4 Digital ethnography

Understanding platform labour from within

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4.1 Background

Long-term ethnographic fieldwork was established as a methodological approach in various social science disciplines early in the twentieth century. Early contributions to the ethnographic research method were made by the anthropologist Bronislaw Malinowski and the Chicago School of Sociology proponents Robert E. Park and Ernest Burgess, for example (Deegan, 2001). In the latter half of the twentieth century, ethnographic fieldwork was primarily conducted in human geography, sociology, anthropology, nursing, educational sciences, and, more recently, in business and management studies (e.g. Delamont & Atkinson, 2019). The rapid rise of digital media in the 1990s posed new challenges for ethnographic researchers. Committed to an immersive assessment of everyday routines evolving around Internet technologies (Coleman, 2010, p. 498), the scope of digital ethnographic research was initially circumscribed by the boundaries of online communities. In the wake of the cultural turn in communication research, numerous media scholars began to draw on ethnographic research to conduct in-depth investigations into digital media production, circulation, and consumption (Ardévol & Gómez-Cruz, 2012, p. 2). Dedicated to a practice-orientated approach (e.g. Couldry, 2004; Postill, 2010), digital ethnographers predominantly explore media practices within the multiple realms of localised lifeworlds, such as living rooms, pubs, parks, subway stations, and workplaces. Many contemporary professions are increasingly entangled in platformisation processes, creating forms of labour which are mainly oriented towards digital platforms. Ongoing platformisation processes pose a substantial challenge to contemporary qualitative inquiries. The platformisation of labour relates to the economic and infrastructural penetration of digital platforms into the workflows and taskscapes of employees (e.g. Nieborg & Poell, 2018). Ethnographic approaches are directed towards the local knowledge of a given community and the everyday practices of its members. By engaging with digital media technologies, digital ethnographers conduct iterative-inductive research that evolves throughout the investigation and draws on a family of methods (O’Reilly, 2005). The term digital primarily refers to all entities that can be reduced to binary code (Miller & Horst, 2012, p. 3), and present-day ethnographers increasingly incorporate digital methods into their research endeavours (e.g. Born &
Therefore, digital ethnography can be seen as a strategy of inquiry involving iterative-inductive research, an immersion in the everyday practices of local communities, and a combination of traditional research techniques with digital methods. For instance, participant observation and in-depth interviews can be complemented with computational network analysis.

In this chapter, I draw on ethnographic research into a Norwegian software firm. During the course of this research project, I complemented participant observation in office spaces with the digital methods walkthrough and computational network analysis. Walkthroughs are widely understood as research techniques that systematically step through the various affordances of platforms. In contrast, computational network analysis entails network centrality measures and visualisations of relationships among platform users through data about platform practices, such as liking and retweeting. Present-day workplaces worldwide are increasingly entangled in complex taskscapes, which can be defined as arrays of related activities in professional settings (e.g. Ingold, 1993). The taskscapes of the researched software developers span across the physical settings of their office spaces and the digital platforms used at work. Indeed, the intertwining of physical and digital contexts is inherent in many workplaces globally. Bridging the abstract division between physical and virtual units of analysis in workplace research, the ethnographic approach which I discuss in this chapter is anchored in an extended immersion in both the company’s premises and platform interfaces. The main aim of this chapter is to demonstrate the substantial potential of ethnography for the study of professional groups in the digital economy. In the following section, I will consider methodological choices for researching the increasingly platform-orientated labour of knowledge workers. The next part of the chapter addresses the role of the walkthrough method in ethnographic research, followed by a computational analysis of affiliation networks within the researched software firm.

