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# DIGITAL ONBOARDING OF NEWCOMERS: INSIGHTS FROM AN ORGANIZATION NAVIGATING ONBOARDING CHALLENGES DURING THE COVID-19 PANDEMIC

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# **DIGITAL ONBOARDING OF NEWCOMERS: INSIGHTS FROM AN ORGANIZATION NAVIGATING ONBOARDING CHALLENGES DURING THE COVID-19 PANDEMIC**

*Research paper*

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## **Abstract**

*The rapid transition to remote work necessitated by the mobility restrictions to curb the spread of COVID-19 introduced challenges to the onboarding of new hires for many organizations. Organizations with no prior experience of remote work, had to resort to emergent digital onboarding processes, addressing the problems as they surfaced. This experience has revealed deficiencies in our understanding of digital onboarding processes in both academia and practice. In this paper, we present a qualitative study of an emergent digital onboarding process and newcomer adjustment during the pandemic, within the administrative function of a higher education institution based in the Netherlands. We conducted interviews with 11 newcomers and peers working at the organization during the period of restrictions. Our findings suggest four dimensions that impact newcomer adjustment: 1) relationship building, 2) responsibility and accountability of newcomer adjustment, 3) managing wellbeing and the sense of belonging, and 4) information seeking. Our study advances the discussion on digital onboarding revealing the effects of unplanned transition on newcomers and describing approaches newcomers used to adjust to the new work environment.*

*Keywords: Remote work, newcomer adjustment, onboarding, virtual teams, COVID-19.*

## 1 Introduction

A crucial component of a healthy work environment is the successful onboarding of newcomers. Yet, this component is often missing from the general remote work discourse. Newcomers need greater engagement with their work environment in the beginning, as they seek job-related information and establish relationships with their new colleagues (Bauer and Green, 1998; Allen *et al.*, 2017). However, the remote work environment forces newcomers to engage with the new workplace predominantly through digital tools. This puts an additional burden on newcomers, as they need to put extra effort to meet people and ask for help (Bhakta and Medina, 2021). Such a burden can increase the likelihood of a failed onboarding process and newcomer maladjustment (Ahuja and Galvin, 2003; Asatiani *et al.*, 2021). In turn, employees that are not properly socialized and adjusted to the new work environment may feel isolated, leading to lower productivity and job satisfaction, as well as, higher turnover intentions (Golden, Veiga and Dino, 2008).

The restrictions to mobility, associated with the COVID-19 pandemic, introduced in early 2020, have brought remote work into the mainstream (O’Leary *et al.*, 2020). This has caught many organizations and their employees off-guard. For a significant share of employees working remotely was a new experience, even in the EU, which is generally thought to have a highly developed digital economy (Milasi, González-Vázquez and Fernández-Macias, 2020; Eurostat, 2021). Video conferencing and online collaboration tools allowed organizations to quickly readjust their knowledge work to be performed remotely (He, Zhang and Li, 2021). However, as workers stayed home longer, issues of personal well-being, morale, engagement, and retention started to emerge (Parry *et al.* 2021). Newcomers, hired during the pandemic, were especially affected as they felt isolated and disengaged from their work (Sani *et al.*, 2022).

Although existing research has offered guidance on improving the onboarding process and newcomer adjustment (e.g., Bauer and Erdogan, 2011; Meyer and Bartels, 2017; Caldwell and Peters, 2018), it is predominantly focused on *traditional*, collocated, working environments. The extent and duration of the COVID-19 restrictions forced many organizations, with no experience or established practices for digital onboarding, to hire and onboard new employees without an option for meaningful face-to-face interaction at the early stages of employment (Sani *et al.*, 2022). This pushed organizations to resort to ad hoc, reactive approaches to digital onboarding. A disorganized approach to digital onboarding led to a notable decrease in the wellbeing of newcomers (Sani *et al.*, 2022; Scott *et al.*, 2022). To shed light on the challenges of emergent digital onboarding, and approaches to tackle these challenges, we pose the following research questions:

*RQ 1: How do newcomers and peers contend with the emergent digital onboarding process?*

*RQ 2: What are the approaches to navigating the digital onboarding process?*

To respond to these questions, we conducted a qualitative study in a Dutch higher education institution (HEI) that had to rapidly transition to digital onboarding and work during the pandemic. We specifically focus on employees working within the administrative function of the institution, which had very little experience with remote work prior to the pandemic. The rest of the paper is organized as follows. First, we offer a brief overview of onboarding and newcomer adjustment, as well as the challenges that remote work presents to these processes. Next, we explain the qualitative approach used in this study and describe our data collection and analysis procedures. We then present our findings and discuss the implications of our research. Finally, we present limitations and potential paths for future research.

## 2 Background

Onboarding, and the closely related concept of organizational socialization, describe the process of helping new employees to adjust to the social, cultural, and performance aspects of their jobs (Van Maanen and Schein, 1979; Bauer, 2010). The onboarding process involves socialization among exist-

ing employees and newcomers to exchange tacit and explicit knowledge required for becoming a productive and effective member of the organization (Ahuja and Galvin, 2003; Bauer and Erdogan, 2011). In practice, effective socialization includes information sharing through elaborate mentorship, training, and bonding activities, as well as regular day-to-day interactions with colleagues (Oshri, Kotlarsky and Willcocks, 2007; Bauer and Erdogan, 2011). While onboarding aims to transfer practical knowledge to newcomers about the organization, their team, and their job, a large part of the process is devoted to the inculcation of cultural norms and tacit assumptions (Klein and Heuser, 2008). Therefore, onboarding should not be thought of as a simple process of information transfer.

The goal of successful onboarding is to achieve newcomer adjustment to the new work environment. As the workforce has become more and more mobile, a swift newcomer adjustment has become increasingly important to employee productivity and wellbeing (Bauer *et al.*, 2007). In line with the aims of onboarding, the success of newcomer adjustment is evaluated on the newcomer's role clarity, self-efficacy, and the feeling of social acceptance (Feldman, 1981; Bauer and Green, 1998; Ellis *et al.*, 2017).

