The "Daily Digital": (Re)imagining Technology in Home-Based Women's Gig Work in Egypt.

Laila Mourad, York University, Canada

ABSTRACT

The gig economy is (re)shaping work and revolutionising the use of technology in everyday life. In Egypt, where more than 50 per cent of women's enterprises are home-based, digital tools such as smartphones and social media are integral to managing informal labour practices. This paper challenges neoliberal development narratives by introducing the Daily Digital framework, a decolonial feminist lens that centres the relational and experiential dimensions of technology use. Unlike existing frameworks, it repositions the household as a site of innovation and economic agency, emphasising women's creative strategies for (re)imagining technology and integrating it into their daily lives and work. Based on fieldwork conducted in Egypt in 2022 and 2023 with 25 home-based online food vendors, I demonstrate how women gig workers use their socially reproductive knowledges and relationalities to transform technology into a versatile tool for navigating and overcoming structural, material and social barriers, while (re)claiming and redefining their agency and mobility. This research contributes to feminist and decolonial scholarship by centring the lived experiences of women in informal economies and providing a new lens to theorise the intersections of technology, gender and labour. The Daily Digital framework offers valuable insights for (re)imagining gig work and advancing research and policy in the Global South.

KEYWORDS

Gig economy, technology, social reproduction, agency, labour

Introduction

The gig economy is (re)shaping work and revolutionising the use of technology, particularly among women in the Global South, who are leveraging digital tools to navigate informal economies. The rise of gig work opportunities comes at a time when technology is championed by global powers as a tool of innovation, economic progress and growth. Technology as an economic infrastructure promises the compression of time and endless choices and opportunities for workers with no one lagging behind. In line with these promises, more women are using technology in their daily life and work practices, leading to a rise in home-based gig work. For instance, in Egypt, research on women's entrepreneurship demonstrates that more than 50 per cent of women's enterprises are home-based, mostly emerging and existing within the informal economy, and pre-dominantly include small-scale trading enterprises such as home-based food vending (Carr et al., 2000; Nasr, 2010; Rizk and Rashed, 2019). Despite the growing numbers of home-based women gig workers, they remain invisibilised in neoliberal development discourses that define economic agency and success as the ability to integrate into the market and distance oneself from the home (Coburn, 2019). These discourses overlook and undermine the critical

role of social reproduction in women's labour and economic participation. Research on women's gig work can be situated within broader feminist conversations about the intersections of social reproduction, labour and economic development under global capitalism (Flanagan, 2019; Grau-Sarabia and Fuster-Morell, 2021; Wallis, 2021; Webster and Zhang, 2020). Considering the prevalence of technology in work practices and its intersections with daily social reproductive activities, I propose the "Daily Digital" framework to analyse how women gig workers (re)imagine technology within the household and beyond. Unlike existing frameworks, it emphasises relational and experiential dimensions of technology use, particularly within informal economies in the Global South.

Applying the Daily Digital framework in the context of the SWANA region (South West Asia and North Africa, also known as the Middle East and North Africa, or MENA, region) expands current research on the role and impact of technology in the region. It highlights the significance of centering workers' everyday lived experiences in economic development and labour market policies. In this paper, I focus on the case of home-based women gig workers in Cairo, Egypt, where I conducted six months of doctoral field research from October 2022 to March 2023. I interviewed 25 women from various socio-economic backgrounds who identified as home-based food vendors, preparing and selling food from within the home, and using technology in some capacity in their work. Through the Daily Digital framework, I demonstrate how home-based women gig workers use their socially reproductive knowledges and relationalities to transform technology into a versatile tool. I define socially reproductive knowledges as intergenerational teachings, experiential lessons and reciprocal practices embedded in daily life, and socially reproductive relationalities as the interconnected, fluid, dynamic networks that are nurtured through socially reproductive activities. Technology, transformed into a versatile tool, is leveraged by women gig workers to gain knowledge, learn and explore, access resources and services, navigate family and societal norms, connect with customers, and expand social networks. By doing so, women disrupt structural, material and social barriers in their everyday life, ultimately (re)claiming agency and (re)defining mobility. By centring the household as a site of innovation, relational labour, and economic agency, this framework provides a Global South Feminist perspective on technology, labour, gender and development.

I begin this paper by situating my research within the growing critical feminist literature on technology and its intersections with the crisis of social reproduction and labour under global capitalism. Next, I introduce the Daily Digital framework as a novel analytical lens. I then apply this framework to demonstrate how women gig workers transform technology into a versatile tool to gain knowledge, access resources, navigate family and societal norms, connect with customers and expand social networks. Finally, I conclude by reflecting on the framework's contributions to feminist debates and policies on labour and economic development.

Gendering the Gig Economy: Towards a Critical Feminist Framework

The relationship between technology and work, especially within the gig economy, has been discussed in recent scholarship, which examines the challenges as well as the possibilities and potential of this alternative economy. Existing literature highlights the precarious nature of gig work, which reinforces the commodification of labour and reconstructs hierarchies of power between workers and capital owners (Shade, 2018; Graham and Anwar, 2019; Wood et al., 2019; Graham et al., 2020). Other challenges for workers in the gig economy include low pay, social isolation, working irregular hours, exhaustion and no work/life balance (Shade, 2018; Wood et al., 2019). However, this literature also recognises some potential benefits, including flexible work

hours and location, and the opportunity for workers to utilise their skills and knowledges in various ways (Shade, 2018; Wood et al., 2019). Despite these insights, much of the existing literature lacks an intersectional lens that captures how gig work is experienced differently by workers across various identities and geographies. This gap is particularly evident in studies of the informal economy, where women gig workers, especially those working from home, remain marginalised in dominant narratives of economic development.

