

Digital nomads beyond the buzzword: Defining digital nomadic work and use of digital technologies

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Abstract. Digital nomadicity has gained popularity in recent years as a fashionable lifestyle and as a way of challenging traditional work contexts, but there has been very little incisive empirical research on the lifestyle’s characteristics, its implications for the future of work, or on the technology, which supports it. This paper describes the four key elements that constitute the work of digital nomads: 1) digital work, 2) gig work, 3) nomadic work, and 4) adventure and global travel. We present digital nomads as a community of workers situated at the confluence of these four elements and define how each of these are enabled by the use of digital technologies. This research serves as a foundation for information studies concerned with the dynamic and changing relationships between future of work, new population of workers (digital natives) and emerging digital platforms.

Keywords: Digital Nomads, Gig Work, Nomadic Work, Digital Work.

1 Introduction

In the past few years, there has been a rise of digital natives with location-independent living and working styles [1]. The rise of digital nomads has been credited in popular media to a desire to escape the “rat race” of modern life, a dream to live in such a way that provides a withdrawal from “9-to-5 obligations.” [2] Those who adhere to this style of life are “redefining...making a living” [3] by pursuing employment that allows for global travel, flexibility in work hours, and a departure from the traditional office environment. This romanticized image is one of “true freedom...[without] boundaries or borders...work[ing] from anywhere in the world.” [2] The broader trend is often called the “digital nomads” movement, and arises from a combination of improved global access to information and information infrastructures, more flexible work arrangements, a preference for travel, as well as adventure and work flexibility among the younger generation of knowledge workers [4]. As perpetual travelers, many digital nomads have given up the idea of a permanent home and embark on extreme forms of remote and location-independent work; they may work from a coffee shop in Bali, Indonesia and the next month may be working from a co-working space in Berlin [5].

We argue that the digital nomads community is a fertile context for information research since it features a changing dynamic between people, information, and ICTs. Digital technologies play a critical role in the work practices of digital nomads, and

these practices are therefore a useful context for studying the interplay between affordances of emerging technologies and organizational and location-independent work, which partly define the future of work and organization [6].

Digital nomadism has been a popular topic for magazine articles and blog posts in both the world of management and amongst workers and avid travelers [5]. However, despite this surge in popularity of digital nomads, there is little empirical and academic research examining different aspects of this lifestyle such as the working arrangements of digital nomads, changing ties with organizations, new balance between work, personal life and travel, and the role of digital technologies [1, 7]. In particular, while the current characterizations of digital nomads invoke monikers such as remote workers, freelancers, location-independent workers, and online entrepreneurs, digital nomadic work tends to be different from these monikers¹.

These concepts only embrace certain aspects of the digital nomads community, and each falls short of providing a holistic perspective on the nuances of digital nomadic work. These labels are ill-equipped to accommodate the dynamic work arrangement of digital nomads. They are particularly less useful in adequately distinguishing digital nomadism, which, in its current form, is a very recent phenomenon [2, 4], from more traditional forms of work that share some characteristics but are divergent along other dimensions (e.g., teleworkers).

Specifically, a key aspect of digital nomads work is the mediating roles played by a range of digital technologies and infrastructures. Although the current discussions on the topic (happening primarily in business press, websites, or blogs) are driven by excitement, they point to the digital nomad's savvy use of technology to accomplish work. As information researchers, we see this as an opportunity to explore the relationship between emerging forms of work and digital mediation. As a result, this paper is an attempt to address the gap in our understanding of digital nomads, common work practices, and the underlying role of digital technologies. In this paper, by building on analysis of digital nomads forums and interviews with twenty-two digital nomads, we seek to address the following questions: 1) What are the basic elements that define digital nomadic work? 2) How these elements are intertwined with the use of digital technologies?

2 Methods

Empirical data was gathered from two sources: an in-depth exploration of popular digital nomad forums and a series of 22 interviews with digital nomads. Forum posts were gathered from the `/r/digitalnomad` section of reddit.com, the Facebook group "Digital Nomads Around the World," and from nomadforum.io, a forum dedicated to digital nomadism. All three forums were chosen for their large, active populations, and their focus on digital nomad topics. Interview participants were contacted based on their presence on the forums, through word of mouth, or because of other writings they had published on the topic of digital nomadism. The forum collection and subsequent interviews occurred from January to May of 2017.

