

Secondary Publication



Mirbabaie, Milad; Marx, Julian

Micro-level dynamics in digital transformation : Understanding work-life role transitions

Date of secondary publication: 01.10.2024

Version of Record (Published Version), Article

Persistent identifier: urn:nbn:de:bvb:473-irb-985024

Primary publication

Mirbabaie, Milad; Marx, Julian (2024): Micro-level dynamics in digital transformation : Understanding work-life role transitions, in: Information Systems Journal, Oxford [u.a.]: Wiley-Blackwell, Vol. 34, Nr. 5, pp. 1810–1832, doi: 10.1111/isj.12514.

Legal Notice

This work is protected by copyright and/or the indication of a licence. You are free to use this work in any way permitted by the copyright and/or the licence that applies to your usage. For other uses, you must obtain permission from the rights-holders.

This document is made available under a Creative Commons license.



The license information is available online:

<https://creativecommons.org/licenses/by/4.0/legalcode>

Micro-level dynamics in digital transformation: Understanding work-life role transitions

Milad Mirbabaie¹  | Julian Marx²

¹Faculty of Information Systems and Applied Computer Sciences, University of Bamberg, Bamberg, Germany

²School of Computing and Information Systems, The University of Melbourne, Melbourne, Australia

Correspondence

Milad Mirbabaie, Faculty Information Systems and Applied Computer Sciences, University of Bamberg, Bamberg, Germany.

Email: milad.mirbabaie@uni-bamberg.de

Abstract

The transitions individuals make between roles are critical for navigating professional and private life domains. These role transitions involve physical and psychological movements between positions and statuses in social structures. Today, digital technologies are becoming increasingly pivotal in these transitions. However, neither existing theory on role transitions nor recent contributions to the digital transformation literature have unpacked the connection between digital technologies and role transitioning. Based on a qualitative inquiry involving knowledge workers from the Global South, we develop the concepts of *role emancipation*, *role confinement*, and *role conflation* and examine how these types of role transitioning relate to the capabilities of digital technologies. We find that digital technologies can introduce levels of rigidity or flexibility that, in turn, either solidify or soften the domain boundaries influencing work-life role transitions in the context of digital transformation. We abstract these ideas into a theoretical model and chart a course for consolidating a ‘micro-level of analysis frontier’ within digital transformation research.

KEYWORDS

digital transformation, global south, knowledge work, role theory, role transitions

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Authors. *Information Systems Journal* published by John Wiley & Sons Ltd.

1 | INTRODUCTION

Working from home today, a coworking space tomorrow, and a company-owned office next week—flexible work arrangements that leverage digital technologies have become a reality for many knowledge workers (Ajzen & Taskin, 2021). This means that the changes to the nature of work in the context of digital transformation alter the ability, frequency, and extent to which individuals perform *role transitioning*, that is, entering and exiting roles over time. While this development can augment worker autonomy (Wang et al., 2020), it also requires individuals to increase their efforts in self-managing the boundaries of work and other life domains (Becker & Lanzl, 2023).

In recent years, this topic has gained in importance as we see a surge in academic studies exploring concepts such as work-life boundary management (Benlian, 2020; Ollier-Malaterre & Foucreault, 2021), work-life identity (Prester et al., 2023; Vaast & Pinsonneault, 2021), or occupational well-being (Tarafdar & Saunders, 2022; Yassaee et al., 2019). In parallel, practitioners grapple with the question of how to balance organisational effectiveness and individual flourishing in the future of work (Meister, 2021).

However, this micro-level of analysis is rarely considered in Information Systems (IS) research on digital transformation. Existing studies have predominantly investigated changes to the workplace on an organisational level, such as top-down implementation, subtraction, and management of digital technologies (Zimmer et al., 2023), which in turn affect work practices (Baptista et al., 2020; Wessel et al., 2021). While these studies have enhanced our understanding of digital transformation from a strategic and organisational standpoint, they reveal little about impacts of digital transformation that reach beyond organisational boundaries, such as work-life role transitioning on a micro-level.

Additionally, case studies that focus on organisational outcomes through macro-level investigations often adhere to a single-IS paradigm (Gerlach & Cenfetelli, 2022), failing to capture the diverse array of digital technologies individuals use both for work and leisure (Mathiassen et al., 2023; Vaast & Pinsonneault, 2022). Furthermore, the existing digital transformation literature appears to presume that those tasked with implementing strategic decisions about the use of digital technologies possess the requisite skills, resources, and socio-economic status (Virtaneva et al., 2021).

To take the first step towards addressing this research problem, the purpose of this paper is to establish a *micro-level of analysis frontier* that provides a largely overlooked perspective on digital transformation. We shift the level of analysis from the organisation to the micro-level, of which the individual is one example, assume a multi-IS paradigm, and collect data from a non-WEIRD¹ context. We build upon the theoretical framework of role transitions provided by Ashforth et al. (2000), which examines *the psychological dynamics of daily role transitions involving the social domains of work, home, and third places* (p. 486). While this framework provides a theoretical basis for understanding role transitions, it does not explore the impact of digital technologies on these dynamics. With these considerations in mind, we formulate the following research question:

RQ 1. How do individual-level work-life role transitions unfold in the context of digital transformation?

To address this question, we conducted interviews with knowledge workers from various countries within the Global South—a term that refers to nations with emerging economies. Our methodological approach addresses the potential circularity of micro-level antecedents and outcomes of digital transformation. Instead of relying on cross-sectional data, we focus on qualitative data that enables us to explore the temporal aspects of work-life role transitioning. We analyzed our dataset inductively using grounded theory techniques (Gioia et al., 2013) and

¹The acronym WEIRD—Western, Educated, Industrialised, Rich and Democratic—aims to raise awareness about psychological differences and emphasises that WEIRD individuals are but one unusual slice of humanity's cultural diversity (Henrich (2023).

synthesized our findings into a theoretical model. Overall, our work contributes to the digital transformation literature and the IS discipline in three significant ways.

First, we identify three distinct types of work-life role transitioning that are evident in our sample: *role conflation*, *role emancipation*, and *role confinement*. While existing theories describe role transitioning within either a short-term timeframe without considering digital technologies (Ashforth et al., 2000), or a long-term timeframe within the confines of the IT-profession (Dubé, 2014), our research extends these perspectives by showing how work-life role transitioning plays out in the context of digital transformation.

Second, we present a theoretical model that illustrates how the knowledge workers we have studied navigate entry and exit from roles across work and other life domains, and how digital technologies facilitate or complicate this process.

Third, our paper paves the way for a *micro-level of analysis frontier* in digital transformation research. By highlighting the importance of roles and work-life role transitions, we aim to mobilise this frontier for future research that explores other micro-level dynamics, such as routines, practices, socio-economic circumstances, or psychological aspects of digital transformation.

2 | THEORETICAL BACKGROUND

2.1 | A micro-level perspective on digital transformation

The broader notion of digital transformation describes *a fundamental change process, enabled by the innovative use of digital technologies accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve an entity and redefine its value proposition for its stakeholders.* (Gong & Ribiere, 2021, p. 12). The conceptualization of digital transformation has spurred considerable debate in IS research, which includes distinguishing it from related terms such as IT-enabled organisational transformation (Wessel et al., 2021). As highlighted by Baptista et al. (2020), digital transformation can lead to *unintended and unexpected changes in patterns and nature of work* (p. 5). This paper extends this perspective by acknowledging that, on a micro-level of analysis, work and life domains are increasingly intertwined.

Changes in work practices are often presented as a secondary or tertiary finding in studies of the broader digital transformation landscape (Grønsvund & Aanestad, 2020; Morton et al., 2020; Rahrovani, 2020; Struijk et al., 2023; Wessel et al., 2021). The emphasis on strategic aspects is also prevalent in research that specifically addresses the digital transformation of work (Rossi et al., 2020; Zimmer et al., 2023). While such macro-level analyses are plausible from an IS perspective, this research falls short of shedding light on important micro-level phenomena, such as work-life role transitions in the context of digital transformation. The IS literature is rich in efforts that try to understand changes to the work domain from an organisational lens, focusing on strategic decision-making (Baptista et al., 2020), top-down system implementation (Lauterbach et al., 2020), and shifts in organisational culture (Asatiani et al., 2021). However, these studies often assume the Taylorist view that treats 'work' as a domain that is separated from other life domains. Moreover, changes to individual-level work practices are seen as second-order effects of digital transformation (Baptista et al., 2020). These effects are said to result from strategic initiatives, suggesting that changes to work practices evolve mainly in reaction to the top-down implementation of digital technologies (Brünker et al., 2023; Rossi et al., 2020).

Consequently, theory development in digital transformation research may discount unique challenges on a micro-level. From an organisational standpoint, there is an expectation for knowledge workers to cope with the technological shifts resulting from strategic decisions. However, access to technological infrastructures, resources, and digital literacy can differ, influenced by socio-economic backgrounds (Bonina et al., 2021; Ramadani et al., 2023). This means that not all knowledge workers 'are created equal', that is, they do not possess the same capabilities to engage with digital work (Virtaneva et al., 2021).

