Meaningful Work Canvas: a visual tool for service designers

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Abstract

While "empathy" is a usual reference in design discourses and methodologies on design, the main focus may be how designers can increase their sensibility to the demands of the clients or users on future service provisions. Nonetheless, the consideration of the voices and presence of workers constitute a pressing demand for service design theory and practices, still almost neglected in the field. This paper presents the Meanignful Work Canvas, a visual tool developed to help designers create from scratch services that facilitate providers to pursue work meaningfulness. It blends characteristics from Job Design and Job Crafting literature. The two first authors conducted workshops with a post-graduate class to codesign the tool with the students. The paper presents a service created by a student from this class, the third author, to illustrate how the Meaningful Work Canvas works. Besides creating worker-centric services, the tool was able to identify some patterns regarding how workers perceive their jobs and to educate the students at the workshop on what influences meaningful work. Meaningful Work Canvas represents an initiative to fill the gap in Service Design literature about creating services centred on workers.

Keywords: Meaningful Work, Service Design, Workers Health, Meanings of Work

Introduction

While "empathy" is a usual reference in design discourses and methodologies on design, the main focus may be how designers can increase their sensibility to the demands of the clients or users on future service provisions. User-centric service designers may remain dangerously close to being complicit in perpetuating economic systems which are at the root of social inequality and racism (Penin & Soruco, 2021). There are many services whereby workers earn low wages and face precarious

conditions or imminent unemployment, to which the term "servitude" would be more applicable.

The consideration of the voices and presence of workers constitute a pressing demand for service design theory and practices. This paper intends to contribute with one aspect: work meaningfulness. How could we support service designers to include considerations of work meaningfulness in their design processes and results? Our answer was to develop a visual tool to support designers in getting familiar with a set of concepts and theories related to the field and facilitating the application in their projects.

The search for meaningfulness is a fundamental human need (Barrett & Dailey, 2018). The lack of meaningfulness is seen as a "serious psychological deprivation" (Martela & Pessi, 2018, p.2) associated with depression and suicide ideation, not only due to its intrinsic outcomes but also due to a contemporary pressure to live authentically (Martela & Pessi, 2018). Work is one of the key domains whereby individuals derive meaningfulness (Barrett & Dailey, 2018; Martela & Pessi, 2018), given this centrality in people's lives (Barrett & Dailey, 2018) Besides protecting employees' health, meaningful work may act as the most potent mediator between work characteristics and outcomes (Barrick et al., 2013) such as commitment and creativity.

According to Rosso and colleagues, work is meaningful if the roles individuals play at work hold a great amount of significance to them (Rosso et al., 2010). Furthermore, meaningful work has multiple dimensions and is a comprehensive construct, which means that this experience is stronger when the multiple dimensions are balanced and simultaneously present (Bailey et al., 2018).

The importance of meaningful work described in this section led scholars to develop an interest in investigating how it could be fostered. This stream of research is split into two major traditions, depending on who is acting to facilitate meaningful work. *Job Design* represents a number of theories considering that the organization is in charge of fostering work meaningfulness for their employers (Dwivedula et al., 2017). In the first decades of meaningful work research, scholars speculated that different types of work could offer more or less meaningfulness due to their characteristics. Consequently, the experience of meaningful work was a matter of adequately designing work characteristics, and organizations should make suitable choices in terms of, for example, autonomy to facilitate their employees to have this experience.

In the first years of the 21st century, however, researchers acknowledged workers' active role in pursuing meaningfulness in their work (Cai et al., 2018). In opposition to the job design tradition, *job crafting* considers that workers are in charge of fostering work meaningfulness. A seminal study (Wrzesniewski & Dutton, 2001) presented job

crafting as the external and internal actions endured by workers to change job characteristics.

