

Barriers to Digital Transformation in Non-profit Organisations

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Abstract

While prior studies extensively explored digital transformation in for-profit and relatively well in public organisations, the challenges non-profit organisations (NPOs) face remain under-investigated. This study attempts to bridge this gap by conducting a review of the extant literature and an exploratory case study in one NPO in Sweden. Semi-structured interviews and internal documents were used to collect data. The thematic analysis resulted in a taxonomy of barriers presented under eight categories covering internal organisational settings and external environments, grounded in recent digital transformation frameworks. The thirty-two barriers (i.e., fifteen newly identified and seventeen confirmed from prior studies) highlight the significant challenges unique to the non-profit sector. The findings provide a foundation for further research exploring the relationships between the identified barriers and digital transformation processes within the context of NPOs. Moreover, practitioners can leverage these insights to inform the formulation of effective planning and execution of their digital transformation initiatives.

Keywords: Barriers, digital transformation, non-profit organisations, Sweden.

1. Introduction

Digital Transformation—defined as “...a fundamental change to a process utilising digital technologies that result in an improvement to all stakeholders so dramatic that demand for the new way of working or thinking, such as new digital platforms, new methods, new cultures, new strategies, and new structures” [1, p. 10] has brought many benefits for today’s organisations across sectors and industries. For organisations in the private sector, new digital technologies have facilitated the execution of innovative business models, improving the offering of value propositions. In a public organisation context, digital transformation has resulted in synchronised product-service combinations across the sector [2, 3]. The primary motivation for embarking on the digital transformation journey for non-profit organisations (NPOs) is that it shapes the communication between various stakeholders to improve fundraising and delivery of services. The rationale is that digital transformation can enhance transparency, accountability, and stakeholder relationships by facilitating more inclusive, high-quality, and impactful provision of services to beneficiaries [4]. However, despite the availability of advanced technologies and attempts to embrace digital transformation, NPOs, even in leading countries like Sweden [5], face challenges in integrating and implementing emerging technologies in their existing processes [6].

While the Swedish government actively supports the works towards modernising the digital infrastructures, drafting favourable legislations, and improving citizens’ digital skills [7], a report by Sweden’s Open Government Partnership [8] highlights the ongoing difficulties NPOs face as they attempt to embrace digital transformation. For instance, the

report revealed the lack of recognition of the importance of cross-sectoral data collaboration to address social challenges, further underlining the critical role of digital transformation in Swedish NPOs.

A closer look into the extant research within the Information Systems (IS) indicates that digital transformation is predominantly studied within commercial and private organisations, referred to as for-profit organisations (FPOs), as well as agencies and administrations in the public sector. Thus, there is a dearth of scholarly attention towards investigating digital transformation within the context of (NPOs). This is unfortunate, given the pronounced differences between NPOs and organisations in the private and public sectors. We argue that digital transformation needs to be studied considering the NPO's context, particularly in light of the rapid proliferation of digital technologies within the industry in the aftermath of the COVID-19 pandemic. It is worth noting that suppliers of services and products within the Information Technology (IT) industry recognise the burgeoning demand for diverse emerging digital technologies, including those operating in non-profit domains [9]. Using Swedish NPOs as a case, this study attempts to reveal the various barriers to digital transformation in the sector. We argue that the results of our research will contribute to answering the calls for further studies, offering insights for NPOs to develop strategies to overcome digital transformation barriers [10]. The following research question guides the study: What are the barriers to digital transformation in a Swedish non-profit organisation?

The rest of the paper is structured as follows. The next section presents related studies based on the extant literature in the IS and cognate disciplines. Next, the methodology section outlines the research strategy as well as the data collection and analysis methods. The results section presents the main findings, followed by a discussion of the identified barriers. Finally, the implications of the findings for research and practice are highlighted.

2. Related Studies

2.1. Digital Transformation in Non-profit Organisations

Digital transformation and the conceptualisation of the construct have evolved and been shaped by advancements in technology and changes in business practices. It is tied to digitalisation, as both define the results of implemented emerging technologies in an organisation. However, IS scholars emphasise that the two concepts differ in scope and complexity [11]. Digitalisation, even regarded as a critical component of digital transformation, is limited to improving processes or products with mainly economic-driven outcomes (i.e., improved efficiency and effectiveness). Digital transformation goes beyond the technological dimension as it is aimed at not only improving but also changing the organisational processes, models, and activities, focusing on the human dimension and having capability-driven outcomes [1], [12].

