Soft Skills: A Key Driver for Digital Transformation

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Abstract - This paper focuses on exploring the value of intangible (soft skills) investments to aid successful digital transformation in organisations. The human capital of a business or an organisation is the key catalyst for implementing change. It is, therefore, important to have a skilled workforce which is capable of adopting and coping with changes such as digital transformation. This research focuses on the importance of soft aspects of digital transformation. Gioia method was adopted to guide the analysis of the data (interviews) for this research. The results are indicative of the important soft skills required to embrace digital transformation and its potential impact on successful implementation.

Keywords-intangible investment; soft skills; digital transformation; project managers.

I. INTRODUCTION

Technology and society are evolving faster than business can naturally adapt and digital transformation is one aspect of this evolution. Technology has changed relationships between customers and organisations, deeply affecting organisational models and management systems [1] [6]. It is an exponential change, which is not just the job of a person or a team, but a collective effort of the whole organisation. It is about the overall improvement of ways of working and efficiency of an organisation [2]. Due to the scale of change and ease of its management, it is often divided into smaller projects, which are then managed to adopt the change [3]. It is worth considering that given the awareness and planning of change, if organisations are ready to face it. And more importantly: What drives it? A single thread that weaves in everything to ultimately produce the outcome is the soft aspect of the organisation. Digital transformation is probably less about digital and more about transformation, which is led by people. Technology is a tool but its actual strength is soft skills [4][5]. This research seeks to address the gap pertaining to soft aspects of digital transformation, which successful implementations hinders and changes management in organisations. It aims to instill the value of investing in intangible aspects of an organisation, which in turn play a key role in their success.

This paper is further divided into four sections, namely, Background, Significance and Research Contribution, Research Approach and, Preliminary Findings and Future Research. Firstly, the background section provides an insight into current situation and context of this research leading to the significance and research contribution section. This Carmen Haule Reaiche Business School University of Adelaide Adelaide, Australia e-mail: carmen.reaiche@adelaide.edu.au

section then establishes the importance and possible contributions of this project. The next section of research approach elaborates on the process of data collection and method used by researchers. Lastly, the preliminary findings and future research section summarizes the primary findings of this research and provides insight into the future steps for this project.

II. BACKGROUND

Digital transformation has become an integral part of organisations in pursuit of growth, expansion, quality and sustainability [1]. One on hand, it allows organisations to enhance organisational efficiency and customer experience, but, on the other hand, it brings tremendous pressure as it demands changes in organisational models and management systems [6][7]. Many organisations adopt a project management approach wherein change management is the key focus [8][9]. However, the key element is the people who drive, accept, adopt and implement this transformation, i.e., the human capital of the organisation [7]. In line with adoption strategies and careful planning, human capital strategies play an important role as well. The project manager needs to plan how to manage, organize, develop, and align people at work to deliver successful customer and employee experiences [10]. It is probably not the strongest of the species that survives, not the most intelligent that survives. It appears to be the one that is the most adaptable to change [11].

Some of the skills required by a manager in order to successfully manage digital transformation are: critical thinking, complex communication, creativity collaboration, flexibility and adaptability, productivity and accountability, building a team that thrives, cultivating a growth mindset, influence, ability to navigate innovation and change, effective collaboration with leaders and across teams. In addition to these, adaptability, creativity, action-oriented, passion, curiosity and management skills also play an important role while managing the team and projects [6] [11]-[15]. From the customer's orientation, it is important to create memorable and meaningful experiences. The most valuable assets for service and experience creation are people, ideas and collaboration [16]. There has been some emphasis on people's aspect in vivid literature, however, the importance of soft skills has not gained much focus as a key driver or backbone of digital transformation, although, it has been a recommendation in those research studies. Thus, this research aims to establish the importance of soft skills in managers.

III. SIGNIFICANCE AND RESEARCH CONTRIBUTION

This research contributes to knowledge by identifying the moderating role of soft skills in digital transformation. The research aims to establish the importance of "people" and their "soft skills" in an organisation by investigating the value of investing in intangible assets, i.e., soft skills of their employees. Prior research has identified key drivers that support digital transformation, however, there has not been enough attention on developing and acquiring the skills needed to maneuver this change. Having an adaptable workforce has become a necessity for business and organisations in order to cope with the changes in their respective domains [12].

IV. RESEARCH APPROACH

This is an exploratory research, which has been conducted in two phases. In the first phase, we explored secondary data comprising of literature and various case studies. This was followed by a second phase of qualitative data collection concentrating on interviews. Prior to running the interviews, a pilot study was conducted to validate the interviews questions.

A. Data

Firstly, a pilot was conducted in which a qualitative data set of nine interviews was collected. The narratives of these interviews were then analysed to verify if the findings were indicative of the information being sought by researchers. Secondly, a total of ten interviews were conducted particularly focusing on project managers in a variety of fields, and this forms the actual data set for this research.