The precise approaches to the onboarding process vary by the organization from formal and systematic to informal "sink or swim" strategies (Bauer, 2010), in which new hires often struggle with understanding their new workplace and figuring out what is expected. Earlier research suggests that when done right formal onboarding process tends to be more effective in achieving a fast newcomer adjustment (Bauer *et al.*, 2007). However, in either scenario, the newcomers are expected to actively engage with their new work environment and interact with their peers and superiors. While HR departments and managers play a significant role in contributing to successful socialization, employees must also facilitate their own onboarding by building relationships actively and integrating into the culture (Bauer, 2010; Ellis *et al.*, 2017). Newcomers often strive to reduce uncertainty surrounding their new job and make their work more predictable and controllable (Saks and Ashforth, 1997). To achieve this, newcomers engage in establishing interpersonal relationships with more experienced peers (Allen *et al.*, 2017; Zhou *et al.*, 2022), and information seeking (Bauer and Green, 1998; De Vos and Freese, 2011) at the early stages of their employment. These activities help newcomers to both gain explicit knowledge and make sense of their new work environment.

Remote work introduces additional complexity to the onboarding process. Remote work organizations tend to be less culturally homogenous (Duarte and Snyder, 2006), meaning that achieving a shared understanding of underlying assumptions requires additional effort (Asatiani *et al.*, 2021). More importantly, onboarding and successful newcomer adjustment often hinge on the extensive face-to-face interactions between newcomers and peers. Remote work reduces the opportunities for such interactions, making communication of finer details harder, and disrupting the socialization process (Ahuja and Galvin, 2003). Remote and hybrid organizations often address this issue by getting newcomers to first integrate with their new work environment in a collocated setting, with regular face-to-face meetings, and increase the share of time spent working remotely only after the newcomer has adjusted (Crowston *et al.*, 2015; Asatiani and Penttinen, 2019). Such organizations are also advised to set more specific objectives and bring more role clarity for newcomers in order to reduce the uncertainty (Kniffin *et al.*, 2021), in essence, increasing the rigidity of the onboarding process (Asatiani and Penttinen, 2019).

It remains challenging to achieve a successful newcomer adjustment in predominantly remote work environments, where face-to-face meetings are not an option. Digital onboarding is a practice that attempts to create virtual experiences for newcomers to socialize and adjust (Sani *et al.*, 2022). As a part of digital onboarding organizations may resort to socialization substitutes to compensate for the absence of face-to-face interaction (Goodman and Wilson, 2000; Oshri, Kotlarsky and Willcocks, 2007). Socialization substitutes can take two forms. First, an organization could deploy structural changes to the work process that reduce interdependence and the need for interaction (Goodman and Wilson, 2000). Second, organizations can resort to creating information artefacts designed to transfer knowledge and skills required for the job to newcomers, satisfy information seeking, and minimize the need for interpersonal interaction. Yet, such substitutes may have limited utility in the context of high-

er interdependence requirements or fast-evolving large teams (Oshri, Kotlarsky and Willcocks, 2007; Asatiani *et al.*, 2021).

The COVID-19 pandemic has presented a challenge of remote newcomer onboarding to many organizations that had to switch to a fully remote work model overnight (O’Leary *et al.*, 2020). So far, very few studies have been conducted on digital onboarding during the pandemic. Rodeghero *et al.* (2021) studied the onboarding process of software developers at Microsoft. The authors concluded that promoting proactive communication, emphasizing team building, and introducing an ‘onboarding buddy’ contributed to positive outcomes of digital onboarding. Other studies also emphasized the importance of communication to reassure newcomers and increase trust between newcomers and the organization (Goodermote, 2020; Carlos and Muralles, 2022). However, neither of these studies offers a deeper insight into the emergent process of onboarding. While the pandemic could be discounted as an extreme case, fully remote work environments have become increasingly prevalent already before (O’Leary *et al.*, 2020; Asatiani *et al.*, 2021). Therefore, investigating digital onboarding, in remote work environments is highly relevant.

### **3 Method**

We carried out a case study in a HEI based in the Netherlands (hereafter called “UNI”). We specifically focused on the employees working in the administration, thus excluding teaching and research staff. Prior to the COVID-19 pandemic, administration employees of UNI worked exclusively in physical offices, with the onboarding process of newcomers taking place on premises. There were no existing procedures, policies, or practical experience in digital onboarding. However, digital onboarding was introduced as an emergency measure, after the Netherlands introduced mobility and social distancing restrictions to curb the spread of the COVID-19 virus in the Spring of 2020. As a result, the digital onboarding process has emerged through the practice out of necessity, rather than being a result of a planned and systematic action. Such a drastic transition made UNI an attractive case to study emerging digital onboarding and newcomer adjustment in remote work environments.

#### **3.1 Data collection**

We conducted eleven semi-structured interviews. We chose the semi-structured interview approach as it allowed us to dive into the employees’ individual experiences by asking specific open-ended questions, while also maintaining structure and giving space for additional clarification (Newcomer, Hatry and Wholey, 2015). The onboarding process involves two groups: newcomers and existing employees or peers. Therefore, we decided to include both groups in our interview sample to get a complete picture of the process. There were no exclusion criteria pertaining to a specific position within the administration, age, or experience of the informants. The informant sample was homogenous in terms of gender, with all informants being female. However, this was representative of the gender composition among the administration staff of UNI. There are two possible reasons for this composition. First, the city where UNI is located has a majority female population. Gender balance is even more skewed toward females in the 18-35 age group, to which most of the administration staff belongs to. Second, historically, the administration staff at UNI has been predominantly female. Table 1 provides an overview of the informants. We gained the access to the case organization, by using existing links to the organization (Shenton and Hayter, 2004). The first author had a past professional connection within UNI at the time of data collection, which allowed us to access the initial set of informants. We then used snowballing approach to recruit additional informants.