Digital transformation is known to have implications for almost every aspect of an organisation. Thus, it is considered a means that supports organisation-wide changes towards enhancing new capabilities. On the other hand, scholars have also found that several factors can influence the digital transformation process enabled by emerging digital technologies, which are also referred to as barriers. According to the findings of a series of empirical studies (e.g., [13]), organisational or sectoral differences determine the various factors considered barriers or success factors to digital transformation. Prior studies suggest that digital transformation barriers are particular organisational elements due to a lack of alignment between people, processes, and technology [10].

On the other hand, Vial [14] argues that digital transformation barriers emerge due to disruptions associated with customer behaviour and expectations, competitive landscape and data availability. The combinations of these barriers are also related to the NPO's organisational characteristics, which is relevant to our work. Due to their size, profile, market coverage, and purpose diversity, NPOs present various characteristics that can affect their digital transformation journey [15, 16]. For instance, customer behaviour and expectations in NPOs closely relate to the long list of stakeholders, determining their expectations and propensity to adopt digital solutions. Thus, stakeholder theory [17, 18, 19] is relevant to reveal one of the challenges facing non-profit organisations attempting

to succeed in their digital transformation journey. Specifically, the multi-stakeholder nature of NPOs complicates the understanding of consumer behaviour and expectations, making it more challenging to meet diverse needs and application of digital technologies [20]. Sanderse et al. [21] present a non-traditional business model for NPOs to address value creation misalignments, emphasising the accurate expression of the organisation's reality in terms of multi-stakeholder needs and requirements. With limited research on NPO's challenges in digital transformation, insights from previous studies on digital transformation in both FPOs and public organisations presented by Jonathan [13] are recalled for adjusting the structure based on [1] and [4] as well as already revealed barriers to NPOs digital transformation embedded in the literature.

2.2. Barriers to Digital Transformation

Researchers agree that digital transformation is a complex process that challenges entities to align different organisational elements with the technology to gain value from the implemented disruptive technologies. Vogelsang et al. [10] define barriers as “*things that can hinder or stop the successful implementation of digital transformation*” (p.4938). Identifying and recognising the challenges and striving to overcome them allows organisations to achieve capabilities that can support the alignment, enable the transformation, and realise the anticipated benefits. According to the author, there is a gap in the research regarding a general framework that captures most barriers and draws a relationship between them. Moreover, both Brink et al. [22] and Vogelsang et al. [10] underline that prior research identifying various barriers focuses on specific profit-oriented sectors. Even though numerous taxonomies have been developed on barriers to digital transformation in FPOs, only a few have been identified in NPOs. The following are some of the digital transformation barriers in NPOs identified in the literature.

1. Vogelsang et al. [10] revealed some of the most pressing challenges in NPOs by comparing FPOs and German NPOs. These include lack of managerial skills, lack of acceptance, lack of adapted IT solutions, lack of new roles, lack of agile environment, rigorous legal requirements, and lack of customers.).
2. Balacescu [23] excludes limited resources as a barrier per se, instead identifying a lack of planning, goals and vision; lack of strategy, lack of qualitative data, and lack of collaboration are highlighted.
3. Cavicchi and Vagnoni [24] also point out that funding challenges can be resolved in different ways. The barriers identified are lack of awareness, managerial skills, collaboration, data quality, and resistance.
4. Nahrkhalaji et al. [20] analyse digital transformation in NPOs on different maturity levels where barriers might differ. According to the author, the main barriers that hinder digital transformation in NPOs are inertia, lack of resources, lack of tech expertise, fear of change, damage to corporate image, and lack of leadership and management.
5. Brink et al. [22] find a list of barriers to digital transformation based on empirical studies in German NPOs consisting of a lack of adapted technology-based communication structures, a lack of customer pull, a lack of acceptance, and legal barriers.
6. O'Grady and Robert's [25] findings from studies in Irish NPOs are a lack of funding, a lack of public trust, inefficient management, a lack of ICT function, a lack of awareness of digital transformation benefits, resistance, a lack of leadership, a lack of data, a lack of collaboration, a lack of planning, a lack of innovation.
7. Schiffhauer and Seelmeyer [26] found digital transformation barriers in NPOs. These include a lack of adapted guidelines, systematic concepts for evaluating technologies that fit welfare organisations, ethical aspects, and a lack of collaboration.