4.2 Argument: Demystifying the socio-technical assemblages of platform labour

For a long time, ethnographic workplace research was confined to a locale where professional activities were actually performed. However, in recent decades, the implementation of digital media technologies in numerous workflows has considerably transformed the post-Fordist office space, which posed numerous challenges to the practices of ethnographic workplace research and its traditional principles of holism and long-term immersion. A multitude of present-day professional groups inhabit screen-centred offices, and their skilled practices are mostly directed toward the interfaces of digital platforms. Previous generations of workplace researchers assessed knowledge practices, organisational discourses, and working orders among certain professional groups such as lawyers (Suchman, 2000). Numerous sociologists conducted ethnographic research to examine how digital media transformed organisational life, providing empirical studies about command and control centres, financial institutions, news media, and the construction industry.
(Heath et al., 2000). After comparing different methods widely used in workplace research, Sellberg and Lindblom (2014) conclude that the methodological canon of the research area lacks in-depth analysis of workplace artefacts and their socio-historical development. To this day, the work practice studies of many management consultants are primarily based on etic frameworks, which examine corporate culture through a non-participatory lens and from an outsider’s point of view. Hence, emic perspectives from within communities of practices are still much needed to broaden the scope of workplace studies (e.g. Jordan, 1996). Rooted in the local knowledge of employees, emic perspectives describe internal practices from within a community of practice and in terms that are meaningful to its members. Based on the case study of the Norwegian software firm, I suggest that the combination of ethnographic fieldwork and digital methods can bridge the hermeneutical gap between the subjective meanings employees attribute to their skilled practices and the meanings coded into platform affordances, allowing workplace researchers to design holistic projects for the study of Internet-saturated professions. Complementing onsite observations with digital methods, such as walkthroughs and computational network analysis, enables workplace researchers to put the rapid flow of platform practices on hold while unravelling the complex making of knowledge in the digital-physical continuum. By capturing the local meaning-making among employees and the connotations built into platform affordances, workplace researchers can critically evaluate the role of work performances and recommend corporate leaders to balance personal judgment and datafied assessment.

4.3 Example of use: Inside a software firm

Having studied the Norwegian company which develops business intelligence software for oil and gas corporations, this chapter assesses how digital methods can strengthen ethnographic research into platform labour. Today, an ever-increasing multitude of professions are entangled in platformisation processes, and the expansive variety of concomitant workflows involve tasks conducted on digital platforms, generating data traces for various forms of analytics. The research began at several industry events during which I became aware of the rising demand for software applications among oil and gas operators (Ritter, 2021). Such industry events were a great opportunity to arrange subsequent interviews with attendees at their companies’ sites. Overall, I conducted fieldwork for 16 months at intersections between the Norwegian software industry and the global oil and gas industry. The purpose of the qualitative study was to trace the platform ecology and the practical expertise of software developers. After negotiating access to the firm, which is located in the town of Trondheim, I could carry out an onsite ethnography during a 3-month secondment. Conducting an ethnographic study on the premises of the Norwegian firm, I primarily examined how built-in platform metrics shaped the internal evaluation of work performances among software developers. By observing employees and participating in meetings on the firm’s premises (see Figure 4.1), I could gain an in-depth understanding of the skilled practices required
for the production of software. In addition, 30 in-depth interviews were conducted with software experts, including 18 from said firm (see Table 4.1).

In the autumn of 2018, I examined the production of business intelligence software for Norway’s global oil and gas industry. Founded in 2001, the company initially aimed to sell expert reports on extraction equipment to oil and gas companies. At the time of this investigation, the company employed about 20 people. The firm’s energy consultants conducted site visits to assess for instance drilling rigs. Based on their assessment, they compiled expert reports about operational risks. Soon after its inception, the firm expanded and created satellite offices in Qatar, UAE, and the USA, aiming to open its services to an increasingly globalised market in the oil and gas industry. Simultaneously, the firm established a cloud-based distribution system for its software products (Ritter, 2018, p. 2). When the

Table 4.1 Overview of research techniques

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<tr>
<th>Method</th>
<th>Type of Evidence</th>
<th>Locations</th>
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<tbody>
<tr>
<td>Participant observation</td>
<td>Fieldnotes</td>
<td>Open-plan and single-person offices</td>
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<tr>
<td>In-depth interview</td>
<td>Interview transcripts</td>
<td>Single-person offices</td>
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<td>Shadowing</td>
<td>Fieldnotes</td>
<td>Single-person offices</td>
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<td>Walkthrough</td>
<td>Fieldnotes</td>
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global oil price dropped dramatically in 2014, the firm’s products were in much less demand, and consequently, the overseas offices were closed with some 60% of staff made redundant. The firm’s response strategy to the economic crisis instigated a shift from developing consulting reports to producing business intelligence software for oil and gas operators (Ritter, 2019, p. 454). In the wake of this key managerial decision, the company’s emphasis on consultants’ expertise began to wane, whereas the role of software developers became central to its business model. Software development established itself as a core profession of the Internet era as developers build and maintain various digital media technologies that drive contemporary business operations and societal change.