We developed and followed an interview guide that covered newcomer adjustment and digital onboarding experiences, focusing on open questions to encourage informants to answer openly and honestly, without suggesting pre-determined answers (Bryman, 2016). We created a version of the guide for each informant group (newcomers and peers). Following the semi-structured approach, we extensively used follow-up questions to adapt the interview guide to each informant. Two short pilot interviews have been conducted at the beginning of the data collection period, to further refine the interview guide and to test the clarity of the interview questions and sequence. Accordingly, some minor

adjustments were made in the interview guide. The pilot interviews gave some important insight to enhance the quality of the interviews and helped us to formulate additional follow-up questions.

Informant	Status	Age	Gender	Position
P1	Newcomer	25-34	F	Admissions Officer
P2	Peer	35-44	F	Policymaker, Educational Affairs
P3	Peer	55-64	F	Policymaker, Student Exchange
P4	Peer	25-34	F	Student Exchange Coordinator
P5	Peer	35-44	F	Student Exchange Coordinator
P6	Newcomer	25-34	F	Assistant
P7	Newcomer	25-34	F	Project Leader, Student Affairs
P8	Newcomer	25-34	F	Policymaker, Student Affairs
P9	Newcomer	45-54	F	Study Advisor
P10	Newcomer	18-24	F	Student Desk Officer
P11	Peer	45-54	F	Policymaker, Internationalisation

Table 1. Informant profiles

The interviews were conducted via Microsoft Teams during Spring 2022. The first author conducted all interviews. The interviewer paid special attention to creating a comfortable interview setting (Kvale, 2007; Myers and Newman, 2007) by focusing on a relaxing, informal, and trusting atmosphere from the beginning of the interview. All informants were informed beforehand about the topic and the maximum duration of the interview. The invitation for an online Teams meeting included a consent form for the informants to sign, as well as information about confidentiality, anonymity, and voluntary participation. All interviews were recorded and transcribed for further analysis. The informants were informed prior to the interview that the interview will be recorded for research purposes. Informants were assured that the recordings will be stored only until the transcription and analysis had been completed (Treadwell and Davis, 2019).

### 3.2 Data analysis

We followed a thematic analysis approach (Braun and Clarke, 2006) and a three-stage coding based on Gioia, Corley and Hamilton (2013) data structure model. The analysis started by listening and transcribing interviews. All transcriptions were made between 24 and 72 hours after the interview. This allowed us to adjust the interview guide between interviews. We were able to constantly move between a specific interview and the larger context of our data (Klein and Myers, 1999) to determine the need for further interviews.

We then proceeded with open coding (Belgrave and Seide, 2019), staying faithful to the informant terms and not focusing too much on making themes and categories (Corley and Gioia, 2004; Gioia, Corley and Hamilton, 2013). Over 250, first-order concepts emerged from the eleven interviews. In the next stage, we create second-order themes, by observing differences and similarities between the first-order concepts, categorize them into themes, and label the themes. This process eventually led to fifteen second-order themes. We reviewed the themes from the prism of theoretical foundations for the study. Particular attention was given to concepts that did not seem to be that important or that are not referred to the existing literature, to ensure no findings were left out. Finally, we clustered the themes into aggregate dimensions as suggested by Gioia, Corley and Hamilton (2013). This resulted in four aggregate dimensions. The appendix presents the abridged version of the data structure table.

## 4 Findings

Four aggregate dimensions emerged from the data analysis. Each aggregate dimension has several sub-themes, that address the most prominent issues of how digital onboarding affects newcomer ad-

justment and how communication with peers influences the onboarding process and social integration of newcomers. Table 2 shows the summary of the aggregate dimensions and corresponding sub-themes.

Aggregate dimensions	Relationship building (RB), social integration and bonding	Responsibility and accountability for newcomer adjustment	Managing emotional wellbeing and sense of belonging	Information seeking
Sub-themes	RB through online humour	Role of a manager	Sense of community	Communication tools
	RB through shared experiences	Role of a team	Feeling isolated & excluded	
	RB through online meetings	Role of a buddy	Welcome arrangements	New means and methods
	RB through physical meetings	Role of a newcomer	Feeling part of the team	

Table 2. Summary of the aggregate dimensions and corresponding sub-themes.

#### 4.1 Relationship building, social integration, and bonding

The first dimension is concerned with relationship building, social integration, and bonding. One of the key challenges for both peers and newcomers was to build genuine personal relationships and a feeling of collegiality, without meeting others in person. Informants argued that within the onboarding process, relationship building, online or offline, positively impacted the onboarding and social integration process. Newcomers claimed that building a personal connection with their peers helped them integrate into their new workplace. One informant explained this as *“The informal part, and being able to talk about other things, and not just about work, being able to laugh with each other, but also really being able to ask questions work-related”* (P8). However, the aspects of not starting physically in the office as a newcomer, generated a feeling of limited possibilities for such a relationship building: *“I was starting, and I remember like, at Monday morning at 9 o'clock, and I was like, okay, so what should I do now? Like, I have no idea”* (P8). Onboarding remotely forced newcomers, and peers, to find new ways of engagement through online tools. P2 mentioned setting up a new kind of online meeting to socialize: *“So I have been a part of these meetings where we had, like these informal [online] meetings, I think they were called even informal meetings. Two of them... actually, one, would be at the beginning of the week. And that would be just as like a starting of the week kind of thing where you could discuss work, but also not work-related. So, it'll be about what you did the week before. But it will also be something that you're working on”* (P2). However, informants suggested that the online meetings are just compensation for the lack of physical meetings: *“We've had the kind of social where we would do like, you know, kind of like a pub quiz or have like a drink with colleagues online. And it works to some extent, I guess it's better than nothing”* (P5).