3. Research Methodology

3.1. Research Strategy

Qualitative research was deemed appropriate for this study as it is best suited to reveal the factors related to a phenomenon, aligning with the exploratory reason of the research. Thus,

a qualitative case study was adopted as it allows researchers to gain a detailed understanding of a phenomenon in a natural setting [27]. Additionally, the strategy accommodates the application of multiple data types collected from different sources. Case studies have been long recognised among IS researchers exploring the barriers to digital transformation in FPOs [28], public organisations [12] and NPOs [10]. Scholars argue that a case study is an appropriate research strategy to gather insights into the interconnection and relationships between organisations' structure, processes, and implemented technology under the digital transformation journey [27]. Moreover, we argue that NPOs present a unique organisational setting and list of stakeholders with varying interests compared to both public organisations and FPOs, providing the opportunity to further our understanding of the digital transformation process and its challenges. A single case study rather than multiple case studies was deemed appropriate to achieve the aim of our study—an in-depth investigation and rich description of digital transformation in NPOs. While multiple case studies are popular among researchers interested in comparing cases and testing and replicability of empirical findings and theoretical applications, single cases provide richer insights [27].

3.2. The Case Organisation

In line with the aim of this study, we selected a case organisation that is relatively representative of NPOs and is also known to be undertaking digital transformation. To choose the case organisation, we followed the typical characteristics of NPOs as presented in the literature (e.g., [4].)—organisations that operate for purposes other than generating profit but engaged in furthering social causes and shared goals contributing to, for instance, sustainable socio-economic growth of local communities. The motivation for choosing the case organisation was to gain a natural setting (i.e., with various unique characteristics of NPOs' missions, resources, and operational models) that could have implications for digital transformation. Thus, we selected a large, well-established Swedish NPO (also referred to as "*ideell förening*" in Swedish). The case organisation, which remains anonymous, is based in Stockholm, with approximately 600 employees and 400 volunteers. It is part of an umbrella of national NPOs operating in different districts in the country with similar features (but different territorial coverage). The NPO based in Stockholm organises its offerings in three areas, i.e., social services, social enterprises, and education. The organisations' beneficiaries are people with different backgrounds, both nationals and migrants from all ages. The organisation's goal is to advocate for equity and support the beneficiaries in overcoming a vulnerable life situation by offering an extensive range of services: job training, juridic support, social assistance, housing, education, economic support, and well-being conversations. It is worth noting that both private entities and governmental organisations finance the organisation. The second criterion for selecting the NPO for the study is the digital transformation it is currently undertaking. According to the documents obtained, the NPO is introducing various emerging technologies to support its processes, including Cloud Services, Data Warehouse, and Power BI. The organisation says that digital transformation is a means to improve the relationship with its stakeholders, value propositions to the beneficiaries, and operational efficiencies.

3.3. Data Collection Method

Yin [27] argues that the results from case studies can provide a deeper insight and a better understanding of a phenomenon when mixed data collection methods (also referred to as multiple sources of evidence) are applied. In the initial stage of the study, we conducted a systematic literature review to establish the state-of-the-art of digital transformation research within NPOs. Using a combination of keywords (i.e., "*digital transformation*", "*digitalisation*", and "*non-profit organisations*", "*not-for-profit organisations*", "*challenges*", and "*barriers*"), the search for relevant articles was conducted in databases indexing basket of 11 journals and premier information systems conferences. The appraisal of the final papers selected for the review was based on the inclusion and exclusion criteria set at the beginning of the search. Articles in languages other than English, studies that had not been peer-reviewed, incomplete articles, book chapters, research-in-progress articles,

and duplicate articles were excluded. Complete and peer-reviewed articles, published between 2016 and 2024, on the topics of digital transformation in NPOs were included in the review.

The empirical part of the study adopts interviews and documents as methods of data collection. However, one-to-one semi-structured interviews were the primary data sources for the study. Our objective is to gather data, as provided by participants, to capture the holistic view and unique situation in a natural environment. The interview questions were formulated to reveal the various challenges facing the case organisation as it introduces and manages emerging digital technologies. Probability sampling was deemed inappropriate for our study because we aimed to provide in-depth insight, not a generalisation, of a phenomenon on the broader population. Thus, we adopted a purposive sampling strategy according to selection criteria in line with the study aim. We were interested in recruiting those with the knowledge and responsibility for the ongoing digital transformation at the organisation. To ensure we have selected respondents who could provide us with the richest information, we consulted the organisational structure of the case organisation. The final list of participants (referred to in the paper only by randomly generated codes) includes product owners, project leaders, team leaders, and a digitalisation manager. The interview data was complemented with internal organisational documents (i.e., 2023-2025 Digital Strategy, financial policy, organisational chart, IT strategy and project roadmaps).

3.4. Data Analysis Method

The study adopted a thematic data analysis approach, which is widely recognised among qualitative researchers since it provides flexibility while enabling a rich and detailed account of data [29]. Researchers argue that thematic analysis can be used in studies where complex phenomena are explored. Prior digital transformation studies have applied thematic analysis (e.g., [28]). The thematic analysis method was deemed appropriate for our study as our aim was exploratory, focusing on digital transformation in a complex organisational setting.