4.3.1 Ethnography and interfaces

By discussing the challenges I faced while exploring the digitised taskscapes of professionals, I will demonstrate how the digital method walkthrough can be integrated into the ethnographic research process. After I was allocated a desk in the firm’s main open-plan office, I began to conduct participant observation among the software developers, consultants, and sales personnel. While spending time with employees, I could attend meetings and shadow their work routines in the physical settings of the company site. Shadowing is an informal observational research technique for understanding how employees perform a specific task. A shadowing session can be seen as an observational tactic that allows ethnographers to elicit the subjective meanings people assign to their everyday practices. After the first few weeks of the secondment, I arranged shadowing sessions with members from each department. I asked my interlocutors during the shadowing sessions to explain their most common tasks. Having taken notes during these sessions, I conducted follow-up interviews with the participants (e.g. Ventura & Keinan-Guy, 2018, p. 5). The employees produced various narratives about their taskscapes during the shadowing sessions. In addition, the interview reinforced my understanding of their skilled practices, allowing me to cross-check central pieces of information. The narratives of interlocutors revealed how platforms or other artefacts were locally appropriated and how their hallmarks were categorised. The shadowing sessions and the accompanying in-depth interviews with software developers helped me comprehend their emic perspectives on their tasks, skilled practices, and internal relationships with colleagues and tools. Emic perspectives convey the local knowledge existing within a given community. Internal practices are described in terms that are meaningful to the members of a community of practice.

By attending onsite meetings, I could conduct further participant observations. During my stint at the company, I mainly participated in ‘daily scrums’ and ‘all-hands’, and such meetings helped me learn how employees made sense of their internal events, skilled practices, and digital platforms used to produce software. All-hands meetings were scheduled for Monday afternoons. The following revised fieldnote describes how this type of meeting unfolded in the researched company:

The meeting begins with a PowerPoint presentation by the consultant Emil. He elaborates on a planned update of one of the firm’s software programs.
After various meetings with clients, Emil spent the last weeks designing the blueprint for a new analytics dashboard. He reports that the new design is in line with the requests from existing users. Based on their feedback and wishes, he presents a new tool to the Chief Executive Officer (CEO) Jan and the software developers who are supposed to write the code for the update in the upcoming weeks. The slides display the main elements of the dashboard. Emil’s presentation sparks a tense debate between numerous consultants and software developers. The latter question repeatedly the feasibility of the calculations on which some features of the update are based. Jan requests technical information from both consultants and software developers. Finally, he adjourns the meeting prematurely. He suggests meeting an important client and user of the software before proceeding with the development of the update.

Immersing myself in the local meeting culture of the firm elucidated how employees interpreted the categories for professional roles and internal hierarchies. By writing fieldnotes, I documented the local knowledge of the employees. Acting as a participant-as-observer on the company site, I could, for instance, glean crucial information about the internal evaluations of work performances. Assessing skilled practices in situ also made possible the documentation of localised understandings of the project management framework scrum. Furthermore, onsite observations brought to light how energy consultants acquired skills from software developers. The underlying objective of such place-based observations was to elicit emic perspectives on internal practices, social relationships, and local artefacts.

Very soon into the secondment, I noticed that most employees spent their working days in front of a desktop and laptop computer screen. Traditional observational techniques could not provide any insights into how the affordances of platforms shaped the daily routines of software developers. Affordances can be seen as the material properties of digital objects that shape the ways in which they can be used. A few weeks into my placement, a leader of one of the software teams granted me access to the platforms GitHub, Slack, and Huboard and the software packages produced by the staff, which were distributed via the cloud. As the daily routines of software developers revolved around the interfaces of these internal platforms, the observational practices of workplace researchers require systematic documentation of platform interfaces. Such interfaces are primarily shared boundaries between computer systems, connecting hardware, software, and human users. Furthermore, they can be defined as mediation techniques and effects at the interstices of socio-technical systems (Galloway, 2012, p. 33). By performing technical walkthroughs of such interfaces, I could gain a more comprehensive understanding of platform affordances’ role in software production. The walkthrough method demonstrates how built-in mediators of platform interfaces construct symbolic meanings (Light et al., 2018). I documented the meanings assigned to the various affordances of interfaces, including the design and layout of their menus, icons, and buttons. At one software meeting, I learned that a client had reported problems with an access key to her software package during a support call. Mark, the software team
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leader, allocated the task of repairing the access portal to two team members on the GitHub platform, a hosting service for software development and version control. The following extract from a revised observation record contains a technical walkthrough of a central GitHub interface:

The web browser displays a menu bar on the top of a code repository. The menu bar contains the buttons ‘code’, ‘issues’, ‘pull request’, ‘projects’, ‘wiki’ and ‘insights’. Under ‘issues’ a long list of items can be found. Issues are features of GitHub that allow its users to track their work. The progress of an issue is shown on a timeline. Mark creates an issue for the access key problem. He titled the issue ‘Access bug’ and entered a long description alongside a screenshot of an error message. He adds two members of the team to the issue. After the two team members complete their adjustments of the code, they attach the label ‘PO test’ to the issue. Subsequently, the product owner tests and approves the repaired feature of the software. The issue is forwarded to a ‘UA test’. The user acceptance test is performed by a consultant who adds a comment about the user experience to the issue. Finally, Mark attaches the label ‘Approved’ to the issue. The various affordances of the code repository shape the ways in which the bug can be fixed and how employees report on their progress. The different buttons, labels, and menus on the platform GitHub structure the workflow for repairing a front-end bug.

During the ethnographic investigation into software making, the walkthrough method provided invaluable insights into how interface affordances invoked ways of organising tasks and collaborations. The underlying objective of this method was to demystify how platform interfaces construct ideologies of achievement and competitiveness. Technical walkthroughs enable researchers to critique the sociocultural assumptions coded into platform affordances and thus govern the everyday practices of their users. The walkthrough method documents the symbolic meanings circulating through the interfaces of digital technologies while filling the lacunae left by participant observation directed towards places and events. The technical walkthroughs allowed me to trace how transformative mediators attribute meanings to the affordances of central platforms, such as Slack and GitHub.

The software firm under investigation mainly consisted of local places and interlocking platforms where observational techniques could be employed. Combining participant observation and the walkthrough method enables workplace researchers to trace the twofold construction of meaning which occurs in communities of practice where labour is directed towards digital platforms. The skilled practices in office spaces and on digital platforms were inseparable from the everyday lives of the firm’s employees. However, the act of writing fieldnotes, which documented both local practices and platform practices, reveals the differences between the two observational techniques. The technical walkthroughs were conducted on my desktop computer in an open-plan office. Whereas these fieldnotes primarily focused on the buttons, icons, and menus of interfaces, the fieldnotes based on participant observation described the local knowledge on the company premises. This type of
fieldnote documented situations in the office space, including activities, actors, and small-scale events. While technical walkthroughs enable researchers to systematically trace the meanings generated by the affordances of interfaces, participant observation explicates how members of a given community of practice interpret their social relationships, skilled practices, and artefacts at work. Both types of fieldnotes complemented interview transcripts. The complete qualitative data set was analysed in accordance with the coding procedures of grounded theory, which ensures that theoretical claims are based on concrete evidence and inductive reasoning (e.g. Bowen, 2008; Jinghong et al., 2019). Combining the two observational methods initiates a dynamic interplay between centring and de-centring digital media. The technical walkthrough can be seen as a media-centric technique of observation. In contrast, participant observation in a local office enables researchers to foreground the ways in which employees engage in media practices. By exploring media in situ, researchers de-centre digital media. They acknowledge that media are inseparable from other technologies and activities through which they are experienced. Media are part of, and entangled with, broader settings and socio-technical relations within everyday worlds. Assessing everyday realities as embedded social practices, non-media-centric research elucidates the local contexts of digital media (e.g. Bräuchler & Budka, 2020; Moores, 2018). The tension between both data collection techniques makes possible a dialectical spiral that incrementally drives the research process.