Despite their potential to enrich organisation-level studies, micro dynamics remain largely unexplored in the digital transformation literature. Adopting a multi-IS paradigm (Gerlach & Cenfetelli, 2022) is one approach that acknowledges the diverse sets of digital technologies individuals use in their work-life (Mathiassen et al., 2023). Furthermore, empirical data from the Global South, which would contribute to the scientific discourse on digital transformation, is frequently disregarded (Elbanna & Idowu, 2022). In many developing regions, the technological infrastructure, such as reliable Internet access and hardware availability, is often insufficient, yet it is precisely these regions where digital transformation is most actively taking place (Bonina et al., 2021; McGregor et al., 2019). The Information and Communication Technologies for Development (ICT4D) literature plays a vital role in this respect, shedding light on the socio-economic barriers to technology adoption and implementation (Holeman & Barrett, 2017).

Micro-level roles are being reconfigured by digital transformation processes. Fundamental routine behaviours, such as working from an office or receiving a task from a human manager, are now being reevaluated. However, the nature of work-life *role transitioning* behaviour in this new context, and the specific influence of digital technologies, remains unclear.

2.2 | Work-life role transitioning in the context of digital transformation

Role theory provides a framework for understanding how the positions and statuses individuals hold within social structures inform their behavioural patterns. Adhering to these patterns increases the likelihood of achieving goals, as certain behaviours are deemed more appropriate for specific situations (Solomon et al., 1985). Concepts relevant to role theory fall into one of three categories: (1) patterned and characteristic social behaviours, (2) identities assumed by social participants, and (3) the scripts or expectations for behaviour that are widely recognised within a culture or society (Biddle, 1986). The workplace creates a variety of roles, each with its own set of behaviours and expectations.

Ashforth et al. (2000) contribute to this theory by exploring *role conflict*, which addresses the challenge of meeting expectations associated with multiple roles, and *role transition*, defined as the *psychological (and, where relevant, physical) movement between roles, including disengagement from one role [...] and engagement in another* (p. 472). In the context of digital transformation, an individual-level role transition perspective is of particular concern because of altered capabilities to transition between roles (Elbanna & Idowu, 2022). In this regard, we are particularly interested in the way digital technologies either facilitate or hinder these work-life role transitions.

Theoretical models explaining role transitioning distinguish between micro transitions, for example, entering a room that is dedicated for work such as an office (Ashforth et al., 2023), and macro transitions, for example, leaving a job (Dubé, 2014). All role transitions involve crossing boundaries which can be of various types: physical, temporal, emotional, cognitive, or relational. These boundaries are created and maintained by individuals or organisations to structure the environment across certain domains, one of them being 'work' (Ashforth et al., 2000; Barrett et al., 2012). On a micro level, digital transformation and ensuing changes in work practices have removed many physical boundaries that allow for a quicker role transition between, for example, 'home' and 'work' (Ashforth et al., 2023; Tarafdar & Saunders, 2022). On a macro level, digital transformation can introduce new, more defined boundaries. For instance, algorithmic management can create boundaries that are delineated by digital technologies and may be challenging—or even impossible—for individuals to cross (Schulze et al., 2022; Wagner et al., 2021). To provide a clearer understanding of these concepts, Table 1 provides an overview of the key terms and ideas related to role transitioning.

In this study, we set out to theorise how work-life role transitions unfold in the context of digital transformation. To do so, we make use of an inductive approach but use role transitioning as a clear 'construct-in-use' to channel our theorization (Suddaby, 2010). The research design for our qualitative inquiry is outlined below.

TABLE 1 Key concepts of role transitioning.

Concept	Description	Examples
Role	<i>behavior referring to normative expectations associated with a position in a social system</i> (Allen & van de Vliert, 1984, p. 3)	<ul style="list-style-type: none"> Employee works in an office from 9-to-5 Manager assigns task to employee
Micro role transition	<i>frequent and usually recurring transitions</i> (Ashforth et al., 2000, p. 472)	<ul style="list-style-type: none"> Employee commutes from 'home' to 'work' Employee switches from 'family' to 'home office'
Macro role transition	<i>infrequent and often permanent changes</i> (Ashforth et al., 2000, p. 472)	<ul style="list-style-type: none"> Employee gets a promotion Employee changes jobs
Boundary	<i>physical, temporal, emotional, cognitive, and/or relational limits that define entities as separate from one another</i> (Ashforth et al., 2000, p. 474)	<ul style="list-style-type: none"> Physical distance from 'home' to 'office' Time it takes to cognitively switch from 'family' to 'home office'
Boundary-crossing	An individual's transitions and interactions across different sites or domains (Akkerman & Bakker, 2011)	<ul style="list-style-type: none"> Employee drives a motorcycle to commute from 'home' to 'work' Employee enters separate room in her house as 'home office'

3 | RESEARCH DESIGN

In this study, we follow a qualitative approach to develop new theory that explains how digital transformation affects work-life role transitioning in a sample of knowledge workers from the Global South. Our methodological framework is informed by the constructivist grounded theory approach of Charmaz (2014), which differs from the traditional grounded theory understanding from Glaser and Strauss (1967) as it leans more towards the interpretative paradigm and supports inductive theory building (Burton-Jones et al., 2015). Following the recommendations of Gioia et al. (2013), we did not disregard the existing theory completely but recognised role transitioning as a clear 'construct-in-use' (Suddaby, 2010). This approach facilitated theoretical sampling and constant comparison, which required phases of data collection and analysis to alternate (Gioia et al., 2013).

3.1 | Data collection

To address our research question, we conducted 25 interviews with knowledge workers across various countries in the Global South. This demographic was chosen to explore domain-specific insights into role transitioning amidst the unique challenges and dynamics of digital transformation in emerging economies. The focus of our study was on the lived experiences and daily work-life realities of these individuals, rather than their technical expertise.

Our sampling strategy sought participants whose experiences would offer rich insights into the processes of role transitioning as influenced by digital technologies. We included freelancers and employees from diverse sectors, including industry, academia, and governmental institutions to cover multiple perspectives. Moreover, we aimed to recruit informants from countries with varying GDPs. We excluded business owners with staff responsibilities and high-level management as we were interested in role transitions of operational and middle-level employees who experience digital transformation and not make strategic decisions about it. We approached the interviews openly

and reserved the option to follow-up on interesting anecdotes in a situational way (Myers & Newman, 2007). The data collection took place between October 2021 and February 2023. The audio of all interviews was recorded and transcribed ad verbatim.

We selected the interviewees purposefully to receive rich information about the researched phenomenon (Suri, 2011). The criteria for selection were at least 2 years of experience in performing knowledge work in a developing country and good command of English. The more our theoretical model progressed, the more inclusion criteria were added. For example, we decided to reach out to some informants again later in the data collection process to clarify those dimensions of the model in which they were experts.

According to Welter and Baker (2021), subjects of study 'do' context, rather than being exposed to a 'given' context. For our sampling, we focused on a 'when' context to understand our phenomenon. The shared experience of knowledge workers was more important for building our sample than 'where' they were located during this experience. The size of the sample was steered primarily by data saturation. We concluded the data collection after the interviews unearthed no further new and surprising insights. Gender, age, or other demographic factors did not affect the selection procedure. Nine women and twelve men were interviewed, with an average age of 26.24 years. The interviewees' occupations ranged from self-employment, employment by local, mid-sized companies and start-ups, to employment at larger international organisations. An overview of the interview sample can be found in Table 2.

We recruited the interviewees mainly through Facebook and LinkedIn. By employing a snowballing technique, we were able to get access to additional interviewees (Heckathorn, 1997). To increase validity, data was collected from different sources, times, and locations (Denzin, 1970).

TABLE 2 Overview of the interview sample.

ID	Age	Gender	Occupation	Country of origin	Interview length (total)	#
I1	35	F	Lecturer/PhD candidate	Brazil	101 min	2
I2	26	F	Auditor	Philippines	65 min	1
I3	25	M	User Experience Designer	Azerbaijan	24 min	1
I4	28	F	Government Agency Employee	Kenya	36 min	1
I5	23	M	Digital Content Producer	Pakistan	45 min	1
I6	30	M	Engineering Consultant	Venezuela	62 min	2
I7	27	M	User Experience Designer	Sri Lanka	53 min	1
I8	26	M	Accountant	Nigeria	22 min	1
I9	26	M	Marketer	Ecuador	37 min	1
I10	23	F	Government Agency Employee	India	49 min	1
I11	27	M	Sales Representative	Kenya	75 min	2
I12	25	F	Administration Secretary	Papua New Guinea	20 min	1
I13	25	M	Finance Manager	Ethiopia	23 min	1
I14	25	F	Researcher	Kenya	32 min	1
I15	27	F	Researcher	Jamaica	59 min	1
I16	25	M	Finance Analyst	Malaysia	78 min	2
I17	26	F	Legal Associate	Kenya	23 min	1
I18	30	M	Product Designer	Bangladesh	37 min	1
I19	23	M	Software Engineer	Sri Lanka	38 min	1
I20	22	F	Finance Manager	Jordan	30 min	1
I21	27	M	Program Manager	Haiti	43 min	1

3.2 | Data analysis

We analyzed the interview data following a constructivist grounded theory approach (Charmaz, 2014) and derived first-order codes, second-order themes, and aggregate dimensions from the transcripts (Gioia et al., 2013). Two researchers were involved in coding the interviews to ensure an objective, open, and transparent process and to minimise potential biases (Sarker et al., 2013). Codes and themes were compared constantly, and differences were discussed within the author team. At the point when additional interviews did not yield additional first-order codes, we stopped the data collection and developed an inductive model based on our data structure. We then conducted five additional interviews based on the idea of theoretical sampling to address some open questions we had at this stage about the role of digital technologies within the aggregate dimension of *role conflation*. We reached out to informants we had already interviewed who were most qualified to help us refine our theory based on their profession, socio-economic background, and experience. We continued our interviews until no further insights could be gained to improve our theoretical model. The model is based on a data structure that groups first and second-order themes within the three aggregate dimensions of *role emancipation*, *role confinement*, and *role conflation* (Figure 1).