We followed the six phases of the thematic analysis procedure by Braun and Clarke [29]—familiarising with data, generating initial code, searching for themes, reviewing themes, defining and naming themes, and producing the report. The aim of the procedure is to search and identify common threads. The themes emerge as researchers carefully read and familiarise themselves with the raw data. To help us describe the phenomenon under investigation, we considered one of the two forms of coding: inductive or deductive. Even though inductive coding is common among exploratory studies, we chose a hybrid approach incorporating both inductive and deductive theme generation to improve the rigour of our study. First, we developed the initial codes and sub-themes from our transcribed data following the inductive approach. Later, we mapped and grouped these themes deductively using a priori template.

4. Results

In addition to the various barriers to digital transformation in NPOs found in the extant literature, the analysis of our interviews and documents revealed fifteen more, shown in light green sharp rectangle boxes shown in Figure 1. The thematic map also shows the seventeen barriers shown in white boxes. These barriers presented in eight categories were organised based on the priori template we developed from our literature review as well as the common attributes of NPOs.

4.1. Organisational Structure

The responses from our interviewees and the internal document we obtained depicting the organisational structure indicate that our case organisation exhibits a structure characterised by hierarchy and silo structure. A closer look into the various processes at different units also shows that there are fragmented processes that could have resulted from the silo structure. Recognising the redundant processes at various units, the NPO attempted to make adjustments to the organisational structure in 2022. The restructuring aimed to

create a flatter organisation that could support the redesigning and rethinking of the organisation's processes. Even though the organisation seems to enjoy a reputable profile in the sector, the business model lacks a robust arrangement to utilise the knowledge resources in place to create an adaptive capability. Respondents acknowledge the benefits of adaptive business models, which utilise available resources. The synergy between a business model and the organisation's attributes must be carefully considered. As one of the respondents stated, *"You cannot go into this kind of organisation being totally process oriented because then we would probably lose our soul and all the people working within this. But I still think it can be combined"* (MP15).

The centralised silo structure, the fragmented processes and the lack of a business model are barriers which have their roots in the organisation's historical development. This is reflected in the lack of partnership between IT and the rest of the organisation, which the organisational diagram confirms. Besides the IT department, the financial department is also excluded from the top-level decision-making. On the other hand, the interviewees agree that there are some reasons for optimism. According to some, despite the rigid centralised structure and the lack of formal decision-making with the participation of many, IT decisions are still pushed forward through consensus via the informal structure in the organisation. Conversely, one respondent argues that the informal arrangements sometimes undermine the formal organisational structure by hindering timely decision-making. One respondent says, *"... from inside, it doesn't affect me in a negative way because I can feel that I can get the decisions I need in order to drive the change, from my part of the organisation"* (MP15).