Furthermore, digital onboarding often resulted in peers not feeling the need to connect to newcomers, mostly because their work tended to not overlap. P3 describes the way of looking at a newcomer: *“I think, the closer they are in connection to work, content-wise, the easier it is because you have a lot more informal meetings or also formal meetings with the ones that are working closely to you but the further away, [...] I don't think I have had the need to meet them (online) because the work is not related. Maybe it could be related but it never came up since they started”* (P3).

Our data suggest several approaches to how newcomers and peers tried to build a relationship with each other during the onboarding period and how these positively or negatively impacted social integration. Relationship building through humour proved to be a successful strategy amongst the informants. As a result, online humour was used in digital onboarding to integrate socially with team members. P8 mention an example of the use of GIFs in group chats: *“I think it really helped that the study desk here has a chat, where like, everybody's inside the chat, and they do not only talk about work, but they also like make jokes or when they see an email or something or some somebody says something*

*funny, you know, [...] A lot of GIFs are sent as well, so I think it's like very informal and yeah, like you can also talk about other things and work so I think that's really helped to socially integrate* (P8).

Due to the COVID-19 restrictions, physical meetings were hardly possible during the onboarding, however, in some exceptional cases, informal physical meetings were organized to stimulate the relationship building of the newcomers and their peers. While these were extremely rare and limited to small subsets of people, such meetings clearly highlighted the advantage of physical interactions over virtual ones during onboarding. P6 describes the positive outcome of such a physical meeting: *"I think I was lucky that in my second week, there was a physical meeting in a garden of our team member, so I could meet the team. And I, for me, that was like the best thing, because then I could see them and really connect with them. So then afterwards, also, it's easier to have more like formal conversations about work, because then you know how someone is"* (P6).

Most informants argued that physical meetings were indispensable and that the few physical meetings that were organized during digital onboarding times, were the most useful in terms of relationship building and social integration. P11 describes the first time she really felt part of her team: *"We went on a walk and had to do like a treasure hunt, that sort of stuff. And it was really about team bonding on that day. And yeah, I remember that being the first point in time that I really thought to myself, okay, well, this is my team. These are my people"* (P10).

Lastly, findings showed how sharing experiences contributed towards relationship building. The following quote explains: *"I think we cried all so much during those online meetings because I think a lot of us felt that way [not feeling part of the team], even, the ones that were part of the sub-teams"* (P7). Relationship building through shared experiences was also visible when a newcomer that started completely remotely, later became closer to three other newcomers. P10 describes the feeling of being able to help newcomers out: *"A couple of months after I started, three other people started working in my team. So, we were like, the newbies group. And I do remember us meeting up quite frequently and just chatting about everything, about nonsense. So, it was really nice having that group of new people that are all a little bit insecure about their new job. But it was really nice to just share that experience with each other"* (P10).

In conclusion, we identified four techniques of relationship building for newcomers: humour, online and offline meetings and shared experiences. Informants seem to be flexible when it comes to social integration and different tools for relationship building have been found such as the use of GIFs, different online communication tools and being open about experiences in the onboarding period, including negative ones.

## 4.2 Responsibility and accountability of newcomer adjustment

Different groups within an organization have an impact on newcomer adjustment. Informants identified four groups: a manager, a team, a *buddy*, and a newcomer. The key challenge here was to define the responsibilities of each group and ensure that the expectations of each side were met. Some informants argued that the responsibility and accountability are divided amongst all stakeholders, as P9 states: *"The team has to be cohesive; the manager has to be proactive and have personal skills and understand where someone's coming from. And you have to go outside your comfort zone. And dare to be vulnerable sometimes"* (P9). However, informants also experienced that there were times, during the period of digital onboarding, when no one felt responsible for the newcomer, as this was not clearly stated before the newcomer had started. *"There should be someone responsible, but if no one feels responsible, the bigger the team gets, the less responsibility you feel. So, then I would, I would like to have these guidelines that someone says, okay, now you are the responsible one"* (P4).

### 4.2.1 Role of a manager

When discussing the role of a manager, our informants focused on the hiring manager of the newcomer. It is expected that the role of a manager in the onboarding process is clear, however, that is not always the case, as expressed by P6: *"I think it's really important in online working, that the manager is*



aware of how everyone is, including him- or herself, in the team. [...] Especially in the beginning, the team manager should say to a team like 'Hey, make sure that in the first week, you plan on my meeting to get to know each other.'" The lack of presence of the manager in the digital onboarding process was especially noticeable in bigger teams: "As soon as the team is bigger than several people, then you [the newcomer] don't know whom to reach out to, especially when these people do similar jobs. [...] I was talking about these guidelines earlier that I would like to receive on how to make sure a newcomer would feel welcome" (P6).

Another aspect of the responsibility of a manager in the onboarding process is an open communication policy between the manager and the newcomer, which is illustrated in the following quote: "I think it's the team leader's responsibility to make sure that the new colleague has all the information and all the tools to get started. And to keep in touch with a new colleague: is he doing all right? Can he or she find the way? [...] as a team leader, you have to be alert and make sure you have an open communication that the new colleague feels that there is room to ask for help" (P11).

#### 4.2.2 Role of a team

The role of a team during the newcomer adjustment period was also discussed by informants. One important aspect that was mentioned repeatedly was the need for team cohesion. Several informants seemed to struggle with figuring out what the role of the team was within the onboarding process. P4 explained that she felt disconnected from the onboarding of her new colleague: "When remote working started, I would not say I would feel very connected. That had to do with, in my head, I don't feel responsible for the new colleagues, which I think is a bad thing that happened. But that is the truth. So, if I on professional level, I don't have to work with this person, it does already feel a bit more far away from me" (P4). One informant offered a potential explanation for such a feeling. According to her in the remote setting, people rely on the person that works the most with the newcomer to ensure the newcomer is socially integrated: "I guess you kind of figure that the person who will be working with them closest, like most, most time would feel responsible for that. But that's not always the case. [...] Sometimes I think we assume maybe too much that someone else might do it. We could have maybe we could have done more" (P5). It is notable that some newcomers felt the role of the team was not clear and well understood. This is illustrated by P6: "I felt like definitely not everyone took the time to actually know, chat for a bit and make me feel at home or helped me out" (P6).