The first aggregate dimension, *role conflation*, relates to role transitioning between work-life domains, for example, 'work' and 'family'. It describes scenarios in which digital technologies occasion an overlap of multiple roles, which is so pronounced that individuals do not engage in back-and-forth micro transitions anymore. Second, we posit the aggregate dimension of *role emancipation*. It relates to within-domain role transitions, for example, 'work', that benefit the individual. Role emancipation occurs when an individual gains the ability to cross domain-specific boundaries (e.g., with the help of digital technologies) and enters a new desired role as a result. This mostly occurs during macro transitions, that is, within a longer timeframe. Third, *role confinement* can be found in contexts of high organisational control, enabled by digital technologies. This can inhibit the boundary-crossing capabilities of individuals and keeps them stuck in a certain role. This applies to both micro transitions (e.g., daily) and macro transitions (e.g., over the course of several months or years). Table 3 provides definitions and examples for all three types of role transitioning.

4 | FINDINGS

4.1 | Digital technologies and work-life role transitioning

Many of the knowledge workers we interviewed experienced changes relating to their work practices in unison with the COVID-19 pandemic. While several interviewees acknowledged the benefits of the rapidly advancing digital transformation in their organisations or industry necessitated by the pandemic, some suffered from impaired wellbeing. Particularly striking was the case of **Belinda** (I1, name changed), who works as a lecturer and PhD student in Sao Paulo, Brazil. The context of Belinda's case is that her university struggled to provide the technological means that were needed to quickly shift research and teaching activities to a digital format. While the department used Microsoft Teams for internal purposes, there was no solution that met the demands of student-teacher interactions. This meant that Belinda had to complement the digital technologies she used for work with those she typically uses for leisure activities such as her smartphone or WhatsApp. She pointed out that utilising WhatsApp for work is quite common in Brazil, contrasting with practices in most Western contexts. Soon after her work routines became increasingly digital, Belinda started to experience excessive demands to delineate her work and private life, which proved to be taxing.

I was used to just walking down the hallway and asking your coworker 'Oh, you're just doing paperwork, can you do this for me right now?'. And with remote work everything we were using was Teams. You needed to send a message or mails and people answer it. This takes a lot of time, and I

Aggregate Dimensions

Second-Order Themes

First-Order Codes

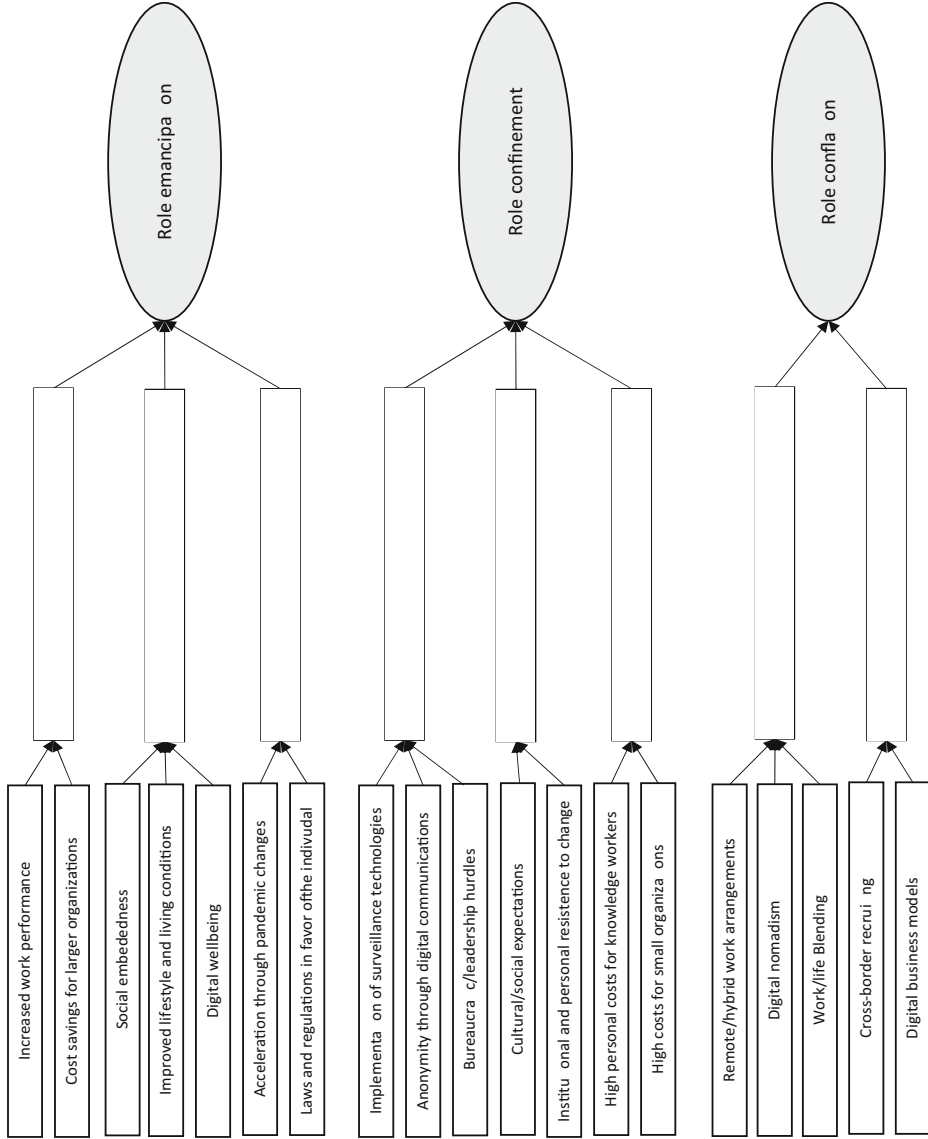


FIGURE 1 Overview of the data structure.

TABLE 3 Definitions and examples for the three aggregate dimensions.

Aggregate dimension	Definition	Examples
Role conflation	An overlap of multiple roles (e.g., 'parent', 'boss') across life domains with the absence of micro role transitions between them.	<p><i>My students were every day in my WhatsApp saying that I can't meet their needs although I was trying to (I1)</i></p> <p><i>You can work in your pajamas, or you can work in your parents' home, or you can go work in another city. (I3)</i></p> <p><i>I have to extend my [working] time because my focus is divided. I'm watching while working, I'm eating while working, I'm doing my laundry while working. (I2)</i></p>
Role emancipation	Upward macro role transitions (e.g., a promotion) within a life domain (e.g., 'work').	<p><i>For example, I could be working for a German company while I'm here in Malaysia [...], meaning that I could get a German payroll, but I could keep living in the Malaysian region. (I16)</i></p> <p><i>A lot of people were hired because of remote work [...]. Especially in the provinces, there are limited numbers of opportunities to work. But when working remotely from the province, they can work, even if the company is in the big city. (I3)</i></p>
Role confinement	The suppression of micro (e.g., daily) or macro (e.g., within several years) role transitions.	<p><i>A lot of managers have five or six screens on their end. It is out of their own pocket to monitor everybody and what they are doing. A lot of the agents got fired because they were not aware of that, and they were using Facebook while working. They were also watching Netflix while working for the clients ((laughing)) (I2)</i></p> <p><i>I think in Argentina there is a very big gap between these two parts of society. The part of the society who can do work remotely is very limited. (I6)</i></p>

was super frustrated because I still believe that I never finish my work. I finish the day and I still think that I have so many things to do, because I can't reach people, because people are in another meeting. Lots of meetings, lots of people in meetings, so that I was exhausted of it. This was the hardest part. (I1)

This quote illustrates that digital technologies have eased the process of crossing boundaries between work and private life for Belinda, making micro transitions more seamless. However, at the same time she experienced frustration as a result. The ability of digital technologies to disconnect the traditional association of space with time contributed to an increased workload for Belinda. The expansion of what is possible digitally has made it challenging for her to determine when she has accomplished 'enough' work, complicating her ability to disengage from her professional role.

Apart from her duties and work routines related to her co-workers and supervisors, the situation worsened once she had to digitally organise her teaching. Belinda emphasised that the capabilities of the instant messaging service WhatsApp contributed to her exhaustion. Since she used the system for both her work and leisure, she felt unable to shield herself from student requests during times that were typically reserved for leisure activities and recreation.

