Platforms and precarity of organizational work

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Introduction

Our digital world is divided among online platforms that affect how we conduct our lives, both privately and professionally. Platforms enable practices that were unimaginable only a few years ago, for instance, conducting highly collaborative and intellectual projects from home offices, or managing armies of freelance taxi drivers through algorithms. Online digital platforms (hereafter called platforms) play an increasingly important role in shaping our practices, with sometimes unintended consequences for how we work (Baptista *et al.*, 2020; Bailey, 2022).

Researchers have documented platforms' role in shaping work in weakly regulated markets such as crowdsourcing, service, and transportation in so-called gig platforms (Stanford, 2017; Choudary, 2018; De Stefano *et al.*, 2021). At the same time, research shows that the "platformized" model of work is no longer confined to weakly regulated markets and is increasingly being copied by more traditional organizations (Faraj and Pachidi, 2021; Jarrahi *et al.*, 2021; Ozalp *et al.*, 2022).

Existing analytical frameworks and platform definitions emphasize reuse, efficiency, innovation, market orchestration, and economic perspectives (Li and Kettinger, 2021). This is partly because platform literature in IS is often about the perspective of the platform owner. Platform workers –employed or freelance –are often seen as anonymous and replaceable "resources," a development that can lead to the neglect of their needs. With the platform model becoming dominant among modern organizations (Gawer, 2022), a *work precarity* lens to analyze platforms, which we adopt in this paper, is increasingly crucial to understanding the sustainability of our digital work practices and the needs of the platform workers.

Our contribution in progress is an analysis of platforms focusing on their direct and indirect impact on work practices. The long-term research question we aim to address is: How do platforms affect the sustainability of our work practices? In this position paper, we want to discuss with the workshop participants whether the lens of work precarity can provide useful analytical tools to address the research question.

Platforms and division of labor

Platforms are defined in different ways by different disciplines (Li and Kettinger, 2021). Most of these definitions, explicitly or implicitly, assume a sharp division between platform *core* and *periphery*. This division is, for instance, evident in the software engineering (SE) perspective (Tiwana, Konsynski and Bush, 2010, p. 675), the innovation perspective (Gawer and Cusumano, 2014), and the market perspective (McIntyre *et al.*, 2021).

This core/periphery division also implies a division of labor. Already in 1968, Conway (1968) articulated his law that says the design of a system will mirror the structure of the human organization behind it. Conway's law cannot be more true than in the case of digital platforms. The role of a clear division of labor is implicit in most platform perspectives (see Table 1). While the SE perspective distinguishes between the SE work to develop the reusable core and the extensible peripheral software plugins, innovation platforms divide the work of innovating between platform owners and a set of complementors in an outsourced "open" innovation ecosystem. From a marketplace perspective, the work is divided between marketplace management –done at the core –and the shop floor work of buying and selling delegated to users through an app.

Table 1: Division of work between platform core and periphery.

Perspective/ Type of work	Work done in core	Work done in the periphery
Software engineering	Develop and operate reusable core functionality, e.g., identity, security, and data management.	Develop and operate complementary functionality in modules and plugins.
Innovation	Develop and operate boundary resources that support innovation in the periphery, e.g., offer platform boundary resources and APIs.	Develop and operate innovative solutions using core boundary resources.
Marketplace	Develop and operate (primarily transactional) functionality to create a marketplace for services and products, e.g., pricing strategies, switching and multihoming cost strategy,	Buy and sell services and products.

This clarification on the division of labor is essential to understand the relationship between platform owners and workers. As theorized by Wallerstein (2004), high-value and high-skill jobs will often move toward the core of a system. This can have implications on how labor and value are divided among platform owners and workers, with consequences for work practice sustainability.

Sustainable work

Our contribution lies in the relationship between the division of labor enforced by platforms and the sustainability of the work practices of platform workers. We find the definition of sustainable development by Holden, Linnerud and Banister (2017) useful. Holden et al. argue that sustainable development means managing three key constraints on human behavior: ensuring social equity, satisfying human needs, and respecting environmental limits. For our research on sustainable work practices, the constraints of ensuring social

equity and satisfying human needs are central. One way to look at sustainable work practices along these constrains is to define work as ranging from *precarious work* to *decent work* to *meaningful work* (see Figure 1).

