depending on the relationship or connection between them. This was an iterative process, where codes were rearranged and redefined throughout.

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<sup>1</sup> The term 'socio-technical' refers to the interrelatedness of the 'social' and 'technical' aspects of an organization or social structure. The socio-technical approach is about harnessing the people aspects and technical aspects of organizational structure and processes to achieve joint optimization, with a focused emphasis on achieving excellence in both the technical performance and the quality in people's work

## 4. Findings

This study is based on the activity analysis aspect of the STT, focusing on the employees' experience and participation in the change initiative or digital transformation project.

### *Main Findings*

The responses highlight two major themes underlying digital transformation and organizational change initiatives, including (a) the external environment (e.g. Covid-19), and (b) attempting to enhance efficiency and effectiveness. Table 1 provides a summary of the themes identified, sub-themes, and example quotes.

**Table 1**

Themes, sub-themes, and examples.

Theme	Sub-Theme	Examples
External environment driver	Covid-19 – minor impact on work processes	“The new changes have been things such as upgraded cleaning measures due to Covid, clean tills and work surfaces 3 times every hour” (Company 1)
		“New Covid regulations mean that masks must be worn in the staff room and COVID tests must be performed weekly on a Sunday and a Wednesday. A one way system has been introduced to staff and visitors so that social distancing is implemented as well as washing hands and keeping clean.” (Company 2)
	Covid-19 – major impact on work processes	“Due to the pandemic, all workers are required to meet the Government standards and are urged to wear face masks and gloves when handling food, only access to drive-thru to reduce contact, and enforced contactless payments than cash.” (Company 3)
		“During the pandemic employees have been told to work from home. They do not have a work intranet as such, however they are utilising systems such as OneDrive to work on price lists, templates for quotes and receipts. All the liaising has to be done through emails.” (Company 4)
IT/IS implementation	Efficiency and Effectiveness (regardless of Covid-19)	“Because of the requirements of the covid-19 prevention and control policy, more online office has been adopted.” (Company 5)
		“Social distancing measures, separating participants, wearing masks, new roles introduced, restructuring of management” (Company 6)
		“Integration of clients’ previous company into a larger group. This involved migrating IT and human systems along with changes to clients job activity.” (Company 7)
		“Implementation of Microsoft Teams to provide better

communication and integration for employees to connect and collaborate” (Company 8)

“New method of "cashing up" tills using updates till software to improve efficiency as old process had some inefficiencies. Also, cash is now banked once per week, instead of once per day. Recently started accepting new payment method (Klarna) which involves authorizing using the till software and scanning a QR code.” (Company 9)

“A new housing management system was implemented, as the previous system was old and wasn’t meeting the organizations’ needs. The new system provides transparency across the organization and helps manage services more effectively.” (Company 10)

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With respect to the factors facilitating the transformation and change process, all participants mentioned:

- Leadership
- Communication
- Structure of the organization
- Shared vision and goal
- Trust
- Company rules and procedures

However, only one participant (i.e. one company) mentioned ‘past experience’ in change projects facilitating the change initiative discussed.

## 5. Discussion

### *Drivers*

Drivers refer to the goals and attributes that influence and initiate digital transformation and organizational change [9]. They can be internal or external triggers (e.g. arise from innovation ideas within the organization itself or from trends in the organizational environment). The three main drivers of digital transformation discussed in the literature are digital technology trends, digital competition, and digital consumer behavior [10] (*i.e. technology driven digital transformation, organizational development driven digital transformation, and consumer driven digital transformation*). Recently, however, digital transformation has been prompted by the external environment. The Covid-19 pandemic forced businesses to innovate and change their traditional ways of working and practices. Workplace offices have become less important, while work from home initiatives have become mandatory. Some businesses observed complete disruption resulting in the subsequent ‘pause’ of their activities [11, 12].