The present study aims to show the Meaningful Work Canvas – a visual tool developed to create from scratch services that facilitate providers to pursue work meaningfulness. To meet that goal, this tool will have characteristics from both job design and job crafting traditions. The paper is organized as follows. The literature review section will discuss current status of workers' well-being in service design literature, outline the constructs of job crafting and job design in detail, and present the Comprehensive Meaningful Work Scale that grounded the Meaningful Work Canvas. Then, the methods section will explain how the tool was developed and how the workshops with postgraduate students were conducted. In the results section, the service designed by one of the students, the third author, will be an example to illustrate how the Meaningful Work Canvas works. The discussion, conclusion and limitations sections enclose the paper.

Literature review

Workers and Service Design

Service design theory and practices evolved in the last decades to attend clients' demands, however the necessities from workers are a gap in this field, representing a rather worrying issue as "designing services is in great part designing service work" (*ServDes.2020 Tensions, Paradoxes and Plurality Conference Proceedings*, 2021, p.611)

The Boolean "TI=(service*) AND TI=(design*) AND TI=(work*) NOT TI=(workflow*) NOT TI=(workshop*)" returns 47 papers published between 2017 and 2013 in Web of Science platform. Three papers presented services intending to improve workers' health (Deady et al., 2017; Dulli et al., 2019; Metcalf et al., 2023), positioning workers as the clients of such services; no study proposed services focusing on the wellbeing of its providers. Two other studies discussed interventions at work environments to enhance workers' well-being (Davis et al., 2019; Nagler et al., 2021).

Regarding ServDes, from the 153 full papers in the proceedings of 2016 and 2018 meetings, no one has the terms "work" and "worker" on the title or in the keywords. The exception from this list is a short paper presented in the 2016 edition, "*Towards sustainable impact after University-Government design projects - Case of worker services in Singapore*", whereby the workers would be clients of a service developed to "empower workers with knowledge of their rights and employment rules, and to

drive take-up of self-help services when dealing with the Ministry" (*Service Design Geographies, Proceedings of the ServDes2016 Conference*, 2016, p.539).

ServDes 2020 had a workshop to help practitioners perceive workers' demands and needs while designing services, "The Workers Tarot. A tool for designer-worker solidarity", presented by Lara Penin and Antonia Yunge Soruco. The tarot was not conceived to directly designing new worker-centric services, but to make designers reflect upon the consequences their projects have on workers while developing services (Penin & Soruco, 2021). The tool adapts five elements from "Tarot de Marseille". The major arcana are the multiple service workers archetypes, and the four suits are the artifacts used by service workers, theories about work and workers, historical movements fighting for workers' rights, and trends affecting the present and the future of work (Penin & Soruco, 2021).

Comprehensive Meaningful Work Scale

The influence from positive psychology triggered the development of a massive number of scales intending to measure and establish antecedents and outcomes from meaningful work. One of the most recent and robust scales is the *Comprehensive Meaningful Work Scale* (CMWS), developed by Lips-Wiersma and Wright (Lips-Wiersma & Wright, 2012), which considers work meaningfulness as a process derived from experiencing wholeness or coherence of the multiple meaningful work dimensions. This sense of wholeness, according to the authors, is a "dynamic process" (Lips-Wiersma & Wright, 2012, p.658) as the worker makes conscious choices to "continue to integrate different aspects into a coherent whole" (Lips-Wiersma & Wright, 2012, p.659). Therefore, they aimed to develop a scale that assessed comprehensively meaningful work dimensions and how they may interact with each other. In opposition to the positive psychology scholarship, CMWS acknowledges the dynamism of the process of deriving meaningfulness by describing two major tensions: tensions between aiming to meet the needs of others and aiming to meet the needs of the self; and tensions between the need for being (reflection) as well as the need for doing (action).

The CMWS scale has four central dimensions, described in a canvas-like framework. Developing and Becoming Self refers to how the work perceives developing herself and building her identity through work. As it depends on what each worker considers more critical, this dimension can represent desires like "wanting to be a good person," "getting the self out of the way," "being through to oneself," or developing "patience" or "detachment" (Lips-Wiersma & Wright, 2012).

Unity with others refers to the meaningfulness workers develop from working with other human beings. A sense of shared values and a sense of belongingness are two

paths that could impact this dimension. Unity should be achieved in diversity, not represent uniformity.