Feminist political economy offers critical insights into the relationships among gender, technology, and work in the digital economy. Monica Grau-Sarabia and Mayo Fuster-Morell (2021) provide a systemic literature overview of how gender has been studied in the digital economy. They identify three main approaches. The first is feminist theory of technology and ICT (information and communication technology) which focuses primarily on technical aspects such as structural inequalities of ICT and digital technology. This approach advocates for transformations in technology for fairer and more equal purposes, but it falls short in analyzing the economic dimensions. The second approach focuses on power, economics and neoliberal patterns of control and ownership. It explores the gendered structure of the economy and the impact of gender dynamics on processes of capital accumulation. An intersectional lens is used as a tool to critique neoliberal feminism which calls for market-based solutions to employment and empowerment. The third approach, women's participation and economic mainstream, focuses on gender differences in participation and use of ICT and the integration of technology in female dominated labour and sectors of the economy. This provides a surface-level conception of women's labour and the digital economy since it does not include a feminist lens on the structural or relational aspects of technology and labour, and it does not include how race and colonisation inflect these emerging relations and economies (Grau-Sarabia and Fuster-Morell, 2021; Lugones, 2016; Smith, 2012). These approaches emphasise the importance of integrating a gender lens into studies of the digital economy. However, they remain focused on analysing structural and material barriers that exist within the formal digital economy, which marginalises informal labour, especially gig work within households.

The literature on women's work in the digital economy often intersects with discussions on the social reproduction crises, and demonstrates that a feminist lens of analysis is useful in understanding how gig work impacts women's everyday lives, especially under neoliberalism (Flanagan, 2019; Webster and Zhang, 2020; Wallis, 2021). The gig economy offers women the "temporal autonomy" and ability to navigate different spatialities and temporalities from their private homes, which allows them the flexibility to be involved in other activities at home (Wallis, 2021). Work in the gig economy therefore provides women with opportunities to make a living despite economic and social challenges that may prevent them from working outside the home (Flanagan, 2019; Webster and Zhang, 2020; Wallis, 2021). However, women's gig work, especially from home, is criticised for further exacerbating the double burden of socially reproductive labour as well as paid work, where women find it increasingly difficult to balance and separate between paid and unpaid work (Wallis, 2021). Critical researchers argue that situating women gig workers within an entrepreneurial framework reinforces neoliberal feminist agendas and narratives on market-based economic participation, individualisation of work, commodification of households and everyday life (Flanagan, 2019; Wallis, 2021). While this literature highlights the role of social reproduction in shaping women's gig work, it remains focused on the Global North context, which homogenises forms of everyday violence under global capitalism and further marginalises the experiences of women gig workers in the Global South.

Alternatively, the household is framed by critical feminist scholars as an alternative economy

and a potential site of social change, which can be politicised and used to challenge global gender inequalities in development (Mitchell and Katz, 2004). In the context of Egypt, critical research demonstrates that working in the market outside the home rather than doing household or subsistence work does not necessarily translate into more agency and power in economic decision making or attitudes on gender equity (Agha, 2019; Malak and Salem, 2017; Salem et al., 2018). Subsistence work from within the home, which also includes unpaid activities for household consumption, is also associated with freedom of mobility for many women as well as more agency and power within the family (Salem et al., 2018). It is often difficult to separate productive and reproductive activities done within the home, but the literature highlights the need to further study household labour in order to capture the multiple meanings and forms of work women do in non-market economies (Salem et al., 2018). Inspired by this critical literature, which highlights the intersections between work and daily social reproductive activities, I propose the Daily Digital framework to analyse how women gig workers (re)imagine technology within the household and beyond. This framework emphasises the relational and experiential dimensions of technology use, particularly in informal economies in the Global South. Unlike existing approaches, it centers the everyday lived experiences of often-invisibilised workers, capturing how they transform technology into a versatile tool for navigating structural, material and social barriers.

The 'Daily Digital': (Re)imagining Technology in Everyday Life

In the past decade, research and policy papers in the SWANA region have increasingly advocated for the potential of technology, digitisation of work and entrepreneurship as pathways for enhancing women's empowerment and economic participation (Assi and Marcati, 2020; Olmsted, 2021). While the number of female entrepreneurs in Egypt remains low, initiatives to involve, train and finance entrepreneurship opportunities for women and formalise businesses are being adopted by the government and corporate and civil society organisations, in order to enhance women's employment and labour force participation (Rizk and Rashed, 2019; Assi and Marcati, 2020; Krafft et al., 2024). However, these approaches reinforce neoliberal ideals of individual economic participation while ignoring informal economies and the structural inequalities that persist in digital spaces. In addition to navigating structural inequalities, informal workers in the digital economy face challenges such as internet censorship, online surveillance and harassmentprevalent tactics employed by the Egyptian state to monitor citizens' use of emerging technologies (Shea, 2020).

To challenge these dominant neoliberal development discourses, I propose the Daily Digital framework as an alternative approach to researching the intersections of technology, labour and gender. This framework centres the household as a site of analysis and examines how technology intersects with women gig workers' daily social reproductive activities. It showcases how these workers use their social reproductive knowledges and relationalities to (re)imagine technology in their daily life and work practices. Socially reproductive knowledges, as I define them, are the intergenerational teachings, experiential lessons and reciprocal practices embedded in socially reproductive activities and gained, transferred and nurtured in the everyday. These include traditional, family and communal knowledge systems that are often delegitimised by dominant Western-centric systems of thought (Smith, 2012; Lugones, 2016). Socially reproductive relationalities, as I define them, are the interconnected, fluid, dynamic connections and networks formed through socially reproductive activities and gained, transferred, and nurtured in the everyday. These include family bonds, friendships, social networks and community connections that challenge the isolating effects of neoliberal capitalism.