Our findings demonstrate that there are two different changes related to Covid-19; (a) minor impact on work processes (e.g. additional cleaning activities, wearing facemasks, etc.) and (b) major impact on work processes (e.g. the implementation of technology not only as a replacement for face-to-face contact, but involving major organizational change). Businesses also underwent change in order to achieve effectiveness and efficiency, regardless of Covid-19. In these cases, the change was mostly digital, involving the implementation of technology/ IS, and the change of work practices accordingly. Our findings support a recent study by Wessel et al. [3] who indicate that the (a) environmental and (b) organizational context drive IT transformation or IT enabled organizational change. It is important to note that it is the organizational ‘goal’ that ultimately drives the journey the

company will be embarking on. For example, it is the goal of becoming more efficient and effective that pushed Company 9 and 10 to implement technology that could enforce such ambitions.

### *Facilitators/ Success Factors*

Success factors refer to the necessary organizational elements for achieving organizational change and digital transformation [9]. Table 2 highlights a number of success factors cited in the literature, along with the contract [5, 6] and example articles.

**Table 2**  
Success Factors

Success Factor	Contact [5,6]	Example Articles
Leverage external and internal knowledge	<i>Knowledge</i>	Piccinini et al. [13]
A supportive organizational culture	<i>Vales</i>	Hartl & Hess [14]
Develop a business strategy (digital/ change)	<i>Efficiency</i>	Schmidt et al [15], Leischnig et al. [16]
Well-managed transformation activities	<i>Task Structure</i>	Berghaus & Back [17]
Engage managers and employees	<i>Psychological</i>	Horlacher et al. [18] Peter & Welch [19]

Research shows that communication is vital during digital transformation and organizational change projects, not only as an informative function but also as a means to create a ‘community’ [20]. This was particularly evident in this study, where communication has “*improved between colleagues*” (Company 8) during the process and as an outcome. Similarly, the importance of leadership, trust, having a shared vision/ goal, and organizational structure have been cited previously in the literature. All these factors relate closely to the values contract proposed in [6]. This contract relates to the ethical principles, such as trust, mutual loyalty and shared objectives, which are expected by the employee as well as the employer.

### *Challenges*

Studies, in different contexts, show that the process of organizational change and digital transformation is not smooth and without challenges [5,21,22]. For example, studies show that organizational change initiatives are bound to face resistance at different organizational levels (i.e. individual, group, organizational/ managerial). During Covid-19, companies worldwide have experienced a range of challenges such as financial pressures, IT-related issues, product development difficulties, time workload, the availability of resources, and productivity development due to social distancing or working from home [12] in order to ensure business continuity. Similarly, on an individual level, challenges were identified in terms of home residences becoming a hybrid place where office work and domestic tasks are shared and the impact this has on well-being and work-life balance [23]. Consequently, a possible challenge includes individuals not ‘working’ during normal office hours. Interestingly, in this study, no major challenges or tensions were mentioned by all participants. Rather than assuming that this could indicate change and digital transformation excellence, it may allude to participants not being able to freely discuss or report any difficulties due to the culture of the organization and the potential impact of the pandemic on their job status [24].

The findings also suggest that there is a limited level of empowerment among employees in different companies. Change is imposed on a top-down basis, with no evidence of allowing employees to contribute to the decision-making process or be given a certain level of responsibility. It can be argued that if employees do not necessarily care about their job and they are largely motivated

by their salary, then there is no foundation for excellence, which potentially is a competitive disadvantage [6, 25]. In addition, this can easily become a toxic working environment where the company is ‘drowning’. The psychological contract proposes that an employee wishes for psychological rewards such as opportunities for advancement, recognition, responsibility, and ‘a sense of achievement’, while an employer needs to have a motivated, enthusiastic, and loyal labour force [6].

The findings suggest that there is opportunity and scope for companies to proactively find solutions for the identified weaknesses in their organizational work systems. It can be argued that when a company is under high and intense competitive pressure it is necessary to exploit any competitive advantage that the company may have. This includes the undervalued but critical contextual expertise inherent in its own workforce. This is supported by other scholars [e.g. 26, 9, 6] and a study conducted by McKinsey [27] where companies that increased performance during Covid-19 invested more time in empowering employees to make decisions, adopted new collaboration technologies to foster relationships, and spent more time on recognition and coaching. Our findings show that the human capital of an organization plays a critical role in the outcome and process of change initiatives, which is consistent with [12]. We argue that change initiatives need to go beyond the ‘technology’, by addressing ‘soft’ organizational issues such as philosophies, employee empowerment, visions, values, and policies.

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