Expressing full potential refers to the opportunities to experience meaningfulness by displaying talents and creativity and having a sense of achievement. Service to others represents the meaningfulness of making a contribution to the well-being of others, society, or the environment.

The CMWS has two main axes, which reflect two tensions regarding meaningful work: being-doing and self-others. *Being* refers to how workers reflect on their relationships with other entities, not only with their colleagues. *Doing* represents all results from collective and individual worker's practices. *Self* is the worker driving some initiative toward herself, while *others* regard the relationship with colleagues, bosses, clients, and society.

Job Crafting and Job Design

Job Design is a tradition on research that investigated how the characteristics from a job could impact in several workers outcomes. A hallmark in this literature comes from Herzberg's Motivation-Hygiene Theory which considered that to improve employee performance and satisfaction, job characteristics should be enhanced rather than simplified, as Taylor believed (Oldham & Fried, 2016). During the 1970s, Hackman and Oldham developed the Job Characteristics Theory (JCT), listing five characteristics of attention to enrich jobs: skill variety, task identity, task significance, autonomy, and job-based feedback. Skill variety represents how different the activities in a job are and the skills needed to realize such activities. Task Identity is how an individual perceives herself in the products of their work as her activities build complete pieces of work rather than only small blocks. Task significance is the degree to which the individual's activities have an impact on society, which could be the local community, the whole society, or the environment. Autonomy is the degree of freedom and independence in matters like schedules and activities an individual has at work. Finally, job-based feedback is the degree an individual has feedback regarding their performance and effectiveness at work.

Despite the almost half-century from Hackman and Oldham studies, Job Design literature keeps some of the limitations presented in JCT. First, as the power of changing job conditions is in the hands of the managerial staff, it falls short in dealing with nuances among the different demands and desires that a large set of employees may have. Second, the role of social interactions is a neglected domain in job design (Hernaus et al., 2021). Third and last, this tradition is deeply rooted in work activities, paying little attention to other characteristics in work environments, like the organizational culture and how work impacts employees' identity (Oldham & Fried, 2016).

In turn, Job Crafting represents the processes enacted by individuals to change their work characteristics to improve their meaningfulness. The seminal study on Job Crafting (Wrzesniewski & Dutton, 2001) considered that workers engage in job Crafting by changing their three work boundaries: task boundary, relational boundary, and cognitive boundary. Task boundaries are the scope of the activities associated with a specific job position. Individuals could expand or reduce these boundaries to make work more meaningful, as in the example of engineers who embrace tasks beyond their scope to perceive themselves as having more control over their work and fostering new professional identities. Relational boundaries represent the worker's interactions' content and targets (who). Changing relational boundaries makes individuals build better connections with colleagues and customers and perceive new identities at work. For example, cleaning staff from a hospital that only interacted only with the medical crew passed to interact with patients' relatives to offer emotional support in dreadful moments. This shift made employees develop caring identities through work, bringing more centrality to workers' roles in the organizational structure. Cognitive boundaries are more abstract and reflect how individuals perceive their tasks and work. For example, individuals who worked in restaurants used some tips they developed instead of just following directions provided in the recipes, shifting from perceiving themselves as only recipe-followers to culinary artists.

The job demands-resource (JD-R) model is a second approach to Job Crafting. According to this model, Job Crafting represents the activities individuals enact to balance their demands with the resources available to them (Tims et al., 2012). The demands are aspects of work that impose individuals to use their physical and/or psychological resources (Tims et al., 2012). Resources are the tools workers use to make their tasks, and reduce their demands and their physical/psychological costs, besides aspects that foster personal growth and professional development (Bakker et al., 2012).

Job Crafting interventions have a similar fashion represented by four stages (Costantini et al., 2020). Before getting in touch with the employers targeted by the intervention, organizers map and explore key work characteristics. Then, a presentation shows the concepts of Job Crafting to employees to teach how they can identify opportunities for job crafting. In the third state, employees build individual goals they will attain during a specific period, usually one month. The last stage evaluates if and how individuals achieved the goals established and how they can enact job crafting after the intervention.