4.3.2 Ethnography and computational network analysis

Although employing observational techniques on the premises of the researched firm provided great insights into employees’ everyday routines, the dynamics of their digital labour are deeply embedded in often-obscured, access-restricted digital infrastructures. The software developers under investigation mainly used GitHub and Slack in their daily working lives. Ethnographic research into digital labour can integrate digital methods to gain a more comprehensive understanding of platform practices. Workplace researchers can conduct participant observation among software developers to elicit the specific meanings they attribute to their skilled practices. However, platform practices leave digital traces in backend databases; traces can be re-purposed for a critical digital analysis. Given this double character of platform practices, mixed-method approaches can illuminate the multiple facets of digital labour (e.g. Berthod et al., 2017). Digital methods research is based on natively digital data and requires medium-specific data collection tools. These medium-specific tools, such as the IssueCrawler and the Twitter Capture and Analysis Toolset, can substantially complement offline ethnographic research (Born & Haworth, 2017, p. 71). Computational network analysis is a digital method that can measure network centrality and provide visualisations of relationships within a given platform ecology (see Table 4.2). Network visualisations enable researchers to identify clusters, alliances, gatekeepers, liaisons, and bridges within a given network. Interpretations of network graphs can shed light on internal dynamics within professional groups. The underlying objective of employing computational
network analysis on the production platform GitHub was to trace connections and collaborations among its users. The ethnographic descriptions of internal events and local places contextualise the outcomes of the computational network analysis. While ethnographic observations study the everyday practices and contexts surrounding platform practices, computational network analysis follows the medium and relies on natively digital data (e.g. Caliandro, 2018; Rogers, 2013).

Researchers conducting computational network analysis mostly retrieve relevant data from the Application Programming Interfaces (APIs) of digital platforms or develop their own scraping software to extract data from the front-end layer of websites. For the last decade, media researchers have regularly retrieved network data from the APIs of many popular platforms, including Facebook, Twitter, and YouTube. However, in the wake of the Facebook Cambridge Analytica affair, access to APIs of digital platforms was considerably restricted for academic researchers (e.g. Bruns, 2019; Puschmann, 2019). The toolbase of the research group Digital Methods Initiative (DMI), which is located in Amsterdam, provides several data retrieval tools for the digital platform GitHub. In order to collect network data for this particular case study, I used the tool GitHubScraper. As a GitHub user with invited access to the firm’s private repositories, I could use my login credentials for GitHub to retrieve network data about them using the GitHubScraper. In contrast to the publicly available code repositories for open-access software, firms producing proprietary software store the source code of their products in private repositories, which only employees or partner companies can access. In these digital locations, software developers can control the versions and updates of specific software packages. They also uploaded minutes from developer meetings, and documented the history of a software program in release notes on GitHub. Thanks to my GitHub login credentials, I was able to generate an access token for the GitHub API. Since I had regularly observed the platform practices of the firm’s software developers on GitHub, I knew their GitHub usernames. I could compile a list of users from all the private repositories the firm maintained on GitHub. I used this list as a query in the GitHubScraper to assemble a network data set about the private repositories of the researched firm. The retrieved GEXF file could be opened in network visualisation software, such as Gephi and visone. The data set was comprised of 215 network nodes and 238 network edges. The bipartite network contained two sets of nodes, namely repositories and users. The edges of the network relate to the platform practice ‘watching’ and are based on the digital traces that platform users leave while engaging with the affordances of the platform. The platform practice ‘watching’ on GitHub is similar to ‘following’ or ‘subscrebing’ on other platforms.

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<tr>
<th>Method</th>
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<th>Location</th>
<th>Data Collection Tool</th>
<th>Data Analysis Software</th>
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<tbody>
<tr>
<td>Computational network analysis</td>
<td>Network graph and centrality metrics</td>
<td>GitHub’s API</td>
<td>DMI GitHubScraper</td>
<td>Gephi</td>
</tr>
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Table 4.2 Elements of computational network analysis
Software developers ‘watch’ code repositories relevant to their work and interests, reflecting their expertise in code libraries.

The affiliation network in Figure 4.2 shows the GitHub usernames of software developers working in the researched firm and the names of code repositories. The edges of the directed network point from software developers to code repositories, which is symbolised by a small arrow. The network visualisation was generated with the layout algorithm Force Atlas 2 and filtered to a degree ≥ 2 (Jacomy et al., 2014). The graph displays a sub-network made up of two clusters. The repository between the two clusters (ExproSoft/FAQWIMS) can be interpreted as a liaison through which the communication among the software developers flows. This repository contains basic information about the software product Well Integrity Management Systems (WIMS).