The Daily Digital framework builds on and extends existing feminist scholarship on technology, labour and social reproduction by addressing critical gaps in how these domains intersect in the context of informal home-based economies. Feminist theories of technology critique structural inequalities in access and use but tend to focus on formal labour markets and institutional frameworks. Similarly, intersectional analyses of gig work frequently emphasise precarity and exploitation within platform-based economies, overlooking the nuanced ways informal workers actively navigate and reshape these systems. The Daily Digital framework diverges from these approaches by emphasising the relational and experiential dimensions of technology use, particularly within the Global South. By situating the household as a site of economic innovation, the framework challenges the neoliberal emphasis on market integration and individual entrepreneurship as the primary pathways to economic development. Instead, it reveals how women in informal economies creatively transform technology into a versatile tool to overcome structural barriers, redefine mobility, and reclaim agency through experiential, interpersonal and reciprocal practices. This approach advances feminist debates by centering informal, home-based labour as a critical site of technological engagement and innovation, offering a decolonial perspective often missing from mainstream literature. In the following section, I demonstrate how the Daily Digital framework can be applied to analyse the case of home-based women gig workers in Egypt's emerging food tech sector, showcasing the framework's capacity to reveal the transformative and innovative uses of technology in informal economies.

Applying the Framework: The Case of Home-based Gig Workers in Egypt

The SWANA region is witnessing the growing integration of technology across various economic sectors, including the food tech industry, where food delivery services, online grocery stores, and cloud kitchens are expanding in size and scope (Kene-Okafor, 2022). My doctoral research focused on home-based women gig workers who prepare and sell food online within the informal economy. I conducted semi-structured interviews with 25 participants recruited from a database of active Facebook and Instagram cooking pages, as well as community networks and online groups on WhatsApp and Messenger in Cairo, Egypt. The sample included women aged 30 to 65 from diverse socioeconomic backgrounds and levels of education, with more than half residing in lower income neighbourhoods and not being professionally trained in business or technology. Most participants (20 out of 25) had previous work experience in formal market economies, primarily in the corporate or education sector, with none of them having formal culinary knowledge or work experience in the food sector. While this number of participants is modest and is low in comparison to the population size of working-age women in Egypt (more than 30 million)¹, this sample provides rich qualitative insights into the relational and innovative ways women engage with technology, emphasising depth over generalisability. There is a growing literature on the relativity of sample sizes for qualitative data analysis. In turn, I found 25 interviews to be an appropriate number for a preliminary exploration of the phenomenon of informal home-based gig work (Wutich et al., 2024). Most of the online food-vending projects (17 out of the 25) were launched between 2015 and 2019, reflecting a shift in the use of social media platforms following the Egyptian Revolution in 2011. Initially used for political organising, these platforms have evolved into informal economic spaces that connect individuals across age

¹ Data from the World Bank Group: https://data.worldbank.org/indicator/SP.POP.1564.FE.IN? locations=EG

groups and socioeconomic backgrounds.

Women gig workers' stories and experiences reflected how technology and digital tools were central to their daily lives and work. In this context, I refer to digital tools as both the "hardware" technologies or material objects such as the mobile phone, and the 'software' technologies such as online market platforms, social media and instant messaging applications, e-wallets and delivery service providers (Wallis, 2021). For instance, they used these digital tools to connect with family, browse online videos, and manage household needs which increased their confidence and familiarity with these tools. This confidence motivated them to use these digital tools for professional purposes. By doing so, they navigated and disrupted structural, material, and social barriers in their everyday lives, thereby (re)claiming their agency and (re)defining their mobility. Agency, as conceptualised by critical feminist scholars, is dynamic and relational, extending beyond individualistic notions of self-autonomy and independence to encompass interpersonal and community-based connections (Mahmood, 2006; Salem et al., 2018; Taha and Salem, 2019). For these women, agency was interconnected with their sense of purpose and freedom and relationalities to their family and community. Mobility within and beyond the home enabled women gig workers to disrupt gendered boundaries that frame the home as non-productive and the market as inherently valuable, by redefining the household as a site of innovation. Applying the Daily Digital framework demonstrates how home-based women gig workers use their socially reproductive knowledges and relationalities to (re)imagine technology in their everyday lives. Through experiential, interpersonal and reciprocal practices women gig workers transformed technology into a versatile tool to gain knowledge, learn and explore, access resources and services, navigate family and societal norms, connect with customers and expand social networks.

Gaining knowledge, learning and exploring

The home-based women gig workers I interviewed explained that their knowledge of technology and digital tools was not gained through official courses or training programs but through using them daily in their personal lives. Despite varying levels of comfort, all the women gig workers were keen on using digital tools or online platforms, even if they personally preferred or wanted otherwise. Those who were hesitant and not as comfortable with technology were mostly women coming from shaaby² or shaaby-middle socioeconomic backgrounds, who faced material barriers to accessing technology which limited their exposure to online platforms. For these women, technology represented the unfamiliar and unknown, and as a result some of them wanted to avoid digital tools and platforms that could invade their privacy or expose them to strangers online. Many of the shaaby women expressed how social media has negative connotations based on stories they heard about online harassment and scams. Socially reproductive relationalities, such as encouragement from family members or close customers, often played a critical role in helping these women overcome their hesitations and experiment with digital tools. This reliance on familial support exemplifies the Daily Digital framework's emphasis on relational dimensions of technology use.