¹ See the Wikipedia entry for more information: https://en.wikipedia.org/wiki/Digital_nomad

While the broad forum collection provided empirical background for the community, analysis for this investigation focused primarily on a forum thread on nomadforum.io, in which digital nomads introduced themselves to the forums (“Introduce yourself”). Contributors gave their name, profession, and thoughts on digital nomadism, as well as a number of other self-identifying descriptions. In total, the analysis of this thread covered the introductions of 460 digital nomads and provided the basis for the researcher's initial characterizations of digital nomadic professional life. The posts collected from this thread spanned from December of 2013 to early 2017.

These initial characterizations were further explored through the interview process, which occurred concurrently with the forum analysis. Participants represented a variety of professional backgrounds but shared a nomadic, digital work situation, and associated themselves with the digital nomad community. Interview questions were developed based on initial exploration of the forums and developed as the interviews proceeded. Interviews were approximately one hour in length, were conducted through video conferencing software, and were transcribed verbatim.

3 Findings

Analysis of interview data and the digital nomads forum suggests that digital nomads' work is best described by the confluence of four key elements: digital work, gig work, nomadic work and global travel adventure. These interdependent characteristics can be collectively used to define who digital nomads are, and what important dimensions their work entail. In describing these elements, we also discuss how they are inseparable from various forms of digital technologies.

3.1 Digital work

To maintain their lifestyle while constantly traveling the world, digital nomads engage with works that create digital goods using digital tools, what research has recently begun calling “digital work” [8]. Digital work is the essence of digital nomadic work since it is entwined with location-independent work practices and enables digital nomads to accomplish work while visiting different cities and countries. By using digital platforms to produce a digital product, digital nomads are able to travel light. Due to the frequency with which digital nomads relocate and the exotic locations they choose to explore, they also do not have access to machinery or the supplies to build a physical product. Digital devices and applications are the primary means through which digital nomads transform digital inputs to digital outputs, and this can be done virtually from any place where power and internet connectivity are available. In the NomadList forums, many digital nomads considered themselves minimalists. Thus, many choose to carry minimal or easily portable gear while traveling and completing work.

Transportable digital devices allow digital nomads to carry out an increasing variety of careers while traveling. The majority of digital nomads observed on the forum fall into the categories of programmers, developers, designers, or content creators. Out of the digital nomads who are considered programmers and developers, many have careers in software engineering and web development. However, digital nomads have also

found work through a spectrum of careers including blogging, graphic design, translating documents, digital marketing, creating podcasts and YouTube videos as well as financial and business consulting. Over 15% of digital nomads from the NomadList forum thread “Introduce yourself” discussed starting their own business using their skills acquired from previous training or knowledge.

Digital nomads use many different technology platforms in order to conduct digital work and produce their digital products. It is quite common for digital nomads to find work on a third-party contracting website, work on a particular gig through an online application, store information on the cloud or their device, and send the final product to their contractor or employer digitally. The vast array of digital applications and programs used by digital nomads can be separated into two categories: 1) profession specific and 2) general tools. Profession specific tools support the work practices involved in specific sub-categories of digital work. For example, programmers use GitHub to write and share code whereas designers and creators often use Adobe Creative Cloud to format website layouts. These programs are generally only used by people in their same field of work. However, there are also certain technologies that are universal for all digital nomads, such as messaging applications, which are used for communication purposes. A popular messaging app amongst digital nomads in the forums is Slack, which allows the user to communicate with many different people and teams in one application. Digital nomads from all kinds of professions also described using communication applications like Skype to attend remote meetings with partners or clients.

Another essential component of digital work is that, regardless of the application, digital workers depend heavily on internet connectivity in order to work on applications and send their finished digital deliverables to their clients. Many digital nomads from the online forums inquired about the best way to get internet access in different countries. Some digital nomads discussed using public WiFi whereas others would their mobile data depending on several factors such as price, accessibility, and secure connection. However, the digital nomad’s reliance on digital tools and services to conduct work means that having an internet connection is necessary.

3.2 Gig work

Another critical aspect of digital nomads’ professional situation is reliance on gig work. Gig work allows people to work short term as independent contractors with flexible work arrangements on demand [9]. The combination of gig and digital work creates the opportunity of working online freelance jobs that can be completed using digital platforms and technologies remotely and untethered from specific locations. Participant 8 described how switching to gig work has rendered her work location-independent: *“Changing the kind of work I do changed everything; I was very much tied to Los Angeles; now that most of my work is online I can be anywhere in the world.”*

Digital nomads can find gigs that allow them to work anywhere in the world as long as there is a demand for their particular set of skills and they can find a contractor. Depending on the type of skills needed and the amount of time spent on the gig, income levels vary between digital nomads. There is an increasing trend amongst firms that outsource projects to gig workers since they may not need to pay for health insurance

or other firing benefits [10]. However, this often creates issues for digital nomads since they do not have the accessibility to the resources a business generally provides its employees, and may result in precarious work situations.