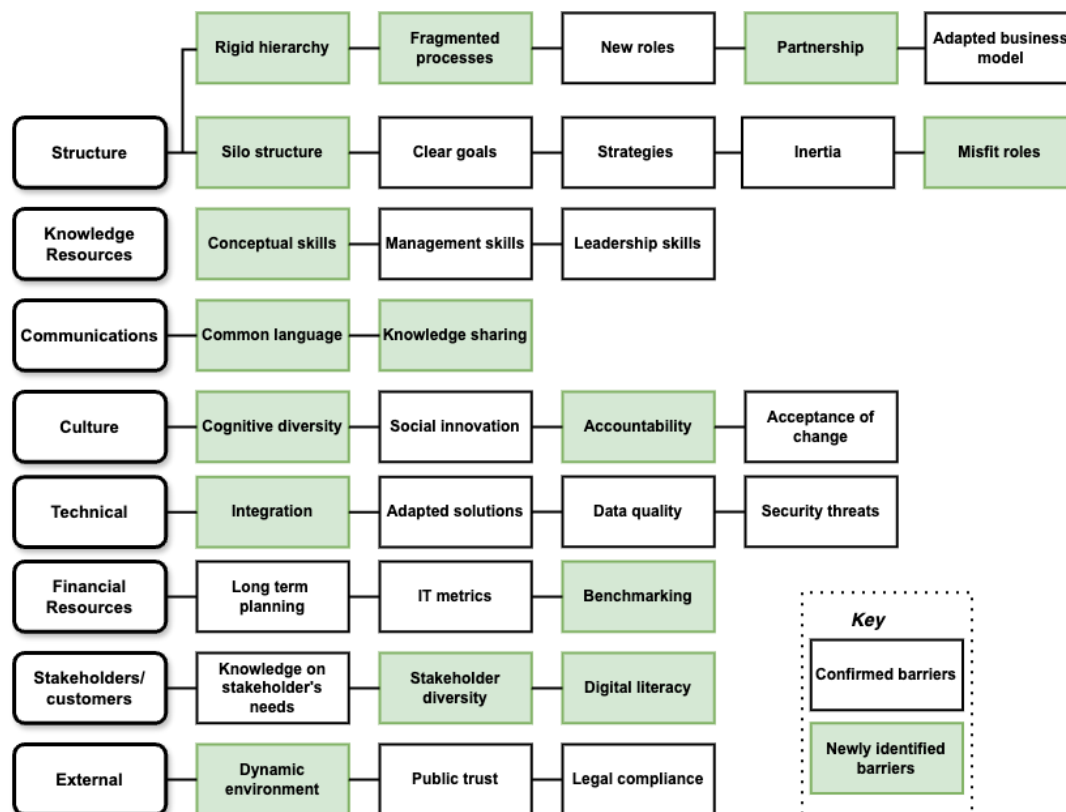


Fig. 1. Thematic map with the barriers to digital transformation in the Swedish NPO.

4.2. Knowledge Resources

To determine if the lack of a participatory environment hinders the digital transformation process, the focus is directed towards the organisation's capabilities. It is evident in the data collected that the lack of diverse conceptual skills such as "system thinking", "service thinking", "abstract thinking", and "process thinking" are challenging the implementation of emerging technologies. These barriers are anticipated by the staff in the IT department.

Respondents argue that the digital skill sets at the NPO are not on par with its profile. The experience of those using digital technologies once integrated with the existing processes raises concerns. As one respondent puts it, *“Maybe they don’t need to understand the data models and how data is structured. They don’t need to know the complex part of it, but they need to understand ‘how do I use it? How do I interpret the numbers?’”* (ZY43).

The lack of managerial skills and forward-thinking directly affects the agility and potential of innovation in the organisation. Our analysis indicates that leaders have a long way to go in encouraging employees to express their thoughts and develop new solutions. For instance, since Power BI was implemented at the NPO, it has become evident that managers still need new skills to extract value from data and push for embracing the technology throughout the organisation. On the other hand, different management styles were observed based on the market that the business unit covers. Some units are more open to innovation than others.

4.3. Communications

Communication is intricately connected with organisational structure, knowledge resources and organisational culture in the context of digital transformation. Communication is concerned with the methods, strategies and tools that an organisation applies to improve understanding and synergy across different levels. The barriers uncovered within this category are lack of common language and lack of knowledge sharing and organisational learning. The profile of the organisation and how it presents itself seem to shape its language. Our respondents agree that a common language facilitating bilateral understanding between IT and the rest of the organisation is a critical milestone for increasing its capabilities and use of digital technologies. For instance, one respondent says, *“One thing that is hard while working with data is that you have to make sure you really use the same kind of definitions”*, states MP15.

Instead of formal arrangements, the NPO uses diverse knowledge-sharing and organisational learning approaches. Thus, there is a lack of a centralised knowledge-sharing strategy covering various units of the organisation. Respondents argue that the knowledge-sharing practices are not effective. One such arrangement is a knowledge-sharing platform on the NPO’s intranet, where learning is facilitated through videos in parallel with one-to-one meetings. KD87 prefers compulsory and scheduled training to overcome the lack of willingness to share knowledge and expertise with employees across units. However, other respondents view teaching and learning by example as more user-friendly and with the most likelihood of success.

4.4. Organisational Culture

When asked to describe the cultural challenges related to digital transformation, our respondents highlighted the lack of cognitive diversity and fear of accountability. These are new barriers not found in the extant literature. However, our analysis also confirms that NPOs’ lack of social innovation and acceptance of change are barriers to realising the benefits of digital transformation.

According to interviewees MP15 and RK57, varying levels of understanding of various terminologies and technologies affect the specialised employees’ motivation and sense of belonging. On the other hand, homogeneous organisational collective thinking fosters a lack of acceptance of cognitive diversity, contributing to a tendency of specialists to self-censor. The respondents from the IT unit agree that resistance to cognitive diversity hinders the employment process of more specialised human resources. Due to budget constraints in NPOs, specialists are most likely to be attracted based on intrinsic motivation and an inclusive working environment. As one of the respondents puts it, *“...they are used to being listened to; they are used to being treated as the experts. And if you are willing to attract those kinds of people, then you should treat them, I think, differently!”* (MP15).