Age was not a determining factor when it came to comfort with technology. The older women I interviewed were keen on staying up to date with new technologies and asked younger members of the family to manage their online posts and communications. For example, Mona³

² Shaaby is an Arabic word that broadly translates, in this context, to "popular" class or those with lower income backgrounds. I intentionally use this as a category that captures both economic and social stratifications and complicates the notion of class.

³ Mona and Aya are partners in their online food-vending shop, Monmon Kitchen, which they began in 2019. I interviewed them on 6 November, 2022, in their home in a middle-income neighbourhood.

shared how her daughter Aya supported her:

Aya encouraged me by posting content and engaging with customers. Until now I don't really know how to manage online posts, I am not even an admin on the page, I mess things up. One time she [Aya] was with her friends and had to come back quickly to delete posts I made.

Mona's story reflects how intergenerational knowledge transfer facilitates women's engagement with technology. Her acknowledgement that there is a learning curve and her willingness to gain more technical skills through experimenting with and exploring various digital tools highlights the essence of socially reproductive knowledges within the Daily Digital framework.

Another example of women gig workers' experimentation with digital tools was exploring how to use various mobile applications or online platforms. A recurring theme amongst participants was their strategic use of platforms such as Facebook and Instagram. Facebook was for fame, since it was easy to promote their pages and reach a broader audience. However, women also associated Facebook with negative experiences, such as unfriendly comments or scams. By contrast, Instagram was mainly used to target elite customers who valued high quality presentation. Women gig workers who specialised in decorated dishes or bakery items often featured their work on Instagram to attract higher-paying clients. By experimenting with these platforms, women were not just adapting to digital spaces but using them in innovative and non-standardised ways to grow their online presence. This process aligns with the Daily Digital framework's focus on the relational and experiential dimensions of technology use, where women (re)imagine digital tools to navigate structural and social constraints.

Women gig workers' relationship with technology was often an emotional experience that involved overcoming fears and anxieties and exposing themselves to the unfamiliar. Whether it was asking younger family members for support or personally experimenting, women gig workers demonstrated resilience and a commitment to learning. Through their socially reproductive knowledges and relationalities, women gig workers (re)imagined technology as a versatile tool to learn and explore new technologies and navigate structural barriers. By doing so they (re)claimed their sense of agency, moving beyond individual autonomy toward relational and collective learning. The Daily Digital framework captures this dynamic process, emphasising how women's engagements with technology are rooted in their everyday social reproductive practices. Other than structural limitations, women gig workers also had to navigate material barriers such as access to resources and services.

Accessing resources and services

Access to internet connectivity and communication infrastructure is a prevalent issue in mainstream gender and development discourses that advocate for capacity development and the integration of technology in female labour sectors (Grau-Sarabia and Fuster-Morell, 2021). Indeed, the women gig workers I interviewed expressed the opinion that accessing the internet was crucial because they relied on social media and instant messaging applications on their smartphones to sell and promote their food online and connect with their customers. However, access to and use of resources and services such as the internet or mobile applications were influenced by both their level of technical skills and material barriers. For instance, some of the women gig workers from *shaaby* backgrounds, who faced financial constraints, shared that access to an internet connection or up-to-date technologies was not always feasible or guaranteed. To overcome these material barriers, women gig workers strategically incorporated mobile and

internet costs into household expenses, reframing them as indirect costs. This strategy reflects the application of socially reproductive knowledges, where women leverage their expertise in managing household finances to sustain their work activities.

Despite reallocating household budgets to cover work-related expenses, women gig workers maintained a clear separation between their work budgets and personal finances. This separation was critical for tracking expenses and income, which determined how much they could reinvest in their businesses. Investments often included essential tools and resources such as new kitchen appliances, packaging supplies or smartphones. For many women, smartphones were particularly valuable, as they facilitated learning and innovation. Through their smartphones, women accessed resources such as on-demand delivery services (e.g. *marsool*) to recruit trusted delivery personnel, e-wallets for receiving payments, and online platforms for professional development. These practices highlight how women transform digital tools into versatile tools that extend beyond logistical support to serve as platforms for learning, innovation and financial control, which aligns with the Daily Digital framework's emphasis on experiential and relational technology use.

Financial management strategies were deeply relational. While women gig workers were open to trying e-wallets, most of them were still hesitant to open official bank accounts and use debit or credit cards for their transactions. Even women from elite or upper-middle socioeconomic backgrounds who had personal bank accounts outside of their work activities still preferred to keep their work finances and records informally on their phone and preferred to save their money in a saving association rather than a formal bank account. One worker, Rabab⁴, shared, "I prefer gam'eyas [saving associations] because you are pressured to commit. The bank isn't that reliable, the visa card is always available and if you are stuck then you will eventually use it and spend your money." This reliance on gam'eyas highlights the importance of socially reproductive relationalities, where financial decisions are shaped by trust-based communal practices rather than formal institutional frameworks. The ability to control and manage finances offline gave women a sense of agency and control over their resources and spending or saving choices, while balancing relational obligations. In addition to financial management, women gig workers also used their mobile phones for their own learning and professional development, researching recipes, watching cooking videos and attending online courses. They stayed updated on news and recent trends in the food industry, tracked competitors, and maintained customer databases with logistical details and specific preferences.