My work involves dealing with the students and their needs [...]. In Brazil we use a lot of WhatsApp. In Brazil WhatsApp is the big thing. And my students were every day in my WhatsApp saying that I can't meet their needs although I was trying to. I always felt exhausted and nervous and felt I was not working enough. Like, I'm not doing my job well. That's the hardest part I believe. The social shame and how to manage the communication with people working remotely. Now I am a little bit more used to it. And now I set boundaries, like I never ask for messages outside my worktime, but they can still send them to me. (I1)

Belinda's use of WhatsApp for both work and leisure has complicated her ability to disengage from her work role during off-hours and weekends. Unlike using multiple digital technologies each for a single purpose, WhatsApp's multipurpose nature has blurred the lines between her work and personal life, leading to exhaustion. The integration of these life domains via WhatsApp has proven to be challenging because it does not facilitate a clear separation. To address this, Belinda attempted to re-establish boundaries by asking her students not to contact her outside of work hours, but this strategy only partially alleviated her mental burden, as the possibility of being reached at any time still persisted.

The reason why Belinda relied so heavily on WhatsApp to communicate with her students was that other systems were unreliable. Although the university later provided an e-learning platform and access to communication tools, the technology itself or requirements to use it properly (i.e., a stable internet connection) were often deficient.

The platform we use to host classes has a lot of instabilities. Sometimes it is just crashing and doesn't work. That's a bit frustrating. And some of my colleagues tend to have not the best Internet connection. They cannot attend meetings or classes. And our students also send us messages like 'Oh professor (-), we have a problem, how to we get reconnected?'. And the answer was often 'Oh my god, I don't know'. Now things are better in Brazil but the last years it was a chaos. (I1)

Part of the reason why Belinda struggled so much with the changing nature of her role transitioning is rooted in Brazilian work culture. Hence, not only her coping with the capabilities and demands that were created by the presence of digital technologies in her life were part of the problem. It was also the incompatibility of some digital technologies with the social expectations that are typical for Brazilian culture.

In Brazil we had this kind of informality in personal relationships. It is a big problem when you think about your work. Brazilian people have a lot of difficulties to set boundaries. We have this tradition to deal with your supervisors as friends. You know 'Ah, I can't say no, because they feel upset with me. I need to do it'. It is really hard to set boundaries. And when it came to remote work, I believe that's a big problem, because people were sending a message in their work WhatsApp group at Saturday night and everyone was like 'Oh my god, I can't. Now we need to relax and have free time'. But people felt sad to say nothing. This kind of informality is a big problem in Brazilian organizations. (I1)

Other interviewees emphasised that some governments do not provide institutional and legal frameworks that support coping with the demands of digital transformation in many countries. Oftentimes, it is the private sector that drives innovation, with the government sector being reactive to those changes. To illustrate this issue, we look at the story of **Rayyan** (I16, name changed), who is a financial analyst in Malaysia. The context of this case is that Rayyan works in an environment with a technological infrastructure that is comparable to most Western countries. However, in this regard, policies and innovation driven by the government lag behind initiatives from the private sector. The financial industry in which Rayyan works is much further ahead in digital transformation than other

industries. As Rayyan explains, this has implications for workers who aim to pursue a career in Malaysia and make the country competitive on a global labour market.

The government needs to encourage the general society and provide the support in terms of rules and funding and the private sector, needs to share their research. Like, you know, not try to monopolize certain technologies to a particular company or to a particular region. It needs to be shared. Something like the vaccine...[...] it is just their vaccine. They're not going to share it. We can't make the same mistakes when it comes to technology because technology is something that we as humans' civilization will only advance if it is shared. [...] If I take artificial intelligence – it will be a big part of how we can work remotely as well because you could have an AI supporting your day job and you could be speaking to an AI when it comes to certain tasks [...]. I feel that the government and the private sector really need to work together to achieve this. (I16)

What Rayyan emphasises it that digital transformation in Malaysia is dependent on institutional progress. If individuals like him want to have equal opportunities in succeeding professionally in this context, there must be an equal playing field (i.e., technological infrastructure). He fears that his ability to emancipate from his current professional role is confined by the digital technologies that the business environment in Malaysia can provide. He specifically mentioned artificial intelligence (AI) and that he believes that the potential of this technology to support him as a knowledge worker will be a decisive factor to compete in the labour market.

Apart from affairs of the interior, Rayyan also contemplated about the role of his country in the global economy. In this sense, measures will need to be taken to allow for a more flexible and mobile workforce that is capable to act across borders and achieve economic growth through international trade.

[Malaysia] is becoming a global business service center. One of the key places in the world. I feel remote work will allow more parts of the population to be involved in this success. And I think it comes not just through home office that people are being much more technologically savvy but also certain networks with other companies. It is all becoming hybrid where companies are starting to share more with other companies. And the government has started to share more with other governments as well. More treaties are coming into place where people are more mobile, they can work in any part of the world with their current visa status, or there's citizenship status as well. (I16)

Although Rayyan suggested that digital transformation can be a driver of a digital divide, he felt quite positive about the opportunities it opened for knowledge workers like him. In a theoretical sense, this means that macro role transitions (e.g., changing jobs internationally) are facilitated by digital transformation. He did not know it at the time but as we kept in contact with Rayyan via LinkedIn, we learned that in 2023, Rayyan left Malaysia to start a new job in Canada.

It is important to note that some interviewees addressed the prevailing political situation in their country. For example, it was stated that Brazil was in a very complicated political situation (I1). Additionally, several interviews revealed that, according to the interviewees, many governments are either not interested in enabling digital transformation (I10), barely care about the issues it creates for the workforce in their country (I20) or do little to promote it (I9).

A country's technological infrastructure includes various aspects such as the Internet, hardware, equipment, software, and services. Many interviewees raised the concern that the demands of digital transformation may not be met by parts of the population due to a lack of the necessary preconditions such as a reliable Internet connection. In the knowledge work sector, however, access to digital technologies was not an issue that was mentioned a lot. However, some interviewees reported that they rely on their own devices and that they had to make tough economic decisions to be able to work in certain jobs. To get a better impression of the dilemmas many knowledge workers

find themselves in, we turn to the case of **Juhaan** (17, name changed), who works as a UX designer in Sri Lanka. The context of this case differs from the previous examples as many knowledge workers in Sri Lanka are bound by their physical location. Remote areas are not well connected and knowledge workers who do not have the economic means to get their own hardware and reliable Internet are excluded from the job market. However, once this minimum threshold is met, digital transformation promises opportunities for knowledge workers even from the most rural areas of the country to participate in the economy.

Internet over here is on the top ten list of things that need improvement. But it is manageable. But it is pretty expensive if you are earning in Sri Lanka and if you're paying for your bills and everything. One of the challenges I face working for a startup is that we don't get our medical claims or certain other claims. Currently, I get only to claim my utility costs, which is mainly the Internet. Because I'm working from home, I am provided with it. But yeah, those are some sort of challenges which is there when you are working remotely in Sri Lanka.

To make the shift from a rural area towards a job in the knowledge work sector, however, depends on education and the economic base to get access to this education. Despite the perks that digital transformation brings, it also sets the bar higher for education to equip workers with the knowledge to make a living.

Not everyone has a laptop in Sri Lanka. Not everyone has Internet in Sri Lanka. There is a major part of the population without Internet and there is a minority with Internet. Education leads towards the future, right? Once these people face employment, they will have to face technology, too. This is one of the challenges I see in Sri Lanka. (17)

Juhaan believes that digital transformation can confine many individuals in their ability to thrive professionally. This means that digital technologies require a certain socio-economic status to allow knowledge workers to emancipate from their current role. An important facet of this problem are social expectations that include, among other things, gender roles. According to Juhaan, those issues have their roots in many areas of society in Sri Lanka. In particular, he criticises the way the education system allows younger generations and especially women to prepare for the job market.

At least more than 60 percent of the people here have that fixed mindset 'the women should be at home and the men should go to work'. But I would say now the world is one of gender being treated equally and everyone should be given an opportunity. The initiative should come from the family. No one is going to come and offer you a job. No one is going to come here and say you have to study, go to university. Let the girls explore the world. Women strive hard to study. The respect given towards them is still underdeveloped. (17)

In the next section, we will shed light on how work-life role transitioning has changed in the context of digital transformation and present three types of role transitioning: role conflation, role emancipation, and role confinement.

4.2 | Theory development

4.2.1 | Role conflation

We theorise that *role conflation* is the first unique type of work-life role transitioning in the context of digital transformation. It describes an extensive overlap of two or more formerly separated roles. This overlap can be physical

(digital technologies enabling individuals to enact different roles in one place), cognitive (digital technologies not requiring an individual to cross socially constructed boundaries when transitioning between roles), or temporal (digital technologies enabling individuals to enact different roles at the same time). The more these formerly separated areas overlap, the stronger the role conflation. Our data suggests that role conflation is a very common experience within our sample.

I know people who really, really, really complain about having their work life mixed up with private matters. Being available for calls 24/7 because there could be a client on the phone [...]. But I also understand people who have that drive, where their job is a large part of their life. Especially in our line of work [Finance], we often complain because we can't access our e-mails on our private phones. We either need a work phone or need to be logged in a company computer. Sometimes I just wish I could check whether I received a certain e-mail. But I can't, so having this accessibility is a big plus [...]. There are two sides of the coin. (I16)

The opinions diverged a lot about whether role conflation was a blessing or a curse. On the one hand, it can have detrimental effects if individuals are unable to protect boundaries and digital technologies inhibit their ability to properly exit a role (e.g., 'work'). On the other hand, digital technologies that reduce the friction for individuals to transition between roles can be beneficial because it empowers individuals in making their own decisions. I11 was very clear about how he felt about this.