A significant limitation of the Job Crafting interventions is little attention to how the crafting process may be conducted collectively. In most interventions, the solo opportunity to team-build the process is during the goal-setting process, whereby

individuals can refine their goals with colleagues. Nonetheless, the existence of "collaborative crafting" was discussed in some studies (Chen et al., 2014; Leana et al., 2009).

From the standpoint of Design Science, in Job Design, organizations design the work meaningfulness, while in Job Crafting, individuals design their meaningfulness. In other words, Job Design is a top-down strategy, while Job Crafting is a bottom-up one, which makes job crafting more dynamic than Job Design.

The Meaningful Work Canvas intends to go further than Workers' Tarot and represents a tool for designers directly develop services centered on workers' demands and needs. The Canvas is built upon the CWMS and blends the characteristics from Job Design and Job Crafting. To the best of our knowledge, there is not any study on Service Design literature providing a tool to directly designing services aiming to improving workers' well-being. Our study aims to fill this gap.

Methods

Developing the visual tool

The two first authors began the process by choosing CMWS as the framework for meaningful work which would ground the tool. The first reason is that CMWS considers meaningful work as a comprehensive, multidimensional, and dynamic construct, reflecting the state-of-the-art of this literature (Bailey et al., 2018). The second reason was the canvas-like representation of CMWS, as presented in figure 1. The four quadrants represent meaningful work dimensions described in the literature review.

As described in the literature review, the CMWS has two axes: being-doing and selfothers. *Being* represents how individuals perceive their relationships with other entities, while *doing* is associated with day-to-day work practices. *Self* stands for initiatives a worker drives toward herself and *others* reflects initiatives toward colleagues, clients, and society. The four quadrants represent the dimensions *developing the inner self*, *unity with others*, *service to others,* and *expressing full potential.*

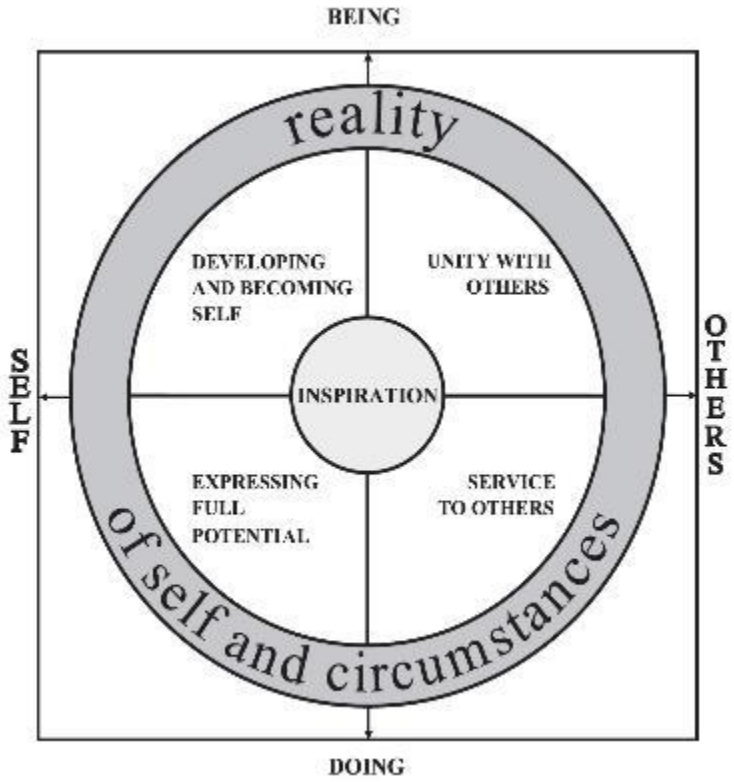

Figure 1. The *Comprehensive Meaningful Work Scale* (CMWS).
Source: Lips-Wiersma & Wright, 2012.