Interviewees indicate that the NPO’s employees are open to change and ready to embrace, for instance, an agile working method, but those at the management level do not seem to be keen. According to them, the management at the NPO exhibits fear of failure and decision avoidance tendencies, reflected in the lack of delegation and trust. The

respondents also blame these cultural barriers for suppressing the organisation's systematic implementation of agile working and social innovation ability. Thus, the management needs to adjust its view of the normative culture and support effective culture change initiatives.

The cultural barriers offer a perspective of shared norms between NPOs and public institutions. Even though private and commercial organisations seem to have evolved towards a more liberal one, Swedish NPOs hold to corporate social norms with attributes that include risk aversion and a propensity for stability.

4.5. Technical Barriers

The technical barriers refer to technologies, applications, systems and data-related challenges. As the case organisation is in the inception phase of its digital transformation journey, most of our respondents often refer to the lack of integration as an “archipelago” or “spaghetti” application landscape. Thus, it is not regarded as a long-term barrier by itself. Digital technologies are considered as flexible emerging technologies that provide out-of-the-box solutions. However, the lack of adaptations of the solutions is resource-demanding, specifically for NPOs, which present complex requirements. According to a respondent, “...the information they have is rather extensive because they are solving other problems as well and I think the organisation is a little bit more adapted to the solution”.

The challenge here is assigning those responsible for ensuring the digital technologies align with the problems that NPOs face, as well as IT or other departments. IT ownership poses a challenge in the term by developing unfitted solutions. The risk in the case of NPOs that lack knowledge of business requirements and business development is to decide on a solution based only on an IT perspective, posing a threat to the business core.

Lack of data quality is referred to mainly as a data standardisation problem, which is debated at the central level among those responsible for an ongoing project for designing a service catalogue. Information security threats were also mentioned as one of the technical barriers that might affect digital transformation. As in public organisations, IT resources are shared. Therefore, suppliers' risks are not particularly of concern now but could raise ethical and societal consequences in the future.

4.6. Financial Resources

NPOs' financial restrictions are statutory. Only 25% is distributed for administration and projects. Without long-term resource planning, old IT projects are not developed, while new ones are implemented. This is unfortunate as flexible financial decisions are necessary as the technological and market landscape changes regularly.

Even if the IT team realises the benefits of long-term resource planning, it also recognises the challenges of formulating such plans due to external challenges—the uncertain economic landscape and compliance—and the lack of measuring the IT benefits. One respondent says, “*We cannot measure the benefits at all!*” Measuring the IT benefits has been regarded as beneficial in influencing the leadership's decision for actual and future IT projects and for augmenting some long-term budget planning.

Respondent MP15 is interested in a system that measures the IT benefits but acknowledges the challenge. “*It's hard! The new costs for the new systems appear in one place, but the costs of not having the systems appear in many different places. And that is so much harder to show and count all of them! I should focus more on that!*” (MP15).

On the other hand, the actual implementation of IT metrics is described as problematic in the NPO context by IT team member KD87, which identifies the lack of metric models. “*I think it could be needed to have clear metrics on it and a model to lean on.*” Even though benchmarking helps various industries evaluate the best solutions on the market and adapt to the organisations' needs, there is a lack of good practices in NPOs.

4.7. Customers/Stakeholders

Our analysis reveals a list of stakeholders at the case organisation: donors, institutions, other organisations, operational departments, units, volunteers, customers, employees, and beneficiaries. The digital transformation initiatives at the NPO aim to improve its efficiency and communications with its stakeholders. However, the diversity of the

stakeholders might pose a challenge as technologies are adapted to the needs of each, as noted by respondent MP15: *“We have customers and beneficiaries, and then we have some mix with those two. But one thing we have a challenge with is to think about the user, and users can come in many different shapes”*.

The respondents acknowledge that the NPO aspires to become data-driven and provide more and more digital services to its stakeholders. Thus, the central management and leaders at the various units must assess whether the needs of stakeholders are considered when the digital strategy is formulated. Unfortunately, the result of the analysis indicates that beneficiaries' needs are not on the agenda. Moreover, MP15 raises the issue of the lack of recognition of the needs of beneficiaries' digital literacy. *“...even more important is that we can provide work training places for people that need to train their work skills in an environment that is demanded in the future. We need to provide work training places within the digital area”*.

4.8. External Barriers

Respondents admit that the success of digital transformation undertaken by the case organisation is highly contingent upon external environmental complexity. It is argued that the uncertainty and dynamism of the social landscape, stakeholders' diverse needs, and technological and market developments are critical. Besides, NPOs are expected to create added public value by introducing new digital technologies while navigating through regulatory and compliance issues and maintaining inter-organisational collaboration. Therefore, it is worth recognising that the pressure outside the organisation might lead NPOs to new unexplored paths which cannot hinder or facilitate digital transformation.