In Africa, we stay very close to our family. If there is something with my family that I need to attend, I always make the time. The thinking that we should separate the person who is "the worker" and the person who is "living" is a bad thing. In the traditional work model where you shower, go to the office, you still have your phone there. You are still thinking about your family or your friends. Nothing will get this person out of you. It is just the body that has moved from your house to the office. You are still that father; you are still that brother. If somebody were to tell you 'switch off your phone, I want you to work', it was as if they said 'switch off your brain'. (I11)

In a second interview with Belinda (I1), she reported that after the COVID-19 pandemic had subsided in Brazil, her university went from a 100% remote to a hybrid work arrangement of 4 days in the office and one home office day per week. The reduced amount of work helped her to deal with the social expectations that made remote work a big challenge for her. She developed the ability to ignore the temptation to easily transition between work and private life and by doing so, avoids role conflation.

I feel much better now. In the beginning, I felt guilty about not answering my work messages on the weekend. But now I say: I am here in the University. I don't need to answer those messages [...]. When I am at home, I don't think about work. I Am not checking my e-mails and I am not checking the messages from my students. (I1)

4.2.2 | Role emancipation

The second type of role transitioning we posit, *role emancipation*, describes the ability of an individual to exit a role for their own benefit, for example, in pursuit of more fulfilling or economically rewarding work. Role emancipation can occur within an organisation or across organisations or even borders. It is typically related to long-term role transitioning but can also occur daily, for example, when digital technologies allow an individual to develop their work identity independently or improve self-determination. Around three-quarters of the employed interviewees

reported that they were convinced to contribute more to the objectives of their organisations since digital technologies have become prevalent. When asked about their personal goals, however, those were still rated as much more important. The identification with the organisation was rather secondary. A possible explanation for this can be found in missing or ineffective institutional feedback or appraisal mechanisms. I10 was experiencing this issue but made a distinction between smaller and larger organisations:

I don't think it [missing appraisal] is the same for smaller companies. I think it is just because it is an international company, they have some standard procedures that they need to follow. the job that I was in, which was a purely Indian company before this, they didn't have any mechanism of that sorts, you know, they didn't have any feedback mechanism. The managers were very unapproachable. (I10)

This means that strategic decisions about implementing digital technologies can backfire from an individual-level misalignment. At the same time, digital transformation across industries opens a dimension we coin as role emancipation, which describes the facilitated ability to transition between professional roles (e.g., changing jobs, moving physically, combining employment and entrepreneurship, etc.).

This is supported by another salient theme within our data: the 'supralocalisation' of work. Digital transformation creates novel opportunities for knowledge workers. For example, individuals from low-income countries can transition from unemployment into jobs that can be done remotely for organisations even outside of their home country.

A lot of people were hired because of remote work. A lot of them cannot work onsite because they live in the provinces, where there are limited numbers of opportunities to work. Now they can work remotely from the province, they can work at all, even if the company is in an urban area. (I2)

I did some interviews for a job in another city. And it was just assumed that we would be able to work from anywhere. They even had some people from Colombia and Brazil in the interview, and they were all there just via Zoom. It was pretty cool to be a part of that. (I9)

Digital transformation can have even more invigorating effects on some knowledge workers. Many of them consider subordinating their work to other roles they play in life or the way they want to work, for example, as digital nomads. However, this is still subject to economic boundaries that prevail in countries with lower GDPs.

I am a person who wants to explore. Keep traveling, you know? Keep going around the world. But when it comes to a lower GDP country, that's kind of hard and it takes time to grow and to explore the world. (I7)

4.2.3 | Role confinement

The third type of role transitioning we theorise is *role confinement*, which is antagonistic to role emancipation. It describes a tendency towards a state in which boundaries are solidified and hard to cross by an individual. An example for this is the inability to change one's role due to algorithmic management that does not intend to allow an individual to cross a boundary such as core working hours or a physical space.

Role confinement is supported by the fact that digital technologies shift the focus from time-bound performance measurement to results-driven assessments of work. This occurs primarily in organisations with traditional hierarchies. Here, knowledge work is restructured through often tighter deadlines and more rigid performance metrics to

counterbalance the missing ability of management to observe employees directly. This statement by I21 emphasises this point vividly:

They [the supervisors] are checking if I met the goals [...]. Because my performance in business is based on results. As long as I provide the results, depending on how I provide them, either I go to a restaurant or to a hotel or I stay home, it doesn't matter. The thing is, I have to provide the results. (I21)

Around half of our interviewees reported that their autonomy is bound by hierarchical control mechanisms that are introduced by digital technologies. In two cases, these instances of surveillance were enforced by management.

It (Fin Analytics) is one software and also Time Doctor. A software that records everything you are doing on your screen [...]. It is recording everything [...] Even though my headset is on mute that software will find a way to record everything. (I2)

In this case, digital technologies are being used to restrict the ability to transition between roles, which other digital technologies made possible in the first place. Management using digital technologies to confine role transitioning contrasts facilitated role transitioning as an almost an unintended consequence of implementing these digital technologies. Such management decisions are patronising in the sense that they enforce and constrain the individual use of digital technologies at the same time.

Other interviewees who did not experience such rigid control mechanisms had a more positive view on the correlation of the digital transformation and their personal autonomy. I17 observed that their management was losing control while the individual gained more autonomy:

My employer would really not know exactly what it is I'm doing right now. It would be hard for him to control me. And if I was physically at the office, he would see me at my desk, maybe not working. (I17)

Based on the data collected from our sample, we infer that role confinement occurs because of control enforced through digital technologies, a rather fixed mindset (individual and/or collective), and decision-making from a scarcity standpoint. Role confinement means that within a given professional environment, role transitions are restricted indirectly (e.g., through human management) or directly (e.g., through algorithmic management or surveillance) by digital technologies. When experiencing instances of role confinement, individuals are prohibited from flexibly engaging in micro transitioning, and from developing their personal careers through emancipatory macro transitions. Role confinement further inhibits individuals from creating their own identity and rituals around working with digital technologies and physically and psychologically binds them to a role that is defined by someone else.

4.2.4 | Virtual role transitioning

In the following section, we continue our theory development and take a closer look at the flexibility-rigidity antagonism we came across in our analysis. The capability of digital technologies to bridge space and time can lead to individuals abolishing boundaries that were previously constructed to separate the roles they take on in different life domains. The **flexibility** digital technologies introduce to role transitioning is welcomed by those who experience transitions as a burden (e.g., I11, *If somebody were to tell you 'switch off your phone, I want you to work', it was as if they said 'switch off your brain'*). However, this flexibility can also be problematic if micro transitions are a protective measure from strain in one domain. A vivid example of this is the story of Belinda (I1), who was unable to transition

back to her private life roles during the weekend. Her work-related WhatsApp messages—combined with the social expectations she felt—overruled her ability to solidify the boundaries that should separate her work and private life.

Moreover, in the case of Rayyan (I16), digital transformation meant a change in his access to information. He can now quickly switch into ‘work’ mode anywhere and anytime. This allows him to cross-spatial and temporal boundaries that previously defined his role as a financial analyst. In this sense, he gained agency and autonomy in how he defines his identity, which elevates his occupational well-being. Emancipating from a predefined role, however, comes with additional risks and requires deliberate self-management. If role transitions are managed flexibly and autonomously by the individual, the overlaps with and effects on other roles need to be considered.

In stark contrast to flexibility, digital technologies can also introduce unprecedented levels of *rigidity* to role transitioning. If managed under high organisational control, digital technologies can inhibit the ability of individuals to cross boundaries and transition between roles. The interviewees who experienced the rigid side of digital technologies report that the main drivers for this are social and cultural expectations in organisations to what ‘work’ looks like and the strategic decisions that result from these expectations. In remote work settings, control can be exerted through digital technologies such as people analytics and surveillance software, and in office settings, through obligatory desk presence and in-person managerial observation. Strategic decisions that involve such digital technologies reinforce this power, especially if control is automated through algorithms. This leads to solidified, crisp boundaries that restrict individuals from transitioning to other roles, keeping them immobile in the ‘work’ domain.

The role transitioning processes within a domain (role emancipation and role confinement) and across domains (role conflation) are enclosed by socio-economic boundaries that impact individual-level role transitioning capabilities. Moreover, we found that all three types of role transitioning apply to day-to-day micro transitions and long-term macro transitions. Figure 2 depicts the integration of the three types of role transitioning and the flexibility vs. rigidity antagonism into a theoretical model.