Since digital nomads (often as soloworkers) do not have access to the large and expensive resources of a firm, they must rely on an array of web services and freelance marketplaces in order to conduct work. Unlike an employee working for an organization, gig workers must search to find jobs in order to make a steady income. Many digital nomads who have experience with gig work will market themselves to employers online using various online vehicles [11]. For example, participant 17 created advertisements that sent interested clients to a website in order to bring awareness of the services their start-up offered. Participant 20 used LinkedIn and Medium to maintain connections with other professionals in a similar field. Some digital nomads see such a web presence as an effective way to promote their reliability to potential clients. Others may choose websites such as Upwork and Remoteok to find location-independent gigs.

Not only are there many technologies available to help digital nomads find and complete gigs, but also to help them perform a wide variety of tasks that are important for any business. For example, since digital nomads use PayPal and Transferwise as a way of receiving payment digitally. This allows them to bypass having a physical mailing address and keep record of transactions. As another example, participant 18, discussed his use of software called Groove, which helped manage his customer service. By using these technologies, doing gig work and tasks associated with it becomes more feasible for digital nomads and allows them to spend more time on the core project activities.

3.3 Nomadic work

Perhaps the most conspicuous aspect of the digital nomad lifestyle is its constant movement, not only from country to country, but also from workspace to workspace. This presents the digital nomad with not only the problem of mobility, of moving between spaces and finding locations, but also the more complicated problem of nomadicity, which requires the mobilization of resources, and the navigation of local infrastructures [12]. A significant amount of research from the field of computer-supported cooperative work (CSCW) and information systems has already labored to articulate the concept of nomadicity, and a number of candidate definitions have emerged. This research specifically describes the process of leveraging technology to accomplish work across a variety of locations and local infrastructures [13]. Many participants from the forums feel that nomadicity allows them to have experiences outside of a regular routine and gain freedom from the corporate world, but it also requires them to find or assemble their workspace themselves rather than relying on the stable office environment provided by an organization. Digital nomads look for many of the resources described by Pinatti de Carvalho, Ciolfi and Gray [13, p. 2]: “space, time, privacy, silence, and other people.” From the NomadList thread, “Introduce yourself”, a nomadic couple discussed their need to find a “comfortable working space in order to get any work done.” Without this space, the couple feels their work productivity would be limited.

It is important to note that even though digital nomads share some important characteristics of nomadic workers commonly studied in the previous research, their career

aspiration and motivation for constant mobility may differ from most nomadic workers (who are also rising in numbers in the corporate world). What makes digital nomads distinct is their length of travel and decision not to have a home base [7]. In addition, while nomadic workers typically travel *for* their work, the digital nomad travels *while* working. While the nomadic worker is often drawn to various locations and spaces *by* their work, the digital nomad's work must be flexible around whatever spaces they can find in the locations they choose to travel. One member of NomadList named Zbynek discusses how he quit his IT career in the banking industry to become a self-employed android developer in order to live as a digital nomad. This change in career allows Zbynek to work remotely, unlike a career in corporate IT support that may be location-bound. Similarly, participant 12 discussed the transition from a career in legal services to becoming a food and travel blogger. In a similar manner to Zbynek, participant 12 now enjoys the world travel, and as a blogger, she can do work anywhere in the world as long as there is internet access and a properly working device (as opposed to her previous career as a lawyer). It is quite common for many digital nomads to completely change career paths in order to make an income while traveling. While this may require acquiring more knowledge or a different set of skills, digital nomads make necessary preparations before becoming location independent.

The use of portable technologies and personal cloud services facilitates nomadic work of digital nomads across different places. Given the knowledge-heavy varieties of digital nomad work, it is of utmost importance for such workers to maintain a large, stored collection of information. By transferring their relevant information to cloud storage, where it can be accessed anywhere with an internet connection, digital nomads can maintain the necessary knowledge base without the struggle of packing, storing, and carrying more things. Most interviewed digital nomads noted they accomplish work across various devices, and portable devices provide them with the flexibility to work from different spaces or while in transit. Additionally, digital nomads use cloud services to share information or collaborate on a document with clients or peers. Through these services, the digital nomad assemble a kind of movable office, which allows them to reach their professional materials from anywhere.