The complex organisational settings and the external environments they operate in pose challenges and opportunities for NPOs. Respondents MP15, ZY43 and KD87 agree on the complexity of digital transformation in NPOs: *“It's in our DNA to just do a lot of stuff. I think that we need to be able to adapt quickly to change because that is the nature of our business in general! We cannot sit still for one year and develop something because then the crisis could be over, or the need could be twice as much. So, I think that we need a changeable landscape!”* (KD87).

Public trust is a critical element for NPOs' survival since it is an indicator of a continuous flow of financial resources. Therefore, public opinion is viewed seriously by NPO leadership. In relation to digital transformation, public opinion can determine whether NPOs will have the financial resources to fund initiatives or not. Thus, respondents argue that the leadership might be cautious of innovative solutions due to fear of eventual failure. Besides, NPOs might also be concerned about legal compliance not only for the economic repercussions but also for the eventual reputational costs. Our analysis indicates that other legal barriers do not threaten the ongoing digital transformation since third-party contracts cover most IT solutions. However, the case organisation has put measures in place to ensure compliance with GDPR, which takes up some financial and human resources.

5. Discussions and Conclusions

The extant literature provides two frameworks [1] [14] that could be used to categorise the various barriers to digital transformation in NPOs. These were used to present what we found in our case organisation. The starting point for us was the findings of our literature review (e.g., [10], [20], [22], [24, 25, 26]), which were invaluable to not only developing a taxonomy but also in explaining how they are correlated with each other (see Figure 2), and which barriers were recognised by the organisation.

In the initial stage, the application of developed taxonomy in the research confirmed the previously found barriers in the extant literature. The results from this case study confirm previous barriers within seven themes and contribute to one new theme, “Communications”. In total, fifteen new barriers were found: rigid hierarchy, fragmented processes, lack of partnership misfit roles, siloed business structure, lack of diverse conceptual skills, lack of common language, lack of systematic knowledge sharing and organisational learning, fear of accountability, lack of integration, lack of benchmarking, mixed stakeholder's journey, digital literacy, and environmental complexity.