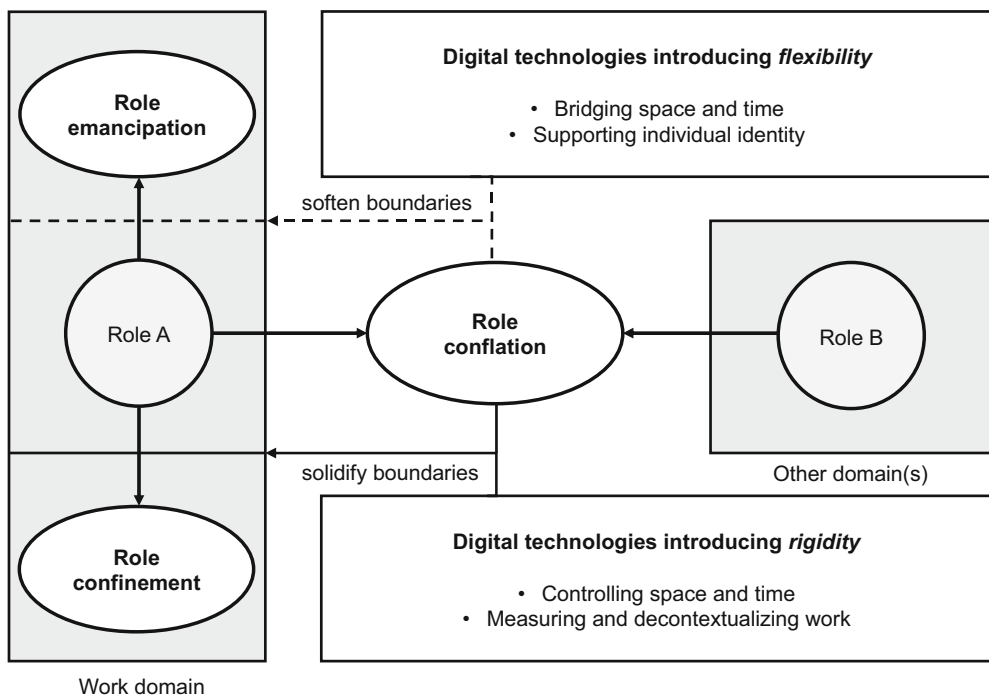


FIGURE 2 A theoretical model of virtual role transitioning.

5 | DISCUSSION

At the outset of this study, our research objective was to gain an improved understanding of *how individual-level work-life role transitions unfold in the context of digital transformation*. Through inductive analysis of qualitative interviews, we identified three types of role transitioning as experienced by knowledge workers from countries in the Global South who participated in our study. Furthermore, we explored the role of digital technologies in this context, specifically in relation to the three types of *role conflation*, *role emancipation*, and *role confinement*. We discovered that digital technologies have a dual impact on individuals' ability to transition between work-life roles: they can enable transitions by introducing flexibility, but they can also impede them by enforcing rigidity. Next, we will discuss the theoretical implications of our findings.

5.1 | Theoretical implications

The three work-life role transitioning types of *role conflation*, *role emancipation*, and *role confinement* and the resulting inductive model add important nuance to our understanding of role transitioning and how it unfolds in the context of digital transformation. Daily occurrences of role conflation elicit diverse perceptions of flexibility vs. rigidity among individuals. Some knowledge workers appreciate and leverage the gained ability to flexibly transition between roles (e.g., 'work' and 'family') (Becker & Lanzl, 2023). Others react with frustration and strain to this change because it makes exiting a role (e.g., 'work') more difficult. This confirms Dubé (2014) and her call for a theoretical distinction between the role transition itself and the individual's reaction to it. Long-term role transitioning is also affected by the flexibility vs. rigidity antagonism. Digital transformation can allow individuals to emancipate themselves from certain roles (e.g., working in different countries), but it can also confine them in developing their own work identity (e.g., making autonomous decisions) and progress in their career.

In their model of micro transitioning, Ashforth et al. (2000) show that segmented roles have crisper boundaries and transitioning between them requires more effort. Integrated roles, in contrast, lead to blurring domain boundaries and simplified transitioning. In more recent work, the concepts of integration and segmentation have been complemented with hybridity, which characterised work-life boundary management as *situated*, *creative*, and *dynamic* (Chamakiotis et al., 2024, p. 263). While our concept of role conflation supports this view of 'personal intent' (Edwards & Rothbard, 2000), role emancipation and especially confinement add nuance to this debate. While the literature assumes that individuals are largely in control of their 'boundary work' practices, our findings suggest that the inverse may be the case in certain circumstances. In a case of strict role confinement, digital technologies restrict individuals take away individual control in boundary work. It is interesting that these findings about being in control of boundary work (with role transitioning being one aspect of boundary work) emerged in a WEIRD context (Chamakiotis et al., 2024 used a sample of 30 UK-based workers), while we derived the concept of role confinement from a sample of a Global South context.

We found that digital technologies that introduce flexibility amplify the integration of roles and reduce the effort of transitioning (e.g., remote work tools) (Mirbabaie et al., 2022; Waizenegger et al., 2020). However, the reduced need for a dedicated physical workplace can also backfire if the work identity of an individual is dependent on this place (Ashforth et al., 2023).

Digital technologies that introduce rigidity amplify the segmentation of roles, and increase the effort of transitioning, up to the point of making boundaries unsurmountable (e.g., through algorithmic management) (Wang et al., 2020). In addition to micro transitions (Ashforth et al., 2000; Ashforth et al., 2023), our model also considers macro transitions (e.g., a change of jobs) and thereby speaks to the context of digital transformation (Zimmer et al., 2023).

5.2 | A micro-level of analysis frontier for digital transformation research

This work further charts a course for a *micro-level of analysis frontier* in digital transformation research. The purpose of this frontier is to shift the perspective from macro-level strategy to micro-level operation, of which the individual experience as outlined in this study can be one example. More studies employing a micro-level of analysis in digital transformation research can advance existing literature that has mostly built theory based on macro-level investigations. For instance, this frontier encourages researchers to assume a multi-IS paradigm (Gerlach & Cenfetelli, 2022), which takes into account the diverse portfolios of digital technologies individuals maintain when performing operational work. Bringing micro dynamics to the fore of theorising digital transformation phenomena will then also provide much more clarity about the role of digital technologies within these portfolios (Mathiassen et al., 2023). Since the individual is only one example of a micro-level of analysis, future studies along this frontier may address transforming practices and routines and how this relates to earlier studies on these topics at the macro-level (e.g., Barrett & Walsham, 1999; Berente et al., 2016). At the same time, it is important not to view micro dynamics in isolation but to consider the interconnectedness of different levels of analysis in digital transformation (Gersch & Wessel, 2023).

Furthermore, it might be worthwhile to consider whether a role transitioning perspective on digital technologies 'as the object that transitions' can improve our understanding of digital transformation. We know that digital technologies are subject to 'polycontextual' uses (Vaast & Pinsonneault, 2022). This means that the role of digital technologies, too, is constantly transitioning between domains and across boundaries, but this can only be observed on a micro level.

A micro-level of analysis frontier in digital transformation research should take a stand for worker autonomy and human flourishing. Whereas understanding the implications of digital transformation for strategy are important, considering the interest of the affected individual or group in this change process is paramount. The instances of *role emancipation* and *role conflation* we discussed in this study relate to the broader debate and theory concerned with digital divide (Vassilakopoulou & Hustad, 2023). With the caveat that further research is needed to assess whether our findings are transferrable to other samples of knowledge workers, our findings suggest that there is a socio-economic dimension to digital transformation. Cultural expectations, political environments, access to and literacy with digital technologies, among other factors, influence role transitioning (Bonina et al., 2021; Ramadani et al., 2023). Therefore, a micro-level of analysis frontier should also consider the socio-economic framework conditions of knowledge workers in the context of digital transformation (Elbanna & Idowu, 2022). The issues of affordability and access to digital technologies that have been described in ICT4D literature (Holeman & Barrett, 2017; McGregor et al., 2019) are also relevant to digital transformation as a global phenomenon. However, the findings of this study also show that—within the context of our study—the importance of geography as a boundary decreases as digital technologies introduce virtual means to cross this boundary.

In micro-level research about digital transformation, contextual distinctions must be made between the public and private sector, as well as large and small organisations. In our study, we found that individuals employed by larger organisations were more likely to experience strategically transformed work processes that tended more towards the rigidity rather than flexibility paradigm. They had a harder time to cross the crisp boundaries that were introduced by digital technologies and their control-oriented management. At the same time, knowledge workers as part of large organisations often benefitted economically, for example, through saving costs on commuting. Those knowledge workers who were involved with start-ups and small organisations more often experienced the implementation of digital technologies as an economic burden, for example, by having to pay for utilities that enable remote work. In turn, it was easier for them to cross boundaries as in their work contexts, digital technologies more often introduced flexibility rather than rigidity.

Finally, we would like to invite researchers to go deeper into studying digital transformation in contexts and case studies from the Global South. We see value in doing so as this type of research will introduce an element that bridges WEIRD digital transformation strategy and issues of digital divide in the Global South. A micro-level analysis is

important in this endeavour because it allows for the identification of blind spots in organisation-level research. This will help guide our efforts towards conceptual, theoretical, and practical alignment across different levels of analysis.

5.3 | Practical implications

We also advise practitioners to consider a micro-level view in the context of digital transformation. Including individual-level preferences and dynamics in strategic decisions about digital transformation will not only benefit occupational well-being among the workforce but also provide a better understanding of the second, third, and fourth-order effects of digital transformation (Baptista et al., 2020). If individual-level work practices continue to be rendered as a second-order priority in digital transformation strategy, organisations are likely to lose talented individuals who emancipate from whatever confines them. One way to remedy this could be to delegate decisions about changes in work practices to the team level rather than introducing organisation-wide workplace policies. Where applicable, this can include more autonomy about workplace technology utilisation and choice for individuals to support work-life transitioning for those who have integration preferences (i.e., avoiding role confinement). In addition, offering training about personal boundary management tactics can remedy drawbacks of those who have segmentation preferences (i.e., avoiding role conflation).