Evident from interviews and discussion on online forums was the fact that one of the largest challenges of constant nomadicity is loneliness, since most digital nomads are unable to maintain long-term relationships and are confined to whatever spaces and people they can find in their location. A user on reddit described the problem: "*...there are profound psychological factors in remote work. They can be obstacles to overcome or job/mood killers if not. Also, I fear 'cabin-fever' may be added to the list as you sleep and work in the same place. Not very stimulating.*" A number of online communities and social programs like Hacker Paradise have developed around the digital nomad community in order to partially address this negative consequence of nomadism. Through these online communities and interaction on online social platforms like Twitter and meetup.com, digital nomads sympathize and connect to others that are dealing with the same difficulties, or find meetups and events near where they are traveling. Founder of NomadList forum, Pieter Levels, is looked up to by many in the digital nomad community for creating the digital platform that allows digital nomads to share not only their travel advice but also to meet others in the digital nomad community.

3.4 Global Adventure Travel

For digital nomads, work and life blur together because of the choice to travel and work nonstop simultaneously. Digital nomads are also different from many forms of nomadic workers studied in the previous literature [e.g., 12, 13] because they are global travelers with a passion for continuously visiting new places. Digital nomads choose to travel to exotic locations around the globe, such as Chiang Mai, Ubud, and Phuket. Since digital nomads choose their lifestyle, most of them opt for tropical areas or places that are known to be ideal areas for hobbies like surfing, hiking, backpacking, or skiing. From nomads forums, we observed some digital nomads embark seasonal travel styles that more closely resemble the true traditional nomadism. For example, participant 19 spends winters in tropical regions, and returns to Northern Europe during summers. There are a number of digital nomad meetups, such as the travel program Hacker Paradise and the Digital Nomad Conference, which are often marketed for the variety of its destinations, allowing the digital nomad to “travel the world.”²

Some digital nomads find traveling partners or arrange to room with other digital nomads in order to reduce costs. Nomad-specific online communities provide essential hubs for finding important information about places to visit and people to travel with. Digital nomads use Facebook as a way to connect with people in order to find housing, and connect with other digital nomads through NomadList and the slack channel #digitalnomad. On these forums, digital nomads make recommendations to each other, offer advice, and rate different aspects of a travel destination, such as its internet connectivity, cost of living, and fun. For example, one commenter on NomadList discussed how he would negotiate with Airbnb hosts to obtain lower rates for long-term housing.

Unlike tourists, digital nomads work continually while traveling and must therefore constantly balance their travel and professional productivity. Conflation of perpetual travel and work imposes non-trivial challenges; productivity for digital nomads is a critical issue that many deal with on a daily basis because of their constant state of ‘workation.’ A commenter on Reddit described the problem of avoiding productivity loss while travelling: “*Keeping a schedule ensures that doesn't happen and also helps with motivation. Here where it's warm and sunny, and the cool people you meet tell you about all the awesome things they are going to do, it's a lot harder to motivate yourself to work.*” In many cases, enforcing the boundary between personal and professional life involved digital nomads setting aside time to be available to their team members on chat programs, and using productivity applications to keep track of work schedules. Additionally, part of the digital nomad’s productivity problem is due to constantly switching time zones or working in a different time zone than their client or employer. A contributor to the NomadList forum described the obstacle of working with employers across time zones and how he dealt with it by changing his work schedule for different clients and by making himself available to collaborators through messaging apps. Such messaging applications like Slack, as well as team management applications like Asana or Trello, helped digital nomads maintain work schedules for themselves and for their team members. Similarly, applications, which keep track and compare time zones

² <http://www.hackerparadise.org/>

were a common subject of discussion on the forums. Digital nomads use these digital applications to stay on top of their work hours and manage productivity.

While digital nomads travel to likely tourist destinations, they differ from tourists in that they seek out resources, which allow them to accomplish nomadic work. In both the forums and interviews, many digital nomads discussed frequenting co-working spaces, which are specially designed for remote workers; these spaces offer a temporary office and a more predictable work environment. Tourists are much less likely to leverage such work-related resources while visiting new places.

4 Discussion

Digital nomadism can be seen as a hybrid of four concepts described above and is complicated by the compound problems of mobility and professional flexibility (See Figure 1). Digital nomads share commonalities with other non-traditional work settings such as remote or nomadic work. However, as an emerging community of digital workers, digital nomads exhibit characteristics that make them distinct from these categories and descriptors. Although digital nomads inherit characteristics from all the four labels, people categorized under one label are not necessarily digital nomads.