To make CMWS useful to the ends of this design project, the two researchers shifted the definitions of the four quadrants. Quadrant #1 is the *doing-self*, renamed to *doing for the self*, which discusses how the worker builds herself as a worker. In this quadrant, the designers will evaluate opportunities workers have to develop their skills and express their talents if employees have autonomy and how work influences perceptions of self-efficacy.

Quadrant #2 is the *doing-others,* renamed to *doing for the others*. This quadrant evaluates how a worker's activities have an impact on colleagues, customers, and society, represented by her clients. In addition, this quadrant aims to understand if the worker can perceive such an impact.

Quadrant #3 is the *being-others*, renamed *relationship with others*. This quadrant assesses the relationship between the worker with colleagues, bosses, and customers. This quadrant investigates belongingness, feedback, and if the individual feels comfortable at work with colleagues and customers. This quadrant also evaluates if the individual builds her identity upon all those relationships.

Quadrant #4 is the *being-self*, renamed *relationship with the self.* This quadrant aims to understand if the worker is coherent with their values and beliefs at her job and how she builds her identity during their work activities. It differs from quadrant #1, as the latter refers to the individual as a worker, that is, her skills and her perception of selfefficacy, and quadrant #4 deals with personal traits.

The last element of the tool is the *disabling issues*, which has no equivalent in CMWS. The disabling issues represent how negative aspects of work, like toxic environments, overwork, and lower wages, can *deflate meaningfulness,* to use the term employed by Barreto and colleagues in a recent study (Barreto et al., 2022).

Designers can act in the four quadrants in different ways. In quadrant #1 and quadrant #2, designers employ direct design actions. In quadrant #1, the designer may project opportunities for workers to express their talents and develop themselves through the collective. In quadrant #2, designers should launch artifacts for workers to perceive how they can impact colleagues, customers, society, and the environment.

Quadrant #3 are subject to facilitating design actions, as the designers cannot manipulate the relationship between workers and colleagues and between workers and customers but create opportunities for these relationships to emerge and flourish. In this facilitating design actions, designers may create solutions that stimulate belongingness, recognition, and collective identity creation.

Quadrant #4 is non-designable, as the designers cannot (or should not) influence workers' values, beliefs, and worldviews. Nonetheless, this quadrant is essential to the tool, as, in this section, researchers will try to access what is hidden about the workers to design with empathy. The Figure 2 represents the modified CWMS model and the possible design actions for each quadrant.

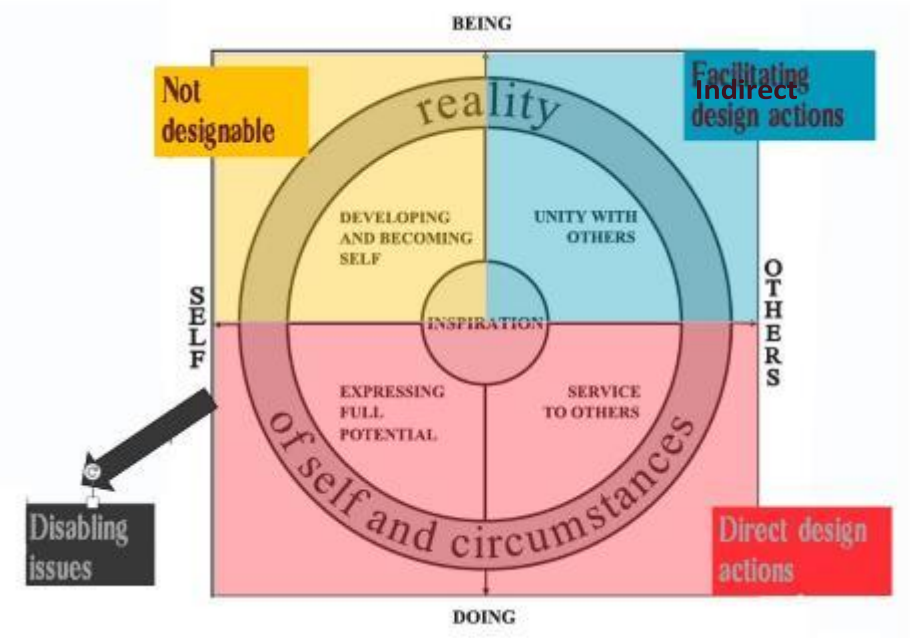

Figure 2. The CMWS model and possible design actions for each quadrant.
Source: adaptation from Lips-Wiersma & Wright, 2012

The workshops

The two first authors conducted workshops in a postgraduate class with eight students for three months. Students codesigned the tool and were free to go beyond the protocol developed during the classes, given the experimental characteristics of the classes and the implementation. Figures 3 and 4 indicate the codesigning process during the classes.