As I learned during the fieldwork on the company’s premises, the software developer Jthagesk contributed to the liaising repository and further repositories of
the researched firm. The software developer Brik was hired by the researched firm just weeks before I started my secondment. Prior to joining the researched software firm, she was employed by another local software firm whose repositories are displayed in the cluster on the left-hand side of Figure 4.2. In terms of the repositories of her new firm, Brik is only connected to the liaising one. Positioned between her current and previous company, she is the only person connected to the repositories of both. Thus, she has a significant role in sharing information on recent developments. The visualisation of the affiliation network indicates which repositories the software developers belong to, thereby providing insights into their professional trajectories and collaborations. Computational network analysis can provide visual evidence for the professional relationships among employees on a given digital platform. Information obtained during the onsite ethnography informed the interpretation of network graphs. The local knowledge documented during participant observation enhanced my understanding of specific nodes and edges. Integrating ethnographic fieldwork with computational network analysis also advanced my knowledge of how employees acquired and shared digital skills in the studied organisation.

4.4 Implications: Doing digital ethnography in the workplace

This case study illustrates how onsite ethnographic research and digital methods can be integrated, which has various implications for workplace researchers and practitioners. The qualitative method walkthrough illuminates how non-human actants, such as icons, menus, and buttons, shape the working lives of professionals whose labour is orientated towards digital platforms. In contrast, computational network analysis is a quantitative research technique which allows researchers to calculate network centrality scores for specific nodes in a given network and to visualise clusters and relationships in network graphs. Workplace studies can benefit in multiple ways from ethnographic research that complements place-based observations with digital methods. This ethnographic approach to workplaces can elicit the meanings that employees assign to their skilled practices and trace the meanings built into platform affordances. In addition to the methods walkthrough and computational network analysis, ethnographers can incorporate further digital methods, including the YouTube data tools, which can provide insights into channel and video networks, and the visualisation software IssueCrawler, which performs, among other things, a co-link analysis of Uniform Resource Locators (URLs). Fieldwork on digital platforms and production sites can, in turn, reduce the dependency of Internet researchers on standard API data (Venturini & Rogers, 2019, p. 537).

4.4.1 Research

Ethnographic researchers whose observations are directed towards platform interfaces encounter various theoretical challenges throughout the data collection and analysis procedures. In this chapter, I make a case for overcoming such a conundrum through the walkthrough method and computational network analysis.
The walkthrough method posits the substantial role of non-human actants in platform ecologies (Light et al., 2018). Ethnographic workplace researchers seek to holistically explore the interlocking worlds of digital platforms and office compounds. The ethnographic case of software making in Trondheim indicates that the taskscapes of software developers are located within complex socio-technical assemblages. Ethnographic research can shed light on the various components of assemblages holding together software developers, product owners, consultants, salespeople, and software users. Although cloud-based software has widely been celebrated as a free-flowing technology, its production, distribution, and usage are deeply grounded in material infrastructures, local hierarchies, and transnational dependencies. Digital ethnography can elucidate such far-reaching entanglements and identify locations for human agency in the increasingly platformised working life. While contemporary Internet technologies mostly involve automation processes and machine-learning algorithms, digital ethnographers have the ability to increase the transparency of the opaque architecture of platforms. Researchers can gain an in-depth understanding of contemporary workplaces by assessing local practices in workplaces and mediation practices in interfaces. Ethnography reveals how employees both engage with and resist the ongoing platformisation of digital labour. The discussed ethnographic approach to workplaces enables researchers to trace professional hierarchies, performance appraisals, and power relations among intermediaries within the socio-technical assemblages of the digital economy. Workplace scholars from different disciplinary backgrounds can thoroughly examine the role of digital platforms, such as Slack, Teams, and Jammer. By employing the localised walkthrough to understand the affordances of digital platforms, digital ethnographers can document hierarchies and divisions of labour within companies. Although computational network analysis may involve the constraints placed on data collection, this digital research technique can provide crucial insights into platform practices. Network visualisations can help improve communication channels within departments and among branches of a given corporation. Future ethnographic investigations can use the following or related research questions as points of departure:

- In what ways do digital platforms reconfigure company hierarchies?
- How do digital technologies facilitate creative collaborations among employees?
- Which non-human elements reshape contemporary workplaces?
- How are gender, race, age, ethnicity, ability, and sexualities negotiated in the day-to-day life of employees?
- To what extent are quantification technologies used in evaluations of work performance?