#### 4.2.3 Role of a buddy

Another important actor in the onboarding process is what some of our informants referred to as a *buddy* - a peer formally assigned to a newcomer to help them adjust. A buddy may also be an online guide but seems to also be the peer with whom the newcomer communicates the most in the beginning, as exemplified by the following quote "I got buddied up with one of my colleagues who guided me through the first couple of days or weeks maybe. So, I spoke with her quite regularly and she was kind of like my contact person within the team" (P10). However, not all units had such a system, causing concern among the peers: "Somebody should probably be given like a mentor, or you know, or have a buddy or whatever you want to call it would be much better. Because sometimes you figure like someone else is going to do it. And none of the colleagues might reach out so then that person might be really lonely, and you wouldn't even know" (P5).

#### 4.2.4 Role of a newcomer

Regarding the role of the newcomer in their onboarding process, informants' views were diverse. Some informants mentioned that they did not feel responsible for the newcomer and that the initiative of onboarding belong to the newcomers themselves. This is exemplified by the following quote: "If I look at these [new] colleagues, it was always that we asked them to take that initiative, and not me as a part of the bigger team because I did not really feel responsible for them" (P4). On the other hand, P5 was very clear about the role of a newcomer in terms of onboarding: "I think it's a bit much to ask from someone who's new to actually be able to pinpoint that I think someone who was just starting in

*a new job would probably kind of just take what is offered? [...] I don't think it [social integration] is the responsibility of the person who's starting the job."*

However, some of the informants that experienced digital onboarding, felt that onboarding successfully was ultimately their own responsibility: *"And I felt like, it was also maybe my own responsibility to like, kind of get out there and connect, but couldn't really do that"* (P7).

To sum up, the second dimension the data suggests is that we can look at four different actors within the digital onboarding process. All four actors have some degree of responsibility, but it is often unclear who is responsible for what without some pre-agreed and written policies on the digital onboarding process. In a face-to-face setting these responsibilities often emerged naturally as newcomers interacted with their new colleagues and superiors. As a result, the actors did not feel the responsibility as explicitly in the traditional onboarding process, compared to the digital onboarding process.

### 4.3 Managing emotional wellbeing and sense of belonging

The third dimension that emerged was related to emotional wellbeing and the sense of belonging. Newcomers had to tackle feelings of not being a part of the community, of being excluded and isolated due to the digital onboarding. Stress because of digital onboarding was actively illustrated by several informants. P1 explains *"I felt like I just spent the first month, just kind of like swimming in the ocean of the institution"*.

It is also noteworthy that some informants did not feel welcomed, and therefore a sense of community was lacking: *"But I wasn't even given like a laptop to start from the university"* (P1), and *"No, I didn't get any information about the institution, the team or the team members"* (P6). It was remarkable, that also the peers felt that these newcomers may have difficulties related to wellbeing. P4 illustrates that newcomers could feel lost when onboarding remotely: *"But if they struggle, there is not a person who will see them daily, because you work from home. And I can imagine that for some people, that is a big struggle that you would feel a bit lost"* (P4).

Our data had examples of creating and maintaining a sense of community within the organization. These examples were quite diverse, depending on the use of informal group chats, for example: *"I think the group chat is really, really helped like for community feeling while also for asking questions"* (P8). Others highlighted special arrangements organized by their manager: *"My manager had a welcoming package sent to my parents' place"* (P8), and *"I met them at the office and brought a big bunch of flowers to welcome them"* (P11).

The findings show that in digital onboarding, managing the new hires' emotional wellbeing is important, to give them the feeling that they belong to their new team and organization. The findings also show that this is handled very differently per team.

### 4.4 Information seeking

The last dimension that emerged from the collected data is focused on which communication tools were used by the informants and what new means and methods were discovered in this new way of working. Communication tools that were used during digital onboarding included: Microsoft Teams channels; group chats, messaging apps (e.g., WhatsApp), screen sharing etc. P4 elaborates on using their Teams group channel as an information source for newcomers: *"We've got a team channel together. What I do see is that some people reach out to each other with some general questions like, input, can someone help me out with this? I think that is a good thing. So, to reach out to the entire team, it's easier than to just find that one person"* (P4).

Furthermore, informants also included new means and methods for future working, where hybrid onboarding with fixed office days or fixed daily meetings were emphasized. P7 suggests: *"I think something like of a morning start like calling in at like 9 or something 9:30 to just check in with each other like, oh, how are you doing?"* On another note, informants mentioned the lack of etiquette in online meetings. This is exemplified in a statement made by P9, and therefore suggests a protocol for

online meetings: “think there should be a sort of protocol of behaviour that people should be aware of” (P10).

In terms of information seeking different online communication tools are used. Looking into the future work environments, protocols and fixed daily online meetings and fixed physical meetings days are desired.

## 5 Discussion

Our study contributes toward a deeper understanding of the digital onboarding process and newcomer adjustment. Our research setting offered a unique opportunity to observe an emergent digital onboarding process, necessitated by *force majeure*. Our findings allowed us to elaborate on four dimensions that impact and shape the digital onboarding process. Two of the dimensions focus on newcomer behaviour, including relationship building and information seeking. The remaining two encompass the role of various stakeholders in integrating the newcomers and ensuring their wellbeing. These findings provide a starting point for future theory-building for newcomer adjustment in remote work environments: a phenomenon that is gaining greater importance as workplaces become increasingly distributed and dependent on digital tools.

In this study, we aimed to answer two research questions: (1) *How do newcomers and peers contend with the emergent digital onboarding process?* and (2) *What are the approaches to navigating the digital onboarding process?* Below we address the two research questions.