Women gig workers' daily financial and resource management strategies enabled them to cut direct costs such as internet or phone bills and be efficient and multi-purposeful with how they used digital tools. Through their socially reproductive knowledges and relationalities, women gig workers (re)imagined technology as a versatile tool to navigate material barriers and access resources essential for their work, thereby (re)defining their sense of agency and control over their work. This relational form of agency highlights the dynamic interplay between individual autonomy and communal support and knowledge systems, a core aspect of the Daily Digital framework. While women gig workers successfully navigated many material and structural barriers, they continued to face social barriers within the household and broader society, particularly concerning family and societal norms.

Navigating family and societal norms

⁴ Rabab began her online food-vending outlet, *7alethaalik*, in 2018 as a side gig alongside her remote job in journalism. I interviewed Rabab in a local coffee shop in a middle/upper income neighbourhood on 4 November, 2022.

In terms of navigating social barriers, women gig workers' communal relationalities within and outside the household often involved family norms or societal hierarchies that either posed limits or offered opportunities for expanding their use of digital tools. For instance, while they felt confident posting pictures of their food online, most women were uncomfortable or felt shy about sharing videos or images of themselves cooking or working in the kitchen. In some cases, women who wanted to post video content were held back or limited by their family members or husbands who felt it was inappropriate for them to be publicly featured online. These dynamics reflect the role of socially reproductive relationalities, as family networks both mediate and shape women's engagement with technology. To navigate these family and societal barriers, women gig workers balanced these fears and anxieties by setting communication boundaries and reassuring their family members about their online interactions. These protective mechanisms, rooted in relational networks, helped women limit risks of online harassment or violence while maintaining their agency to work and engage with customers (Galán, 2024). For example, Rasha⁵ shared how she intentionally involved her husband in her work to reassure him and gain his support: "Even if there is a problem in a food order my husband gives me advice, if there is a late order he figures out a way or finds someone to deliver it. Honestly, he really supports and helps me." This reliance on family support underscores the importance of socially reproductive relationalities within the Daily Digital framework where relational dynamics mediate women's ability to navigate societal norms and assert agency in their work.

Alternatively, some women received active encouragement from their families to create video content or publicly promote their work. For example, Doaa's parents supported her decision to invite food bloggers into their home to film and promote her cooking. Other women convinced their husbands to appear on TV cooking shows, arguing that it was crucial for self-promotion and expanding their customer networks. For instance, one of the workers, Hoda⁷, shared:

The TV episode was good for me, more people got to know me and try my food. There was also a magazine that posted two of my recipes. I also met people and networked with them online. Technology helped me promote my work and learn about other cuisines.

These stories highlight how women gig workers (re)imagine technology to overcome societal restrictions and expand their professional networks. Through these efforts, they disrupt traditional family and societal boundaries, asserting their agency and creating new opportunities for self-promotion.

Using digital tools to work from home also offered women gig workers temporal autonomy and flexibility, enabling them to balance household and work duties. This balance is significant, as women's labour force participation is often constrained by the demands of social reproduction (Barsoum, 2019). Access to orders on WhatsApp and connections with customers through social media allowed women to map out their time and plan their days efficiently, aligning their work schedules with household responsibilities. Women gig workers' use of technology enabled them

⁵ Rasha began her online food-vending work from home with the support of her mother-in-law in 2017. I interviewed Rasha on 1 November, 2022, at her brother's store in a *shaaby* neighbourhood, where she works on a part-time basis.

⁶ Doaa began her online food-vending outlet, WOW Food, in 2020 after she lost her corporate job because of the Covid pandemic. I interviewed her in a coffee shop in an elite neighbourhood on 10 November, 2022.

⁷ Hoda began her online food vending outlet, Cookery, in 2019. I interviewed her in a local coffee shop in a middle-income neighbourhood on 31 December, 2022.

to experience and live time in multiple ways throughout their everyday life, wherein they continuously shifted and balanced between their social reproduction roles (cooking and provisioning at home) and their production roles (cooking and selling food to customers). This ability to fluidly navigate between socially reproductive and productive roles reflects the Daily Digital framework's emphasis on (re)imagining technology to transcend temporal and spatial boundaries. By doing so, women gig workers challenge the rigid division of labour that devalues the home while positioning the market as a productive and valuable space. It is important to note that these experiences exist within the larger context of gendered division of labour and risks of gender-based violence within households. However, research demonstrates that women's participation in paid work increases their bargaining power and involvement in household decision making, which can lower the risk of exposure to violence (Abouelenin, 2022; Sadania, 2016). In the case of the women gig workers I interviewed, their stories reflected how participating in paid work activities and contributing to household income shifted their positionality within the family. This shift reflects the relational and dynamic nature of agency as conceptualised within the Daily Digital framework, where women's engagement in paid work redefines household relationships and power structures.

Beyond the direct gains of selling their food online, women gig workers' (re)imagination of technology offered them temporal autonomy and the ability to navigate different spaces and temporalities from their homes while still being involved in other social reproduction activities. Through their socially reproductive knowledges and relationalities, women gig workers (re)imagined technology as a versatile tool to navigate family and societal norms and to disrupt boundaries between work and non-work and enhance their temporal agency and mobility. Having the agency to post online content and communicate with customers and vendors was necessary for women gig workers' ability to connect and engage with customers.

Connecting and engaging with customers

All the women gig workers I interviewed were keen on developing communication strategies that enabled them to connect with their customers, grow their networks, and stay alert to market trends. Most of them shared that they began their online food vending work by sending pictures and prices of food items to their personal contacts through direct messaging applications. Usually, these personal connections would then share and promote the workers' contact information across their own networks, allowing women gig workers to expand beyond their immediate social circles. As their customer base grew, many women created private groups on instant messaging platforms such as WhatsApp and Facebook messenger to manage orders and maintain communication. One example of a communication strategy was sending personalised messages and special offers regularly to these groups. For example, one of the workers, Doaa⁸, shared:

There are people who order in advance, but 90 per cent of people wait for the "available today" message. Most people don't really plan ahead, so I send a message early in the morning when people are heading to work and another reminder around 12pm. People ultimately end up ordering at that time.