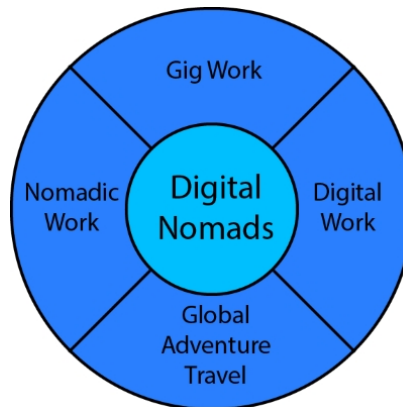


Fig. 1. Digital nomads at the confluence of four concepts

There are groups and professions that fit each label but are not necessarily considered digital nomads such as: (a) stationary corporate IT support (digital workers), (b) Amazon Turkers (gig workers), (c) tourists (global travelers), and (d) itinerant salespeople (nomadic workers). Borrowing the essential aspects of these different labels, we can gain some insight into the dynamics of digital nomadism, and into the enabling roles of technology in their work life.

The work practices and work life of digital nomads signal the declining roles of organizations and the fixed notion of workplace. This trend also highlights the agentic power of individual digital workers who increasingly act as “free agents” [6] and enjoy the benefit of choosing where and when to accomplish work. This sociotechnical change can be associated with changing norms of work (e.g., looser ties to organizations

among new generations of workers and desire for benefits like “flexworking”) and the proliferation of ubiquitous personal technologies and services.

Research findings also make it clear that in order to arrive at a holistic perspective on digital nomads and their digitally mediated work practices, there is a need for a more nuanced understanding of the core elements of their work such as gig work and digital work. Current conceptions of digital work as a distinct subcategory of knowledge work are in their infancy [8]. As evident in the context of digital nomads, the nature of digital work lends itself to virtualization, liberating workers from specific workspaces and therefore enabling location-independent work. Research on gig work is also in its developing stages and lacks conceptual clarity about online freelancing, which constitutes the type of gig work digital nomads engage with, is little taken up in the current bulk of information research. A vast majority of current research has directed attention to microtasking via platforms such as Amazon Mechanical Turk or more idealized forms of gig work such as those taking place around ridesharing applications.

Because of its focus on the digital nomad’s work situation and the imperative roles played by digital technologies, this research has a number of contributions to the ongoing discourse on digitally mediated work and future of work. Specifically, in answer to our second research question concerning the role of digital technologies, we can see that various digital technologies play an essential supporting role regarding all the four categories. These technologies therefore mediate all aspects of the digital nomad’s professional life: from marketing and acquiring clients to conducting work and communicating with clients. For example, cloud services provide access to information from different places, algorithms on websites such as Upwork matches them with potential clients, and as their work and personal life blends together, their devices can assist in both completing work and being productive. The entanglement of digital technologies in how digital nomads achieve work epitomize what Orlikowski and Scott recently noted about digital workers: “*specific materializations of work today include digital platforms operated by complex algorithms and continual streams of data*” [14, p. 5].

These technologies provide a mobile and flexible work environment, but they also require a significant amount of expertise from the worker. Digital nomads typically demonstrate a substantial level of literacy for information applications and tools, and confidence in choosing configuring or even developing them to solve their particular problems. These understandings are not solely personal but developed and passed along via community channels for information sharing (e.g., nomads forums)

5 Conclusion

The ubiquity of personal digital technologies and pervasive information infrastructures across the globe together with changing norms of work has resulted in a surge in popularity of digital nomadicity. Beyond the hyperbole, it is now critical to study characteristics of this community of digital workers as it exemplifies problems of nomadicity and flexibility of work, which may pervade the future of work. As such, the digital nomad community provides a window into changing dynamics of digitally mediated work practices and therefore presents a valuable context for the study of digital tech-

nologies and information resources in the work practices of the new generation of workers. We argue information researchers are well positioned to study these new dynamics given their focus on technology, information and work.

This paper should be seen as an exploratory engagement with the digital nomad community, and a number of factors could improve future investigations of the topic. Our research was limited by the lack of breadth of information on digital nomads, and a more formalized survey of the digital nomad community could provide valuable insights on the people and professions represented there. Additionally, more developed conceptualizations of underlying concepts such as gig work and digital work would provide a better analysis of the practices involved in digital nomadity.

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