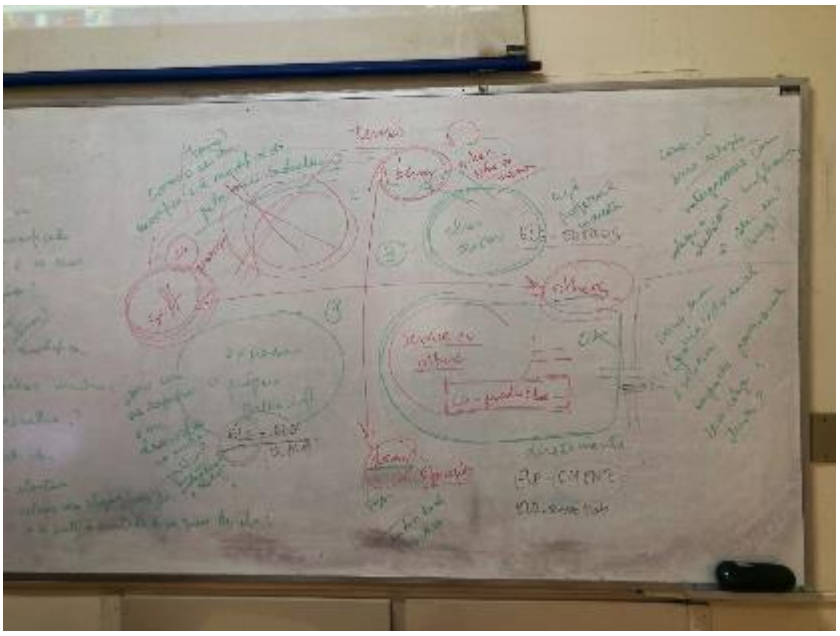

Figure 3. Codesigning the tool with students

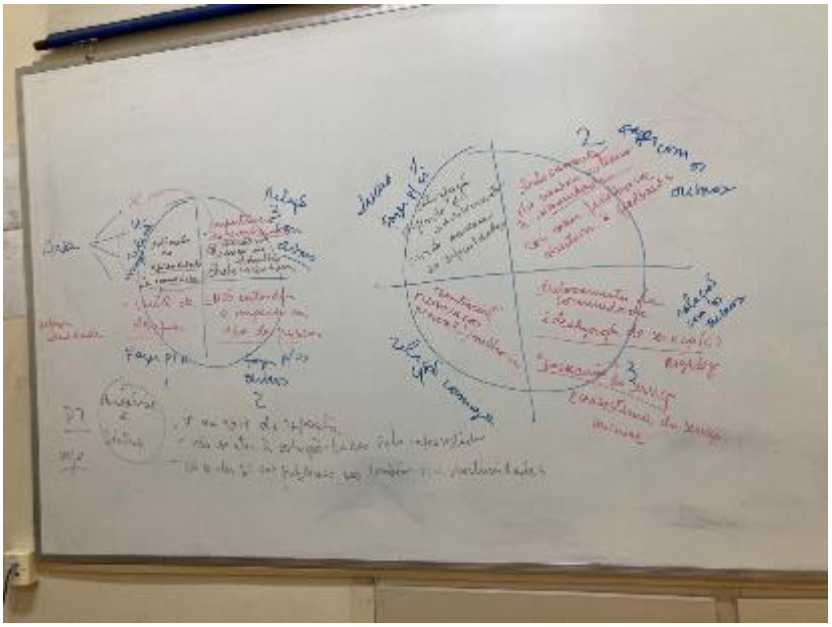

Figure 4. Refining the tool with students

Immersion protocol

The immersion protocol collects two kinds of data: observation at the workplace and interviews with employees. This immersion should sensitize the designers to design work processes with dignity and to generate empathy with the workers' contexts.