This strategy exemplifies socially reproductive relationalities within the Daily Digital

-

⁸ Doaa began her online food-vending shop, Food Stories, during the Covid pandemic in 2020, after volunteering in an online community group that delivered meals to sick members of the neighbourhood. I interviewed her in a coffee shop in an elite neighbourhood on 23 December, 2022.

framework, where women's customer engagement is rooted in interpersonal and reciprocal practices.

Another communication strategy used by women gig workers was reaching out personally to customers through instant messaging applications to ask for preferences, dietary restrictions and special requests. Although menus were posted online, women were open to customising orders. Many saw this as a unique aspect of their service that distinguished them from restaurants or catering companies. Not only did this approach increase customers' trust, but it also gave the women gig workers more freedom to experiment and diversify the dishes they were making. One worker, Roaaya⁹, proudly said that one of her customers who is following a strict diet relies completely on her to prepare meals for the entire month. She explained, "There was a customer of mine who got diet food from me and was shocked that healthy food could taste so good!" This emphasis on personalised service highlights women's relational and experiential engagement with technology, a core concept of the Daily Digital framework. By fostering trust and personal connections, women gig workers used technology to expand their customer networks while diversifying their offerings.

Some of the women gig workers I interviewed who were older or had an elite background worked from rented kitchens, since they could afford to hire employees to prepare the food orders. Even though cooking was being done in a rented space it was still modelled after a household kitchen rather than a commercial one. In these cases, women gig workers preferred to expand their online presence and hire online marketing consultants or companies to manage their Facebook pages or to have their kitchens featured on commercial food applications such as *Talabat* or *MUMM*, which are both owned by private-sector companies. Even in these cases, women maintained personal connections with their customers to uphold the authenticity of a "home-based" kitchen. One example is Mona¹⁰, who said:

There are people who have been ordering from me regularly since the beginning. If they don't order when they usually do I call and check on them. Maybe they are travelling or something, but they are happy when I ask about them.

These practices highlight the socially reproductive relationalities that women gig workers rely on to sustain and grow their businesses.

Women gig workers' use of technology to connect and engage with customers was built on trust and reciprocity, enabling them to transcend material and social barriers. Personalised communication strategies provided customers with a non-commercial, genuine experience while allowing women to professionally feature and promote their work. This dual use of digital tools reflects the Daily Digital framework's emphasis on relational and experiential technology use, where tools are reimagined to serve both professional and personal purposes. Through their social reproductive knowledges and relationalities, women gig workers (re)imagined technology as a versatile tool to build and nurture their customer networks. Technology allowed them to transcend spatial and social hierarchies, enabling them to participate in markets and communities beyond their immediate networks and expand their physical and social mobility. These practices align with the Daily Digital framework's focus on how women creatively (re)imagine technology to challenge traditional market norms and expand their relational and economic possibilities

⁹ Roaaya, who is originally from Upper Egypt, began her online food-vending outlet, Koky Food (named after her youngest daughter), in 2015. I interviewed her in a local *shaaby* café on 3 November, 2022.

¹⁰ Mona launched her online food-vending outlet, Mama Mona, in 2018. I interviewed Mona in her rented kitchen in a middle-income neighbourhood on 26 December, 2022.

Expanding social networks

The connections that women gig workers built and nurtured with their customers were not only a way to increase sales or provide good customer service, but also a means to expand their social networks within the household and beyond. Farha Ghannam (2011) discusses how women's liminal state of mobility opens possibilities for encounters and experiences that transform identities, shift social hierarchies and reflect on social and economic inequalities. In many cases, customers would recommend women gig workers' services to their own social networks or invite them to join closed neighbourhood online groups or participate in local bazaars and events. For example, some women from shaaby backgrounds were added to online groups of gated communities, where most residents come from affluent backgrounds. These interactions reflect the socially reproductive relationalities at the core of the Daily Digital framework, where trustbased networks enable women gig workers to navigate social hierarchies and access new opportunities. Participation in these groups not only helped women expand their social networks but also provided access to professional chefs and instructors who shared training opportunities, courses, recipes and tips. While these groups did not always result in more customers, they offered valuable insights into innovations and practices within the food industry. Women gig workers also participated in more public community groups on platforms such as Facebook, managed by multiple admins who controlled advertisements and featured posts. These groups were useful for connecting the women with others in the community, learning marketing strategies, and promoting their own services. These practices illustrate the relational and experiential dimensions of technology use as women gig workers (re)imagine digital tools to foster professional and communal relationships, a central concept of the Daily Digital framework.

All the women gig workers I interviewed valued maintaining their interpersonal connections with their customers and used digital tools to enhance their online network. For example, those active on Instagram, YouTube or TikTok created and shared interactive content such as live videos or reels showing them prepping or cooking meals. These videos went beyond showcasing cooking; they were avenues for women gig workers to narrate personal stories and share their wisdom. Whether it was cooking tips and tricks, cost and time saving hacks or relationship and family advice, they included everyday personal and communal issues and struggles within their narrative. For example, women gig workers would often include in their online content narratives around rising food prices and their attempt to save costs and offer their customers good deals while being mindful of the harsh economic conditions. This knowledge-sharing aligns with socially reproductive knowledges as women transferred and created wisdom rooted in their daily lives and communal experiences. This sense of communal responsibility was not only expressed through online videos but embedded in the services they provided. For example, during the Covid-19 pandemic, women gig workers continued to receive food requests from their regular customers, which they saw as a sign of trust and confidence in the quality of their work and their personal cleanliness and health standards. One worker, Abeer¹¹, created "Covid meal deals", which many of her customers described as both humorous and practical. She shared, "I would give them offers for that Covid menu, that was my own contribution towards the sick person. When the sick person healed, they would call me and thank me for the food." These examples

¹¹ Abeer started her online food-vending outlet in 2016. I interviewed her in a coffee shop in an elite neighbourhood in new Cairo on 20 December, 2022.

demonstrate how women gig workers (re)imagine digital tools to serve dual purposes by fostering community connections while addressing material and social challenges, a central aspect of the Daily Digital framework.