In accordance with earlier research, newcomers and peers working in an organization with no prior remote work experience, found the lack of face-to-face contact severely limiting the onboarding process. Newcomers found it hard to navigate processes within their new organization (Ahuja and Galvin, 2003; Asatiani *et al.*, 2021). This was particularly noticeable in teams where line managers were not proactive in providing explicit information and arranging workarounds to regular processes hampered by mobility restrictions (e.g., receiving a work laptop). On the other hand, peers not directly engaged with newcomers through the overlapping tasks, found themselves disconnected from the newcomers. The additional effort to reach out to such newcomers, without established structures and guidelines to do so, was perceived as a burden. In cases, where such dysfunctions were not mitigated, newcomers appeared to be more likely to feel isolated socially and professionally, leading to dissatisfaction with work and decreased wellbeing. Such an impact on one’s wellbeing is consistent with findings on remote workers experiencing isolation from their colleagues and managers (Mann and Holdsworth, 2003; Bartel, Wrzesniewski and Wiesenfeld, 2012).

Many of these problems seemed to stem from the lack of clearly delineated responsibilities of various actors in the onboarding process. Initially, both newcomers and peers relied on the informal onboarding process that was in place before the pandemic, where newcomers would “naturally” socialize and integrate with their teams. However, remote work arrangements have reduced the opportunity for spontaneous interactions that fuel the natural socialization process. On the other hand, restrictions have halted formal components of onboarding, such as the first-day and first-week administrative formalities and events. While these components were not typically perceived as crucial for the onboarding process before, as newcomers gained a large portion of essential knowledge through natural interaction with peers, the absence of these components left remote newcomers with no essential knowledge required to perform their work and socialize.

On the flip side, most of the informants in our study opted for developing new practices and socialization substitutes (Oshri, Kotlarsky and Willcocks, 2007) to alleviate the problems brought by remote work in a decentralized manner. Some teams relied on peers working closely with newcomers to engage them, while others have introduced a more formal role of a buddy, a practice similar to one observed by Rodeghero *et al.* (2021) at Microsoft during the pandemic. Peers introduced informal conversation channels for socialization (e.g., in Microsoft Teams), and organized regular non-work events (e.g., remote pub quizzes) designed for team building. In addition, to the non-work-themed channels,

some teams created various thematic channels to satisfy newcomers' information-seeking behaviour. These channels allowed newcomers to get a fast response to work-related questions from more experienced peers. The public nature of these channels meant that newcomers could openly ask a question, without needing to first consider, who the *right* person was for the question.

Employee teams also introduced more regular formal *stand-up* online meetings where everyone could share their work progress for the previous week. These meetings helped to grow awareness of what the job of each peer and newcomer was. While these meetings were not as effective for social interaction, they presented an opportunity to find peers that performed relevant tasks, but who were not working directly with the specific person.

Over 2020-2021 the newcomers and peers had no opportunities to meet physically, due to the COVID-19 restrictions in the Netherlands. Yet, in the rare occasions of loosened restrictions, some teams organized informal outdoor meetings with small groups, that allowed newcomers to meet face-to-face. Predictably, these meetings had a significant positive impact (Crowston *et al.*, 2015; Asatiani and Penttinen, 2019). Meaning that, if possible, the occasional face-to-face meetings remain a highly effective tool for organizational socialization.

## 5.1 Reflections for practitioners

Practitioners can draw inspiration from our findings to inform their digital onboarding strategies. Our findings offer two main insights to practitioners. The first highlights the importance of explicating digital onboarding responsibilities to all involved actors. The second discusses the importance of organic, informal communication channels for socialization.

First, onboarding is a two-way street that requires action from both newcomers and the organization. Our findings offer insight into the actors involved in the process and their roles. There are four actors to keep in mind: line managers of newcomers, members of the newcomer's team, designated onboarding buddies, and newcomers themselves. However, for these actors to fulfil their part in the onboarding process, their roles must be clear to all parties. We noticed that in UNI's emergent process, actors had mismatched expectations and confusion regarding their roles and responsibilities. This was especially noticeable in relation to the actors that did not have a direct work overlap with the newcomers. In a collocated work environment, newcomers engage organically with such actors, by serendipity. In the remote setting, however, peers need to be specifically informed about their role in the onboarding, even if they do not directly work on shared tasks together with the newcomer. Otherwise, newcomers may find themselves socially isolated, and perceive the workplace as a venue for a purely transactional affair. This can negatively impact their wellbeing.

We observed that in teams that introduced a practice of a buddy – a primary guide for newcomers – newcomers had more positive experiences of onboarding. A buddy who is knowledgeable of the organization and is willing to help newcomers settle can accelerate the integration of newcomers. The buddies do not need to work directly with newcomers, and they should preferably be at the same seniority level, to make them more approachable. However, as with other actors, expectations of a buddy need to be made clear to both the buddy and the newcomer. Moreover, the workload of a potential buddy needs to be considered, as the peer already overloaded with work, is less likely to productively engage with the newcomer.

Finally, newcomers themselves need to be made aware of their responsibilities in the onboarding process. While some newcomers in our sample felt a lot of responsibility for their socialization, others were lost and isolated. This feeling was sometimes mirrored in managers, who had varying expectations of newcomer responsibilities. Again here, matching the expectations of all parties is key. As remote work environments lack indirect cues and informal communication, these expectations need to be made very explicit.

Second, our findings unearthed the importance of facilitating informal communication among newcomers and peers in a remote work environment. Teams that set up chatrooms for informal communication and non-work-related online meetings and events, made newcomers feel more socially integrat-

ed and satisfied with their work. A challenge is that while formal interactions directly related to the job tend to be organized, informal interactions are harder to create. The more successful examples in our study came from *organic* informal interaction practices, such as sharing funny GIFs and internet memes among colleagues. In contrast, top-down instituted informal communication channels might be perceived as *mandatory fun* and could create a conflict between work and non-work communication. It is also important to note that initiating such interaction is likely to be very difficult for newcomers. Therefore, peers need to take the action. Organizations should encourage establishing informal communication channels, by, for example, making it clear that it is permitted to use work communication tools for such an endeavour. Newcomers should be informed about and engaged in such channels early on, by their teams or buddies.