There are three main stages in the protocol. First, the designer may find situations of work that are similar to the project she/he intends to design. For example, if the designer aims to project a solution to foster work meaningfulness for NGO workers, she/he has to investigate workers in this milieu.

In the second stage, the designers may observe the participants' working conditions and context. Again, visiting the workplace is the more assertive way to accomplish this task; however, not all students could do this during the discipline. To work around this limitation, the designers should ask workers to register their own workplace, for example, taking photos of their workplaces or how they act in specific moments of their work routine.

The last stage is conducting interviews with participants, running the four quadrants to sensitize the designer to the multiple dimensions of work meaningfulness and sharpen their skills to design the service. The designer may ask for detailed answers from participants, and the latter may illustrate their solutions with examples of daily routines. The protocol set an order to run the quadrants.

Before running the quadrants, designers should ask the worker the following question to acclimate the interviewee: "Describe your job (what do you do at work?)". Then, the students should ask questions from quadrant 1 to quadrant 4 and close the interviews by asking participants about the disabling issues.

Results

The Meaningful Work Canvas

One of the students, the third author, synthesized the codesigning process by providing a visual refinement for the tool and also included some innovations. For example, she changed the quadrants upside down because, in her opinion, this was a more suitable visualization as put in the upper side the dimensions whereby the designer has direct action, a suggestion the two first authors accepted. She also included the interview questions beside each quadrant and organized the theoretical concepts in a way to be quickly reminded by the designers.

The last version of the tool, proposed by the third author, is presented in figure 5.