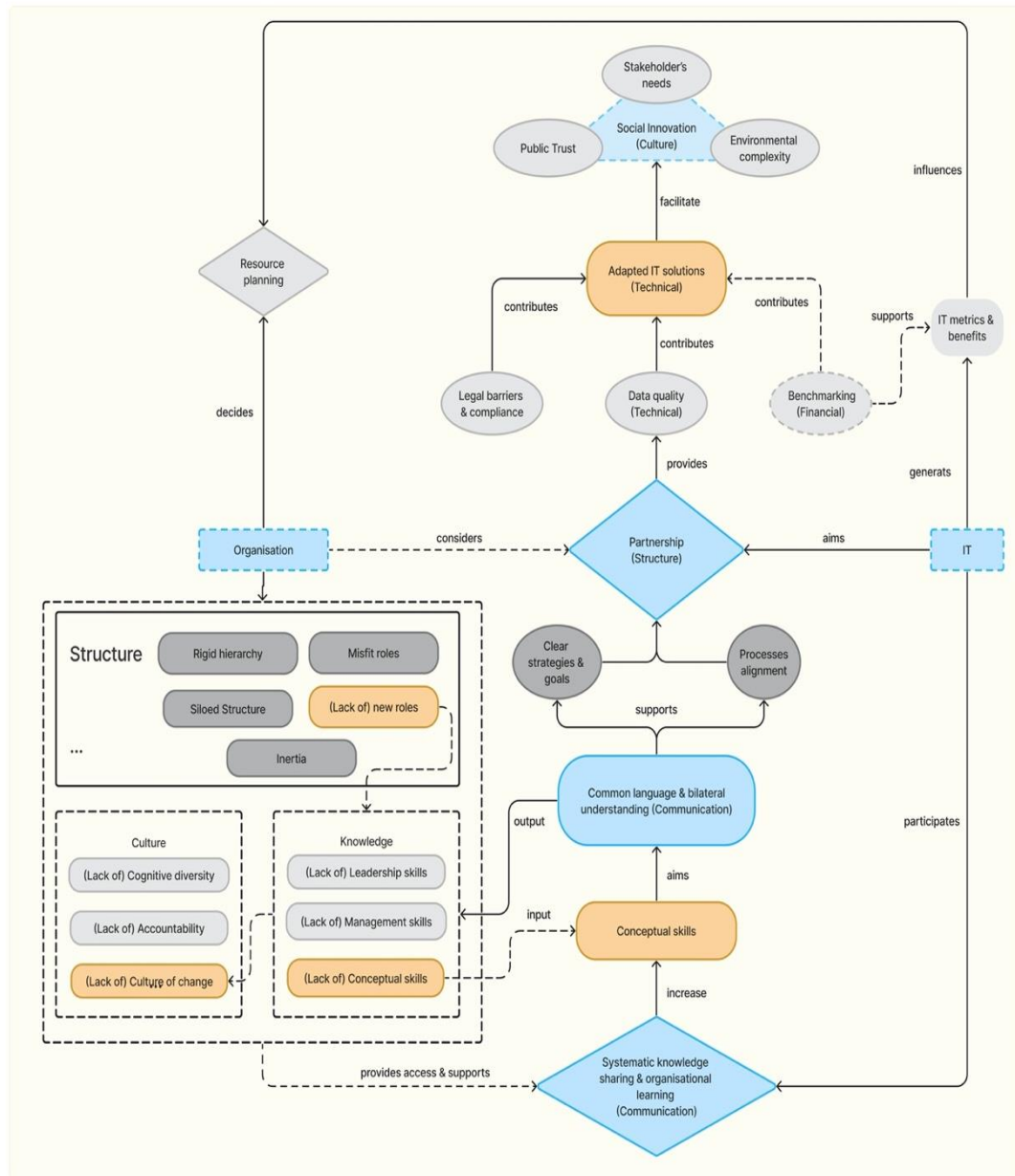


Fig. 2. Barriers to digital transformation in NPOs and the relationship between them

Secondly, new barriers in the Swedish NPO have been identified based on the participants' answers. The new barriers were classified and introduced accordingly under already-existent themes, or if needed, new themes were created. The uncovered barriers provide a broader perspective on NPOs' challenges in adopting emergent technologies that have not been approached in other studies. The organisational core - structure, culture, knowledge, and communications—brings the hinders together within one main organisational challenge: lack of systematic knowledge management and organisational learning. Under communications barriers, we find a lack of conceptual skills, a lack of new roles [10] and a lack of a culture of change [20], [24, 25]. New specialised roles have the capacity to accelerate the development of needed capabilities and to increase cognitive diversity. Lack of cognitive diversity, in turn, is related to both lack of acceptance and lack of awareness previously presented in the literature [10], [22], [24, 25]. Those barriers were assumed to be a result of both organisational historical developments—closely related to the public institutions' constraining environment based on norms and status quo—and a lack of supportive communication management.

Thirdly, barriers that are closely related to Vial's [14] disruptions are found to be

embedded in technical, financial, stakeholder, and external themes. Data availability relates to a lack of data quality [23, 24], legal barriers and compliance [22] and lack of benchmarking. Lack of benchmarking is a specific challenge for digital transformation in NPOs, unrevealed in the consulted literature. NPOs encounter challenges in measuring IT benefits [10] because they rely on benchmarking. The NPO's competitive landscape is shaped by both external challenges—public trust [25] and environmental complexity -and the ability to innovate [25]. Lack of adapted IT solutions [26] and lack of knowledge of stakeholders' needs [20] are elements of consumer behaviour and expectations disruptions.

6. Contributions and Future Research

The study set out to establish the various barriers to digital transformation based on an empirical investigation in a Swedish NPO. We have also attempted to further our understanding of the potential relationship between the identified barriers. Through a literature review of the extant literature in IS and cognate disciplines (e.g., [10], [24]), the thematic analysis revealed new barriers to digital transformation for NPOs that might be a starting point for future studies hypothesising the relationship between the identified barriers and digital transformation, i.e., internal organisational settings and external environments. Thus, the research question “*What are the barriers to digital transformation in a Swedish non-profit organisation?*” is answered through the development of a taxonomy based on two recent digital transformation frameworks [1], [14]. Previous related literature reviews and comparative public-private attribute overviews [13] have been applied to an in-depth exploration of this complex phenomenon.

Readers are advised to take the limitations of the study into consideration when interpreting the findings. Despite the strength of case studies in providing rich insights and an in-depth analysis, we recognise that the results of our study could only be generalised for organisations in similar context and settings. However, the purpose of case studies was not to claim statistical generalisation, but what Yin [27] referred to as analytical generalisation (i.e., a generalisation in which a researcher explores the link between findings of a particular case and a theory). Thus, we argue that our findings can support further comparative qualitative research or confirmatory quantitative studies within the context of NPOs and other organisations in the public sector or for-profit organisations.

The results can be used by practitioners to understand better the various factors impeding their digital transformation journey. The insights are invaluable while planning and executing initiatives in their organisations.

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