4.4.2 Practice

Practitioners can use the research techniques of digital ethnography to examine the actual uses of internal platforms and the well-being of employees. In addition to employing surveys and experiments, workplace researchers can combine
participant observations and digital methods to inform the decision-making of trade unions, human resource departments, and consulting firms. These stakeholders can benefit from ethnographic research since they gain first-hand insights into how employees interpret their everyday practices in digitised taskscapes. In addition, different digital technologies implementation phases can be thoroughly assessed. The polyvocal accounts that ethnographic research provides can enhance employee satisfaction and democratic decision-making in firms. Based on ethnographic materials, employees can develop user guides for internal technologies, from which new staff can significantly benefit. And finally, ethnographic research into workplaces can also inform managerial reactions to ongoing digital disruptions and shape decision-making on purchasing innovative digital technologies.

4.5 Conclusions

Based on an in-depth investigation into a Norwegian software firm, this chapter explored how digital methods can strengthen ethnographic fieldwork. The proposed ethnographic approach complemented participant observation in the physical settings of open-plan offices with technical walkthroughs of platform interfaces and computational network analysis. The main aim of this chapter was to demonstrate the substantial potential of ethnography to enhance the study of professional groups in the digital economy. Technical walkthroughs allow workplace researchers to systematically document how platform interfaces reconfigure present-day work environments. In contrast, computational network analysis can provide invaluable insights into internal collaborations and connections among employees and firms. Integrating ethnographic research and digital methods advances the knowledge of the contemporary workplace by considering the medium-specific properties of digital platforms. Based on this case study, I suggest that combining ethnographic fieldwork with digital methods can bridge the hermeneutical gap between employees’ subjective meanings of their skilled practices and the meanings coded into platform affordances, allowing workplace researchers to design holistic projects for the study of Internet-saturated professions.

Ethnographic fieldwork anchored in the interfaces of platforms is particularly suited to researching the socio-technical dynamics of numerous professional groups within the global economy. This approach is pertinent for exploratory assessments of the implementation of digital technologies in the workplaces of knowledge workers. Digital ethnographers can, for instance, illuminate current transformations in the financial sector, the influencer industry, the education sector, the gaming industry, the health sector, and co-working spaces. Furthermore, in-depth ethnographic studies can contribute to discourses on diversity and gender in the workplace and trace knowledge transfers among professional groups. Finally, workplace researchers can explore the political economy of transnational production networks, the situated construction of professional identities, and emerging forms of digital enskilment.

Nonetheless, this investigation into software developers in Norway also revealed several shortcomings of ethnographic tactics. A major limitation of ethnographic
research on company premises concerns the restricted access of researchers to high-level meetings, documents, backend interfaces, and digital data. Ethnographic immersions in company sites remain partial, and work-based researchers are requested to sign non-disclosure agreements about the intellectual property of the researched firms. While ethnographic research provides great insights into the experience and attitudes of employees, this branch of qualitative research can be a very time-consuming endeavour. Researchers may require job-specific training and long-term stays at companies’ sites to produce substantial results. The exploratory nature of ethnographic research regularly enables researchers to discover new trends and developments from within an organisation. However, employees might not be willing to discuss workplace problems due to hierarchical company structures. The outcomes from the ethnographic investigation into software making and the accompanying methodological reflections underscore that workplace researchers should establish, and adhere to, high ethical standards to protect employees’ identities and interests. Future ethnographic investigations into workplace phenomena can assess the appropriateness of further digital tools for ethnographic research, and experiment with new forms of collaboration between researchers and enterprises.

4.6 Further Reading


Discussing the claims made in the best-selling book *Everybody Lies*, Beuving’s essay opposes the different epistemological terminologies used in the ethnographic tradition and in big data research. Furthermore, avenues for combining ethnography and big data research are provided.


Following a brief overview of the history of ethnography, the chapter proposes ethnographic approaches to games and gamers. Chee provides a comprehensive introduction to ethnographic research into gaming cultures. Since games are increasingly considered extensions of everyday life, video and smartphone games have become central places for interaction and identity formation.


Updating Gary Alan Fine’s piece on the *Ten Lies of Ethnography*, de Seta identifies three lies of digital ethnography: the networked field-weaver, the eager participant-lurker, and the expert fabricator. Grounded in ethnographic research into digital media use in China, the article stresses the need to confront methodological illusions.


Based on long-term fieldwork in Estonia, the chapter assesses how augmented reality technology reorders tourist imaginaries about Estonia. Analysing the design aspirations and visions of Estonian-based app makers, the investigation demonstrates how quantification technologies shaped their app production.
References