## 5.2 Limitations and future research

As with all research, our study is not without its limitations. First, we only studied a single organization operating in exceptional circumstances. While this gave us an opportunity to study an extreme case, to reveal how newcomers and peers adapt to an emergent onboarding process, we recognize that our findings may be influenced by the context. It is also important to note that our informant sample was rather homogeneous, due to the specifics of their workplace and occupation. Therefore, we call for future studies of the digital onboarding process in a broader set of organizations, with a more diverse body of employees, and job descriptions. The future research could also investigate the impact of each dimension of digital onboarding in greater depth.

Related to the first, the second limitation lies in studying the organization during the global pandemic. The restrictions brought by the COVID-19 pandemic drew a lot of attention to remote work and pushed a lot of organizations to switch to this mode of work. Yet, it remains to be seen what lessons from the pandemic will be applicable to post-pandemic workplaces, where, for example, face-to-face meetings are a viable means to reinforce the socialization process. Nevertheless, our research has highlighted both the need for and the lack of research on digital onboarding and newcomer adjustment. A trend toward more distributed and hybrid organizations started long before the pandemic. The events of the last two years have only accelerated it. Thus, we believe that digital onboarding will become increasingly relevant. Future research may investigate the roles of different actors within the digital onboarding process, and their impact on newcomer adjustment.

## 6 Conclusion

The COVID-19 pandemic forced a large part of our society to adopt remote working practices. The sudden nature of the pandemic and associated restrictions left little time to plan a transition to the new normal. As a result, many organizations, with no prior experience with remote work, had to learn how to conduct their work in a new environment. One of the more challenging processes for organizations to perform remotely is newcomer onboarding. In this paper, we presented a study of an emergent digital onboarding process at an administrative unit of a Dutch higher education institution. The study suggests four dimensions that impact newcomer adjustment in the remote work environment: 1) relationship building, 2) responsibility and accountability of newcomer adjustment, 3) managing wellbeing and the sense of belonging, and 4) information seeking. Our findings also revealed approaches to dealing with challenges that emerged during the pandemic, which helped the newcomers adjust better. We highlight that the digital onboarding process remains understudied, and we argue that, in light of the reinvigorated interest in remote work, we need better theories and a deeper understanding of this process.

## References

- Ahuja, M.K. and Galvin, J.E. (2003) 'Socialization in virtual groups', *Journal of Management*, 29(2), pp. 161–185. Available at: [https://doi.org/10.1016/S0149-2063\(02\)00213-1](https://doi.org/10.1016/S0149-2063(02)00213-1).

- Allen, T.D., Eby, L.T., Chao, G.T. and Bauer, T.N. (2017) 'Taking stock of two relational aspects of organizational life: Tracing the history and shaping the future of socialization and mentoring research.', *Journal of Applied Psychology*, 102(3), p. 324.
- Asatiani, A., Hämäläinen, J., Penttinen, E. and Rossi, M. (2021) 'Constructing continuity across the organisational culture boundary in a highly virtual work environment', *Information Systems Journal*, 31(1), pp. 62–93.
- Asatiani, A. and Penttinen, E. (2019) 'Constructing continuities in virtual work environments: A multiple case study of two firms with differing degrees of virtuality', *Information Systems Journal*, 29(2), pp. 484–513.
- Bartel, C. a., Wrzesniewski, A. and Wiesenfeld, B.M. (2012) 'Knowing Where You Stand: Physical Isolation, Perceived Respect, and Organizational Identification Among Virtual Employees', *Organization Science*, 23(3), pp. 743–757.
- Bauer, T.N. (2010) *Onboarding New Employees: Maximizing success*. SHRM Foundation.
- Bauer, T.N., Bodner, T., Erdogan, B., Truxillo, D.M. and Tucker, J.S. (2007) 'Newcomer adjustment during organizational socialization: a meta-analytic review of antecedents, outcomes, and methods.', *Journal of applied psychology*, 92(3), p. 707.
- Bauer, T.N. and Erdogan, B. (2011) 'Organizational socialization: The effective onboarding of new employees.', *APA handbook of industrial and organizational psychology, Vol 3: Maintaining, expanding, and contracting the organization.*, (January), pp. 51–64.
- Bauer, T.N. and Green, S.G. (1998) 'Testing the combined effects of newcomer information seeking and manager behavior on socialization.', *Journal of Applied Psychology*, 83(1), p. 72.
- Belgrave, L.L. and Seide, K. (2019) 'Coding for Grounded Theory', in A. Bryant and K. Charmaz (eds) *The SAGE Handbook of Current Developments in Grounded Theory*. London: Sage publications, pp. 167–185.
- Bhakta, K. and Medina, M.S. (2021) 'Preboarding, orientation, and onboarding of new pharmacy faculty during a global pandemic', *American Journal of Pharmaceutical Education*, 85(3).
- Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative research in psychology*, 3(2), pp. 77–101.
- Bryman, A. (2016) *Social research methods*. 5th edn. Oxford, United Kingdom: Oxford University Press.
- Caldwell, C. and Peters, R. (2018) 'New employee onboarding—psychological contracts and ethical perspectives', *Journal of Management Development*.
- Carlos, A.R. and Muralles, D.C. (2022) 'Onboarding in the age of COVID-19', *IFLA journal*, 48(1), pp. 33–40.
- Corley, K.G. and Gioia, D.A. (2004) 'Identity ambiguity and change in the wake of a corporate spin-off', *Administrative science quarterly*, 49(2), pp. 173–208.
- Crowston, K., Specht, A., Hoover, C., Chudoba, K.M. and Watson-Manheim, M.B. (2015) 'Perceived Discontinuities and Continuities in Transdisciplinary Scientific Working Groups', *Science of the Total Environment*, 534, pp. 159–172.
- De Vos, A. and Freese, C. (2011) 'Sensemaking during organizational entry: Changes in newcomer information seeking and the relationship with psychological contract fulfilment', *Journal of Occupational and Organizational Psychology*, 84(2), pp. 288–314.
- Duarte, D.L. and Snyder, N.T. (2006) *Mastering virtual teams: Strategies, tools, and techniques that succeed*. John Wiley & Sons.
- Ellis, A.M., Nifadkar, S.S., Bauer, T.N. and Erdogan, B. (2017) 'Newcomer adjustment: Examining the role of managers' perception of newcomer proactive behavior during organizational socialization.', *Journal of Applied Psychology*, 102(6), p. 993.
- Eurostat, E. (2021) 'Working from Home across EU Regions in 2020'. Available at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210923-1> (Accessed: 13 May 2022).
- Feldman, D.C. (1981) 'The Multiple Socialization of Organization Members: A Longitudinal Study.', in *Academy of Management Proceedings*. Academy of Management Briarcliff Manor, NY 10510, pp. 380–384.

- Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013) 'Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology', *Organizational Research Methods*, 16(1), pp. 15–31.
- Golden, T.D., Veiga, J.F. and Dino, R.N. (2008) 'The impact of professional isolation on teleworker job performance and turnover intentions: does time spent teleworking, interacting face-to-face, or having access to communication-enhancing technology matter?', *The Journal of applied psychology*, 93(6), pp. 1412–21.
- Goodermote, C. (2020) 'Remote onboarding and training of new program coordinators into the medical education office during Covid-19 social distance quarantine: process and recommendations', *Journal of community hospital internal medicine perspectives*, 10(5), pp. 399–401.
- Goodman, P.S. and Wilson, J.M. (2000) 'Substitutes for socialization and exocentric teams', *Research on Managing Groups and Teams*, 3, pp. 53–77.
- He, W., Zhang, Z.J. and Li, W. (2021) 'Information technology solutions, challenges, and suggestions for tackling the COVID-19 pandemic', *International journal of information management*, 57.
- Klein, H. and Myers, M.D. (1999) 'A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems', *MIS Quarterly*, 23(1), pp. 67–93.
- Klein, H.J. and Heuser, A.E. (2008) 'The learning of socialization content: A framework for researching orientating practices', *Research in Personnel and Human Resources Management*, 27(2013), pp. 279–336.
- Kniffin, K.M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S.P., Bakker, A.B., Bamberger, P., Bapuji, H., Bhawe, D.P., Choi, V.K., and others (2021) 'COVID-19 and the workplace: Implications, issues, and insights for future research and action.', *American Psychologist*, 76(1), p. 63.
- Kvale, S. (2007) *Doing interviews*. Sage Publications Ltd. (Qualitative Research Kit).
- Mann, S. and Holdsworth, L. (2003) 'The psychological impact of teleworking: Stress, emotions and health', *New Technology, Work and Employment*, 18(3), pp. 196–211.
- Meyer, A.M. and Bartels, L.K. (2017) 'The Impact of Onboarding Levels on Perceived Utility, Organizational Commitment, Organizational Support, and Job Satisfaction', *Journal of Organizational Psychology Vol*, 17(5), p. 11.
- Milasi, S., González-Vázquez, I. and Fernández-Macias, E. (2020) 'Telework in the EU before and after the COVID-19: where we were, where we head to', *Science for Policy Briefs. European Commission*.
- Myers, M.D. and Newman, M. (2007) 'The Qualitative Interview in IS Research: Examining the Craft', *Information and Organization*, 17(1), pp. 2–26.
- Newcomer, K.E., Hatry, H.P. and Wholey, J.S. (2015) *Conducting semi-structured interviews*. 4th edn. Hoboken, New Jersey, USA: Wiley.
- O'Leary, K., Gleasure, R., O'Reilly, P. and Feller, J. (2020) 'Reviewing the Contributing Factors and Benefits of Distributed Collaboration', *Communications of AIS*, 47, pp. 476–520.
- Oshri, I., Kotlarsky, J. and Willcocks, L.P. (2007) 'Global software development: Exploring socialization and face-to-face meetings in distributed strategic projects', *Journal of Strategic Information Systems*, 16(1), pp. 25–49.
- Rodeghero, P., Zimmermann, T., Houck, B. and Ford, D. (2021) 'Please turn your cameras on: Remote onboarding of software developers during a pandemic', in *2021 IEEE/ACM 43rd International Conference on Software Engineering: Software Engineering in Practice (ICSE-SEIP)*. IEEE, pp. 41–50.
- Saks, A.M. and Ashforth, B.E. (1997) 'Organizational socialization: Making sense of the past and present as a prologue for the future', *Journal of vocational Behavior*, 51(2), pp. 234–279.
- Sani, K.F., Adisa, T.A., Adekoya, O.D. and Oruh, E.S. (2022) 'Digital onboarding and employee outcomes: empirical evidence from the UK', *Management Decision*, ahead-of-print(ahead-of-print).
- Scott, C.P., Dieguez, T.A., Deepak, P., Gu, S. and Wildman, J.L. (2022) 'Onboarding during COVID-19: Create structure, connect people, and continue adapting', *Organizational Dynamics*, 51(2), pp. 1–8.
- Shenton, A.K. and Hayter, S. (2004) 'Strategies for gaining access to organisations and informants in qualitative studies', *Education for Information*, 22(3–4), pp. 223–231.

- Treadwell, D. and Davis, A. (2019) *Introducing communication research: Paths of inquiry*. Sage Publications.
- Van Maanen, J.E. and Schein, E.H. (1979) 'Toward a theory of organizational socialization', *Research in Organizational Behavior*, 1, pp. 960–977.
- Zhou, L., Park, J., Kammeyer-Mueller, J.D., Shah, P.P. and Campbell, E.M. (2022) 'Rookies connected: Interpersonal relationships among newcomers, newcomer adjustment processes, and socialization outcomes.', *Journal of Applied Psychology*, 107(3), p. 370.