5.4 | Limitations and future research

This study has limitations that provide insights into possible future research endeavours. The openness of our interview approach could have resulted in limited comparability and replicability. Selecting a more structured interview approach may help to overcome this limitation in future studies. Language barriers and the fact that English was not the first language of most interviewees might have biased the findings. In addition, the compiled sample cannot be considered representative of the whole Global South region as differences between countries and regions exist that we cannot account for. We do not aim to statistically generalise these findings to all countries of the Global South nor to any other contexts outside of our sample (Lee & Baskerville, 2003). If researchers or practitioners wish to generalise these findings from our specific sample to other 'when', 'where', or 'who' contexts (Welter & Baker, 2021), it is our responsibility to communicate the need to make certain judgement calls as suggested by Lee and Baskerville (2012). This includes the 'uniformity of nature' judgement call, meaning that similar effects as observed in our sample will also occur in the future. Furthermore, one needs to judge whether the new context is sufficiently similar to the situations portrayed in this study.

Conclusions drawn from the current work that are used for further theory development or testing should be complemented with empirical work that recruits one or more samples from countries of the Global North. A direct comparison between knowledge workers from developing and developed countries could further clarify the role of socio-economic factors for work-life role transitioning.

6 | CONCLUSION

While digital transformation literature is rich in organisation-level analyses of digital technology rollouts in the workplace, resulting individual-level phenomena such as changes to work-life role transitioning have been largely overlooked. Findings from our interview study with knowledge workers in the Global South suggest that digital technologies introduce a flexibility vs. rigidity antagonism to work-life role transitioning. In this context, we theorised three types of role transitioning: *role emancipation*, *role confinement*, and *role conflation*. We integrated these concepts into an inductive model of virtual role transitioning and linked them with the capabilities of digital technologies.

The model shows how digital technologies introducing flexibility and rigidity relate to individual-level work-life domain boundaries and role transitioning. Additionally, this study marks a first step towards a *micro-level of analysis frontier* in digital transformation research. We invite fellow researchers to align their work with and advance this frontier, aiming to develop, test, and refine theories that place human flourishing at the heart of digital transformation discourse.

ACKNOWLEDGMENT

Open Access funding enabled and organized by Projekt DEAL.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available upon request from the authors.

ORCID

Milad Mirbabaie  <https://orcid.org/0000-0002-9455-5773>

REFERENCES

- Ajzen, M., & Taskin, L. (2021). The re-regulation of working communities and relationships in the context of flexwork: A spacing identity approach. *Information and Organization*, 31(4), 1–15. <https://doi.org/10.1016/j.infoandorg.2021.100364>
- Akkerman, S. F., & Bakker, A. (2011). Boundary crossing and boundary objects. *Review of Educational Research*, 81(2), 132–169. <https://doi.org/10.3102/0034654311404435>
- Allen, V. L., & van de Vliert, E. (1984). A role theoretical perspective on transitional processes. In V. L. Allen & E. van de Vliert (Eds.), *Role transitions: Explorations and explanations* (pp. 3–18). Springer. https://doi.org/10.1007/978-1-4613-2697-7_1
- Asatiani, A., Hämäläinen, J., Penttinen, E., & Rossi, M. (2021). Constructing continuity across the organisational culture boundary in a highly virtual work environment. *Information Systems Journal*, 31(1), 62–93. <https://doi.org/10.1111/ij.12293>
- Ashforth, B. E., Caza, B. B., & Meister, A. (2023). My place: How workers become identified with their workplaces and why it matters. *Academy of Management Review*, 1–33. <https://doi.org/10.5465/amr.2020.0442>
- Ashforth, B. E., Kreiner, G. E., & Fugate, M. (2000). All in a Day's work: Boundaries and micro role transitions. *The Academy of Management Review*, 25(3), 472–491. <https://doi.org/10.2307/259305>
- Baptista, J., Stein, M.-K., Klein, S., Watson-Manheim, M. B., & Lee, J. (2020). Digital work and organisational transformation: Emergent digital/human work configurations in modern organisations. *The Journal of Strategic Information Systems*, 29(2), 1–10. <https://doi.org/10.1016/j.jsis.2020.101618>
- Barrett, M., Oborn, E., Orlikowski, W. J., & Yates, J. (2012). Reconfiguring boundary relations: Robotic innovations in pharmacy work. *Organization Science*, 23(5), 1448–1466. <https://doi.org/10.1287/orsc.1100.0639>
- Barrett, M., & Walsham, G. (1999). Electronic trading and work transformation in the London insurance market. *Information Systems Research*, 10(1), 1–22. <https://doi.org/10.1287/isre.10.1.1>
- Becker, J., & Lanzl, J. (2023). Segmentation preference and technostress: Integrators' vs segmenters' experience of technology-induced demands and related spill-over effects. *Information & Management*, 60(5), 1–10. <https://doi.org/10.1016/j.im.2023.103811>
- Benlian, A. (2020). A daily field investigation of technology-driven spillovers from work to home. *MIS Quarterly*, 44(3), 1259–1300. <https://doi.org/10.25300/misq/2020/14911/>
- Berente, N., Lyytinen, K., Yoo, Y., & King, J. L. (2016). Routines as shock absorbers during organizational transformation: Integration, control, and NASA's Enterprise information system. *Organization Science*, 27(3), 551–572. <https://doi.org/10.1287/orsc.2016.1046>
- Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology*, 12, 67–92. <https://doi.org/10.1146/annurev.so.12.080186.000435>
- Bonina, C., Koskinen, K., Eaton, B., & Gawer, A. (2021). Digital platforms for development: Foundations and research agenda. *Information Systems Journal*, 31(6), 869–902. <https://doi.org/10.1111/ij.12326>
- Brünker, F., Marx, J., Mirbabaie, M., & Stieglitz, S. (2023). Proactive digital workplace transformation: Unpacking identity change mechanisms in remote-first organisations. *Journal of Information Technology*, 1–19. <https://doi.org/10.1177/02683962231219516>

- Burton-Jones, A., McLean, E. R., & Monod, E. (2015). Theoretical perspectives in IS research: From variance and process to conceptual latitude and conceptual fit. *European Journal of Information Systems*, 24(6), 664–679. <https://doi.org/10.1057/ejis.2014.31>
- Chamakiotis, P., Symon, G., & Whiting, R. (2024). Agentic interplay between hybridity and liminality in contemporary boundary work. *Information Systems Journal*, 34(1), 261–283. <https://doi.org/10.1111/isj.12477>
- Charmaz, K. (2014). *Constructing grounded theory: A practical guide* (2nd ed.). Sage.
- Denzin, N. (1970). *The research art in sociology*. Butterworth.
- Dubé, L. (2014). Exploring how IT professionals experience role transitions at the end of successful projects. *Journal of Management Information Systems*, 31(1), 17–46. <https://doi.org/10.2753/MIS0742-1222310102>
- Edwards, J. R., & Rothbard, N. P. (2000). Mechanisms linking work and family: Clarifying the relationship between work and family constructs. *The Academy of Management Review*, 25(1), 178–199. <https://doi.org/10.2307/259269>
- Elbanna, A., & Idowu, A. (2022). Crowdfork, digital liminality and the enactment of culturally recognised alternatives to Western precarity: Beyond epistemological terra nullius. *European Journal of Information Systems*, 31(1), 128–144. <https://doi.org/10.1080/0960085X.2021.1981779>
- Gerlach, J. P., & Cenfetelli, R. T. (2022). Overcoming the single-IS paradigm in individual-level IS research. *Information Systems Research*, 33(2), 476–488. <https://doi.org/10.1287/isre.2021.1065>
- Gersch, M., & Wessel, L. (2023). Digital transformation in health care – The role of professional practices. In M. Kipping, T. Kurosawa, & E. Westney (Eds.), *Oxford handbook of industry dynamics*. Oxford University Press.
- Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31. <https://doi.org/10.1177/1094428112452151>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory. Strategies for qualitative research*. Aldine.
- Gong, C., & Ribiere, V. (2021). Developing a unified definition of digital transformation. *Technovation*, 102, 1–17. <https://doi.org/10.1016/j.technovation.2020.102217>
- Grønsund, T., & Aanestad, M. (2020). Augmenting the algorithm: Emerging human-in-the-loop work configurations. *The Journal of Strategic Information Systems*, 29(2), 1–16. <https://doi.org/10.1016/j.jsis.2020.101614>
- Heckathorn, D. D. (1997). Respondent-driven sampling: A new approach to the study of hidden populations*. *Social Problems*, 44(2), 174–199. <https://doi.org/10.2307/3096941>
- Henrich, J. (2023). The Weirdest People in the World - How the West Became Psychologically Peculiar and Particularly Prosperous. <https://weirdpeople.fas.harvard.edu/qa-weird>
- Holeman, I., & Barrett, M. (2017). Insights from an ICT4D initiative in Kenya Kenya's immunization program: Designing for the emergence of sociomaterial practices. *Journal of the Association for Information Systems*, 18(12), 900–930.
- Lauterbach, J., Müller, B., Kahrau, F., & Maedche, A. (2020). Achieving effective use when digitalizing work: The role of representational complexity. *Management Information Systems Quarterly*, 44(3), 1023–1048.
- Lee, A. S., & Baskerville, R. L. (2003). Generalizing generalizability in information systems research. *Information Systems Research*, 14(3), 221–243. <http://www.jstor.org/stable/23015711>
- Lee, A. S., & Baskerville, R. L. (2012). Conceptualizing generalizability: New contributions and a reply. *MIS Quarterly*, 36(3), 749–761. <https://doi.org/10.2307/41703479>
- Mathiassen, L., Jonsson, K., & Holmstrom, J. (2023). Tensions in transfer, translation, and transformation of information: A sociomaterial perspective on heterogeneous work arrangements. *Journal of Information Technology*, 38(3), 232–367. <https://doi.org/10.1177/02683962231164426>
- McGregor, M., Bidwell, N. J., Sarangapani, V., Appavoo, J., & O'Neill, J. (2019). *Talking about Chat at Work in the Global South: An Ethnographic Study of Chat Use in India and Kenya* Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems, Glasgow. <https://doi.org/10.1145/3290605.3300463>
- Meister, J. (2021). *The future of work is employee well-being*. Forbes. <https://www.forbes.com/sites/jeannemeister/2021/08/04/the-future-of-work-is-worker-well-being/>
- Mirbabaie, M., Braun, L. M., & Marx, J. (2022). Knowledge Work 'Unplugged' - Digital Detox Effects on ICT Demands, Job Performance and Satisfaction. 17th International Conference on Wirtschaftsinformatik.
- Morton, J., Wilson, A. D., & Cooke, L. (2020). The digital work of strategists: Using open strategy for organizational transformation. *The Journal of Strategic Information Systems*, 29(2), 1–17. <https://doi.org/10.1016/j.jsis.2020.101613>
- Myers, M. D., & Newman, M. (2007). The qualitative interview in IS research: Examining the craft. *Information and Organization*, 17(1), 2–26. <https://doi.org/10.1016/j.infoandorg.2006.11.001>
- Ollier-Malaterre, A., & Foucreault, A. (2021). When are social network sites connections with coworkers beneficial? The roles of age difference and preferences for segmentation between work and life. *Journal of the Association for Information Systems*, 22(5), 1454–1471.
- Prester, J., Cecez-Kecmanovic, D., & Schlagwein, D. (2023). Toward a theory of identity performing identities in unsettled digital work: The becoming of 'digital nomads'. *Journal of Information Technology*, 38, 442–458. <https://doi.org/10.1177/02683962231196310>