B. Method

Gioia method was used to analyse the data for this research. Gioia is a systematic approach to new concept development and grounded theory articulation [17]. During the analysis, we sieved 1st order concepts, followed by 2nd order themes and finally derived aggregate dimensions. This three step process was adopted to bring in transparency and rigor to the process of inductive research (see Figure 1 for the steps of this process) [18].

In the 1st order concept analysis, researchers adhered to informants terms, with little attempt to distil categories. After data collection, the interviews were transcribed to obtain the first order concepts. As a result, a large number of categories were derived in this step. These were then analysed to identify the themes emerging from data. Once we had 2nd order themes, the finding were then checked against literature to verify that these were "new", i.e., a contribution. As the research progressed to the 2nd order theme, it sought similarities and differences among the 1st order concepts. Upon confirmation that the findings are new, further literature review, and identifying similarities and differences, the aggregate dimensions were finalized. This eventually reduced the number of categories, which were then given labels or phrasal descriptors. Once this data structure of themes and concepts was created, we investigated to distil them further into aggregate dimensions.

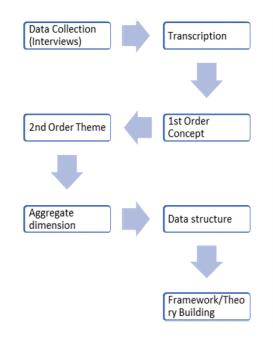


Figure 1. Method.

V. PRELIMINARY FINDINGS AND FUTURE RESEARCH

A successful digital transformation initiative needs to holistically look into customer experience, organisational culture, business model, processes, technologies, leadership and capabilities, and size of the company [7][12][14][19]. In order to have an edge over such rapid changes, companies need to ensure that they are ready to embrace disruptions and fill skills gaps in their organisations. Skills are the most valuable and essential resource in knowledge economy [5]. With markets becoming increasingly complex, complex problem solving, coordinating with others and people management become crucial aspects [20].

From the dataset collected and analysed, project managers have emphasized the importance of soft skills at various avenues. Additionally, they have also shed light on factors, which can impact skills development culture in an organization, for example, the size of the company. "Environment plays an important role in skills development; we might pick up skills according to the need of the environment", indicates the importance of organisations being conducive of developing their workforce. Project managers have highlighted other factors such as size of projects, mentoring, guidance, etc., during the interviews. It was well supported across various domains, such as defense, construction, information technology, etc. Some soft skills considered important by project managers (derived from interviews) are listed in Table I.

TABLE I.	ESSENTIAL SOFT SKILLS:PM PERSPECTIVE

Essential Soft Skills: PM Perspective
Communication
Emotional Intelligence
Empathy
Leadership
Motivation
Resistance
Conflict Resolution
Professionalism
Negotiation

In absence of organisational efforts to develop a workforce, project managers mentioned that selfperformance, reflection, individual personality, lessons learnt from past projects, type of people they work with, zeal to learn more aid as the factors that motivated them to develop soft skills. One of the key findings also indicated that the majority of the project managers realized the importance of soft skills during their experience and had little or no knowledge prior to work experience. This certainly had some exception for people who were natural leaders or in cases where their upbringing included elements like leadership opportunities, were taught to stand up, parental guidance to manage, sports etc. Some of the motivators mentioned by project managers during the interviews have been summarized in Table II below.

TABLE II.SOFT SKILLS MOTIVATORS

Soft Skills Motivators	
Conducive Environment	
Reflection : Past Projects	
Self – Assessment	
Need of Environment	
Communication is the Key	
Team Management	
New Industry/Environment	
Collaboration	
Mentoring	
Team Members	
Individual Personalities in Team	
Employee Engagement	

Though some factors helped practicing project managers to identify the importance of soft skills, in absence of proper training, they struggled with certain issues like the level of comfort colleagues have when getting to the people's side of things, judgmental point of view, underestimating soft skills, being mistaken as trying to micromanage and most importantly finding the right balance of expression. These are some of the preliminary findings from the interviews conducted thus far. A detailed and comprehensive analysis will be conducted once the data collection is complete.

VI. CONCLUSION AND FUTURE RESEARCH

In this research, we have been able to identify some emerging themes from the data collected thus far, which are indicative of the importance of soft skills in digital transformation projects. Essential soft skills such as communication, emotional intelligence, leadership, etc., have been derived from the data set as well. Additionally, the data set is also reflective of soft skills motivators and suggestions for training project managers to groom their soft skills. Even though the data set looks promising at this stage, this research is an ongoing research and future steps have been planned, wherein the researchers aims to conduct a total of 30 interviews (inclusive of 10 already conducted) with project managers across various domains. These interviews will also be analysed using the Gioia method to obtain the findings of the project. The results of this research will not only contribute to the overall development of organisations by identifying key soft skills required by project manager, but also provide a competitive edge over their competitors. This would also aid organisations by encouraging them to reinvest the cost of recruiting new managers into their own assets and developing them further.

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