Women gig workers' experiences and use of technology were therefore impacted and shaped at times by macro-level market conditions and crises such as ongoing inflation and rising food prices or crises such as the Covid pandemic. They navigated these material and social barriers by joining community groups, creating engaging online content or offering customised services during times of need. Through their socially reproductive knowledges and relationalities, women gig workers (re)imagined technology as a versatile tool to expand their social networks and enhance their spatial and social mobility. This expansion reflects the Daily Digital framework's focus on how technology enables women to transcend traditional boundaries and (re)imagine their roles within and beyond the household. By engaging in trust-based and knowledge-sharing practices, they demonstrated how technology can transform not only professional opportunities but also communal connections, offering a pathway to navigate and overcome material and social challenges.

Conclusion

In this paper, I proposed the Daily Digital framework as an alternative approach to analysing how women gig workers experience and (re)imagine technology within the household and beyond. Unlike existing frameworks, it emphasises relational and experiential dimensions of technology use, offering a decolonial feminist perspective on informal economies in the Global South. By applying the Daily Digital framework to the case of home-based women gig workers in Egypt's emerging food tech economy, I demonstrate how women use their socially reproductive knowledges and relationalities to transform technology into a versatile tool. This transformation happens through the experiential, interpersonal and reciprocal use of technology in social and work activities. Women gig workers (re)imagined technology as a versatile tool to gain knowledge, learn and explore, and access resources and services, as well as to navigate family and social norms, connect and engage with customers, and expand their social networks. Technology as a versatile tool is therefore used by women gig workers to navigate and overcome structural, material and social barriers and (re)claim and define their sense of agency and mobility. The Daily Digital framework challenges neoliberal narratives that marginalise women's informal labour and repositions the household as a site of economic innovation and social transformation. By centring the lived experiences of women gig workers, the framework bridges critical gaps in existing literature on the intersections of technology, gender and labour. It highlights the need to analyse informal economies not as peripheral but as central to understanding the dynamics of global digital economies. The Daily Digital framework contributes to feminist theories of labour, agency and technology by emphasising relational and experiential engagements with digital tools. By integrating insights from social reproduction and decolonial feminist theories, this framework offers a more nuanced understanding of how technology is reimagined and mobilised within informal economies.

This research also has practical implications for policymakers and practitioners. While women demonstrate significant agency, these findings also highlight the persistent infrastructural and policy gaps that limit the transformative potential of technology. Addressing these barriers through improved digital infrastructure, community-centred knowledge, and training programs and financial inclusion policies is essential for strengthening women's economic agency. While this study focuses on Egypt, the patterns identified resonate with informal gig economies across

the Global South. I am aware that this is the result of preliminary work, and that more in-depth research needs to address themes and questions that have not been addressed yet at the current stage of the research. Future research could expand the application of the Daily Digital framework to other contexts, uncovering both shared strategies and localised adaptations. Longitudinal studies on the evolving role of digital tools in informal labour practices could provide deeper insights into the sustainability and impact of these innovations. Ultimately, this research highlights the transformative potential of centering women's lived experiences and knowledges in debates about economic agency, technological engagement and social justice.

References

- Abouelenin, M. (2022) Gender, Resources, and Intimate Partner Violence Against Women in Egypt Before and After the Arab Spring. *Violence Against Women*, 28(2): 347–374.
- Agha, M. (2019) The Non-Work Of The Unimportant: The Shadow Economy of Nubian Women in Displacement Villages. *Kohl: A Journal for Body and Gender Research*, 5(2). https://kohljournal.press/issue-5-2
- Assi, R. and Marcati, C. (2020) Work and Women in the Middle East and North Africa: A \$1.5 trillion opportunity. McKinsey and Company. https://www.mckinsey.com/middle-east/our-insights/women-at-work-in-the-middle-east
- Barsoum, G. (2019) 'Women, work and family': Educated Women's Employment Decisions and social Policies in Egypt. *Gender, Work and Organization*, 26(7): 895–914.
- Carr, M., Chen, M. A. and Tate, J. (2000) Globalization and Home-Based Workers. Feminist Economics, 6(3): 123–142.
- Coburn, E. (2019) Trickle-down gender at the International Monetary Fund: The contradictions of "femina economica" in global capitalist governance. *International Feminist Journal of Politics*, 21(5): 768–788
- Flanagan, F. (2019) Theorising the gig economy and home-based service work. *Journal of Industrial Relations*, 61(1): 57–78.
- Galán, S. (2024) Gender-Based Violence in the Context of the Future of Work: A Qualitative Review of the Literature. *Trauma, Violence, & Abuse, 25*(5).
- Ghannam, F. (2011) Mobility, Liminality, and Embodiment in Urban Egypt. *American Ethnologist*, 38(4): 790–800.
- Graham, M. and Anwar, M.A. (2019) The Global Gig Economy: Towards a Planetary Labour Market? First Monday, 24(4).
- Graham, M., Woodcock, J., Heeks, R., Mungai, P., Van Belle, J.P., du Toit, D., Fredman, S., Osiki, A., van der Spuy, A. and Silberman, S.M. (2020) The Fairwork Foundation: Strategies for in a . *Geoforum*, 112, 100–103.
- Grau-Sarabia, M. and Fuster-Morell, M. (2021) Gender Approaches in the Study of the Digital Economy: A Systematic Literature Review. *Humanities and Social Sciences Communications*, 8(1): 1–10.
- Kene-Okafor, T. (2022) The Food Lab, an Egyptian Cloud Kitchen Provider, Raises \$4.5M Pre-Seed for Expansion. Tech Crunch, 18 April. https://techcrunch-com.cdn.ampproject.org/c/s/techcrunch.com/ 2022/04/18/the-food-lab-an-egyptian-cloud-kitchen-provider-raises-4-5m-pre-seed-forexpansion/amp/
- Krafft, C., Assaad, R., Rahman, K. W. and Cumanzala, M. (2024) How do Small Formal and Informal Firms in Egypt Compare? An Analysis of Firm Characteristics and Implications for Formalization Efforts. Review of Development Economics, 28(3), 1292–1315.
- Lugones, M. (2016) The Coloniality of Gender. In The Palgrave Handbook of Gender and Development, edited