- Rahrovani, Y. (2020). Platform drifting: When work digitalization hijacks its spirit. *The Journal of Strategic Information Systems*, 29(2), 1–26. <https://doi.org/10.1016/j.jsis.2020.101615>
- Ramadani, L., Breidbach, C. F., & Kurnia, S. (2023). Investigating information and communication technology-enabled national development as a multi-level social process. *Information Systems Journal*, 33(1), 130–153. <https://doi.org/10.1111/isj.12381>
- Rossi, M., Nandhakumar, J., & Mattila, M. (2020). Balancing fluid and cemented routines in a digital workplace. *The Journal of Strategic Information Systems*, 29(2), 1–14. <https://doi.org/10.1016/j.jsis.2020.101616>
- Sarker, S., Xiao, X., & Beaulieu, T. (2013). Guest editorial: Qualitative studies in information systems: A critical review and some guiding principles. *MIS Quarterly*, 37(4), iii–xviii. <http://www.jstor.org/stable/43825778>
- Schulze, L., Trenz, M., Cai, Z., & Tan, C.-W. (2022). Algorithmic Unfairness on Digital Labor Platforms: How Algorithmic Management Practices Disadvantage Workers. 43rd International Conference on Information Systems.
- Solomon, M. R., Surprenant, C., Czepiel, J. A., & Gutman, E. G. (1985). A role theory perspective on dyadic interactions: The service encounter. *Journal of Marketing*, 49(1), 99–111. <https://doi.org/10.1177/002224298504900110>
- Struijk, M., Angelopoulos, S., Ou, C. X. J., & Davison, R. M. (2023). Navigating digital transformation through an information quality strategy: Evidence from a military organisation. *Information Systems Journal*, 33(4), 912–952. <https://doi.org/10.1111/isj.12430>
- Suddaby, R. (2010). Editor's comments: Construct clarity in theories of management and organization. *The Academy of Management Review*, 35(3), 346–357. <https://doi.org/10.5465/AMR.2010.51141319>
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative Research Journal*, 11(2), 63–75. <https://doi.org/10.3316/QRJ1102063>
- Tarafdar, M., & Saunders, C. (2022). Remote, mobile, and blue-collar: ICT-enabled job crafting to elevate occupational well-being. *Journal of the Association for Information Systems*, 23(3), 707–749.
- Vaast, E., & Pinsonneault, A. (2021). When digital technologies enable and threaten occupational identity: The delicate balancing act of data scientists. *MIS Quarterly*, 45(3a), 1087–1112.
- Vaast, E., & Pinsonneault, A. (2022). Dealing with the social media Polycontextuality of work. *Information Systems Research*, 33(4), 1428–1451. <https://doi.org/10.1287/isre.2022.1103>
- Vassilakopoulou, P., & Hustad, E. (2023). Bridging digital divides: A literature review and research agenda for information systems research. *Information Systems Frontiers*, 25(3), 955–969. <https://doi.org/10.1007/s10796-020-10096-3>
- Virtaneva, M., Feshchenko, P., Hossain, A., Kariluoto, A., Himmanen, J., Kaitila, P., Kultanen, J., Kemell, K.-K., & Abrahamsson, P. (2021). COVID-19 Remote Work: Body Stress, Self-Efficacy, Teamwork, and Perceived Productivity of Knowledge Workers. 12th Scandinavian Conference on Information Systems.
- Wagner, G., Prester, J., & Paré, G. (2021). Exploring the boundaries and processes of digital platforms for knowledge work: A review of information systems research. *The Journal of Strategic Information Systems*, 30(4), 1–26. <https://doi.org/10.1016/j.jsis.2021.101694>
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429–442. <https://doi.org/10.1080/0960085X.2020.1800417>
- Wang, B., Schlagwein, D., Cecez-Kecmanovic, D., & Cahalane, M. C. (2020). Beyond the factory paradigm: Digital nomadism and the digital future(s) of knowledge work post-COVID-19. *Journal of the Association for Information Systems*, 21(6), 1379–1401. <https://doi.org/10.17705/1jais.00641>
- Welter, F., & Baker, T. (2021). Moving contexts onto new roads: Clues from other disciplines. *Entrepreneurship Theory and Practice*, 45(5), 1154–1175. <https://doi.org/10.1177/1042258720930996>
- Wessel, L., Baiyere, A., Ologeanu-Taddei, R., Cha, J., & Blegind Jensen, T. (2021). Unpacking the difference between digital transformation and IT-enabled organizational transformation. *Journal of the Association for Information Systems*, 22(1), 102–129.
- Yassaee, M., Mettler, T., & Winter, R. (2019). Principles for the design of digital occupational health systems. *Information and Organization*, 29(2), 77–90. <https://doi.org/10.1016/j.infoandorg.2019.04.005>
- Zimmer, M. P., Baiyere, A., & Salmela, H. (2023). Digital workplace transformation: Subtraction logic as deinstitutionalising the taken-for-granted. *The Journal of Strategic Information Systems*, 32(1), 1–20. <https://doi.org/10.1016/j.jsis.2023.101757>

AUTHOR BIOGRAPHIES

Milad Mirbabaie is full professor and chair of Information Systems, esp. AI Engineering in Companies at the University of Bamberg, Germany. Prior to this position, he was junior professor at Paderborn University. Before, he

worked as interim professor for information systems at the University of Bremen and as team leader and post-doctoral researcher at the University of Duisburg-Essen, Germany. He studied Information Systems at the University of Hamburg and received his PhD from the University of Münster, Germany. Professor Mirbabaie has published over 100 articles in the leading information systems journals and conference proceedings, such as *Journal of Information Technology, Business & Information Systems Engineering, ICIS, and ECIS*. His work focuses on artificial intelligence, AI-based systems, socio-technical systems, social media, digital work, and crisis management. In 2017, one of his articles was awarded with the Claudio Ciborra Award at the European Conference on Information Systems for the most innovative research article.

Julian Marx is lecturer for Information Systems at the University of Melbourne, Australia. Prior to this role, he was PhD student and team leader for social data science at the University of Duisburg-Essen, Germany. During his master's program 'Applied Cognitive and Media Science' at the same university, he specialised in digital communication and transformation. His research has been published in outlets such as the *Journal of Information Technology, Information and Management, and Business & Information Systems Engineering*.

How to cite this article: Mirbabaie, M., & Marx, J. (2024). Micro-level dynamics in digital transformation: Understanding work-life role transitions. *Information Systems Journal*, 34(5), 1810–1832. <https://doi.org/10.1111/isj.12514>