Precarious work is characterized by "insecurity, such as a low level of regulatory protection, low wages, high employment insecurity and a low level of employee control over wages, hours and working conditions" (Campbell and Price, 2016, p. 315). Decent work is defined by the International Labour Organization (ILO) as "the promotion of rights at work; employment; social protection; and social dialogue" (International Labour Organization, 1999). Meaningful work is "work that is both significant and positive in valence" (Steger, Dik and Duffy, 2012, p. 323).

Our analysis of platforms using a work precarity lens assumes that work precarity decreases –and work sustainability increases –as we move from precarious work to meaningful work. The distinction between the levels can be relative and depends on context. For instance, working for a food delivery platform as a side job might not be regarded as precarious as having such a job as a main source of income (Campbell and Price, 2016). The relationship between the three concepts in Figure 1 is one of our ongoing research topics.
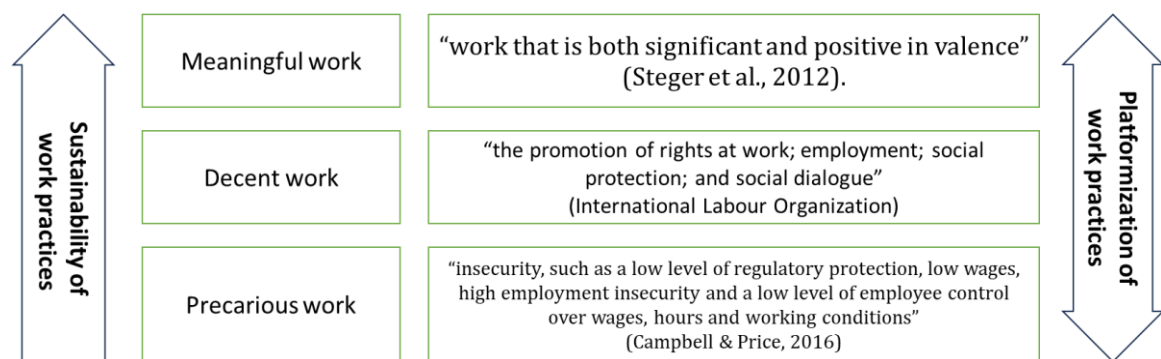

Figure 1: From precarious to meaningful work practices and back.

Platformization and work precarity

We make two arguments related to platforms and work precarity. First, platforms and their affordances can directly impact work precarity, as shown in existing research on platform work (see Table 2 for some examples[1]). This impact can both increase and reduce precarity. Second, platform work is not confined to gig work in weakly regulated markets. Organizational work is increasingly becoming platform work. Therefore, it is interesting to see how platform affordances are applied in different types of work, e.g., in standard employment versus gig work and in highly skilled versus low-skilled professions. This has

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[1] The little space we have in this position paper does not allow us to add more details and references to Table 2. An extended version of the paper will include an in-depth review of the literature.

implications for the sustainability of work practices if we accept that value and skill tend to move towards a platform's core (Wallerstein, 2004; Gawer, 2022).

Table 2: Platform affordances and their impact on work.

Characteristics of work	Platform affordance affecting those characteristics
Meaningful work	Platforms can lead to the atomization of work tasks, eliminate collaborative work, reduce worker autonomy, and lead to deskilling.
Decent work	Platforms can lower the threshold to become employed and provide flexibility regarding the choice of working hours and customers. Gig platforms can be combined with standard employment.
Precarious work	Platforms can eliminate standard employment relationships, which can read to the errosion of worker rights.

Discussion

The ideas in this paper come from our research on real-world cases of platformization in service organizations. Through such cases in recent years we have come to observe, similar to Ozalp *et al.* (2022), the strong influences that platform vendors and technology providers have on how their customers transform their work practices. These transformations increasingly happen according to the value-laden interests of these vendors, sometimes without any apparent benefit for the customer organizations and their employees and customers. Although such transformations have organizational and societal impacts, our research is currently focusing on how employees' work practices are affected by this platformization. In our future research, we intend to connect our empirical observations with theories from literature on work precarity and platforms.

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