- by W. Harcourt. Palgrave Macmillan UK.
- Mahmood, S. (2006) Feminist Theory, Agency, and the Liberatory Subject: Some Reflections on the Islamic Revival in Egypt. *The Finnish Society for the Study of Religion*, 42(1): 31–71.
- Malak, K. and Salem, S. (2017) How Far Does Neoliberalism Go in Egypt? Gender, Citizenship and the Making of the 'Rural' Woman. Review of African Political Economy, 44(154): 541–558.
- Mitchell, K. and Katz, C. (2004) Life's Work: Geographies of Social Reproduction (1st edition). Hoboken: Wiley-Blackwell.
- Nasr, S. (2010) Egyptian Women Workers and Entrepreneurs Maximizing Opportunities in the Economic Sphere. The World Bank.
- Olmsted, J. (2021) Propelling Women into Entrepreneurship in the Arab Region: The Role of Information and Communication Technology (ICT). ESCWA. http://www.unescwa.org/publications/propelling-women-entrepreneurship-arab-region
- Rizk, R. and Rashed, A. (2019) *Trends and Patterns of Women's Enterpreneurship in Egypt.* Economic Research Forum Working Paper Series 1369. http://erf.org.eg/publications/trends-and-patterns-of-womens-enterpreneurship-in-egypt/
- Sadania, C. (2016) Working and Women's Empowerment in the Egyptian Household: The Type of Work and Location Matter. HAL. https://shs.hal.science/halshs-01525220
- Salem, R., Cheong, Y. F. and Yount, K.M. (2018) Is Women's Work a Pathway to their Agency in Rural Minya, Egypt? *Social Indicators Research*, 136(2): 807–831.
- Shade, L. R. (2018) Hop To It In The Gig Economy: The Sharing Economy and Neo-Liberal Feminism. *International Journal of Media & Cultural Politics*, 14(1), 35–54.
- Shea, J. (2020) Global tech and domestic tactics: Egypt's multifaceted regime of information controls. *The Tahrir Institute for Middle East Policy*, 31 January. https://timep.org/2020/01/31/global-tech-and-domestic-tactics-egypts-multifaceted-regime-of-information-controls/
- Smith, L.T. (2012) Research Through Imperial Eyes. In *Decolonizing Methodologies: Research and Indigenous Peoples: Vol. 2nd ed*). Zed Books.
- Taha, M. and Salem, S. (2019) Social Reproduction and Empire in an Egyptian Century. Radical Philosophy, 2.04, 8.
- Wallis, M. (2021) Digital Labour and Social Reproduction Crowdwork in Germany and Romania. *Spheres Journal for Digital Cultures*. https://spheres-journal.org/contribution/digital-labour-and-social-reproduction-crowdwork-in-germany-and-romania/
- Webster, N. and Zhang, Q. (2020) Careers Delivered from the Kitchen? Immigrant Women Small-scale Entrepreneurs Working in the Growing Nordic Platform Economy. NORA Nordic Journal of Feminist and Gender Research, 28: 1–13.
- Wood, A., Graham, M., Lehdonvirta, V. and Hjorth, I. (2019) Networked but Commodified: The (Dis)Embeddedness of Digital Labour in the Gig Economy. *Sociology*, 53.
- Wutich, A., Beresford, M. and Bernard, H.R. (2024) Sample Sizes for 10 Types of Qualitative Data Analysis: An Integrative Review, Empirical Guidance, and Next Steps. *International Journal of Qualitative Methods*, 23.

ACKNOWLEDGEMENT

I would like to express my heartfelt gratitude to Dr Stella Morgana for her invaluable feedback and unwavering support throughout the writing process. I am deeply thankful to the women gig workers who generously shared their lived experiences, stories and dreams, which made this work

possible. A special thanks to my family and friends who provided inspiration and encouragement during this journey.

BIOGRAPHICAL NOTE

LAILA MOURAD is a PhD candidate at York University specializing in gender, labour, and international development through an interdisciplinary lens. Her research focuses on how women gig workers reimagine work, agency and economic justice in the digital age. Laila is the cofounder of the SWANA Feminist Collective, and outside of her academic pursuits, she trains and coaches in kickboxing. [Email: lmourad@yorku.ca]