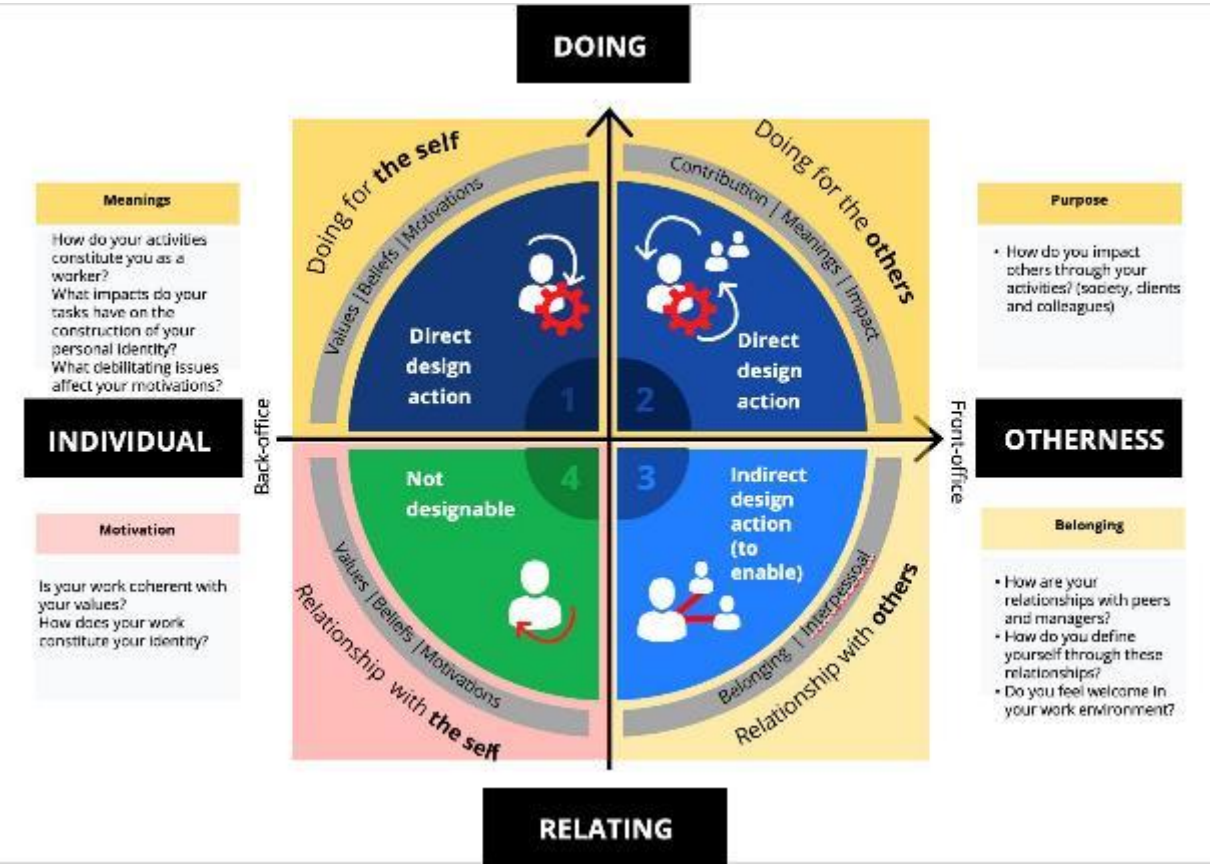

Figure 5. The Meaningful Work Canvas.
Source: authors.

Another contribution she proposed was picking some quotes from interviews and presenting them in insight cards to describe how quotes became insights in a more didactic and summarized way (figure 6).

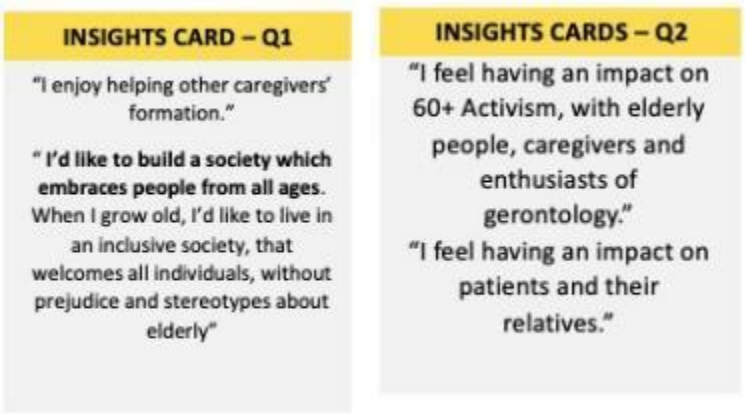

Figure 6. Two insight cards

Using the canvas: example

Each of the eight students presented one service that aimed to foster work meaningfulness for its providers. Therefore, those services must enhance questions regarding the four quadrants and address problems associated with the disabling issues. To illustrate the results, this article will present one of the services.

The chosen project is a platform to provide caregiving services for 60+ individuals. The third author interviewed two caregiving professionals focused on attending 60+ individuals and created two personas: Maria and Ana. Maria attends to 60+ patients, is an activist for disseminating knowledge on caregiving to older adults, and is a Ph.D. student. Ana is a nurse who attends to 60+ patients and is making other graduation to shift her career. The two personas presented both questions that fostered work meaningfulness and disabling issues.

For Maria, contributing to elderly well-being, being recognized by her peers, and developing knowledge of elderly care were questions that fostered work meaningfulness. On the other hand, being unable to set limits for her customers' relatives' solicitations and her difficulty fixing a prince for her services represented disabling issues. Nonetheless, Maria loves being a 60+ activist and perceives her work as a calling.

Ana feels having an impact on her patients and their families, which fosters work meaningfulness. Like Maria, Ana has difficulties on setting limits, and sometimes she perceives her privacy as being invaded by her customers once the service is offered at the patient's home, in his family, and daily context. Besides, she does not feel adequately recognized for her work, either existentially or financially. She intends to shift her career, and her main reason to keep working is to earn a livelihood.

The third author developed insight cards presented in figure 4. In observing the two cards, there is a relative overlap between quadrant #1 and quadrant #2. Both quadrants express the desire to build a society that embraces older adults through caring activities and spreading knowledge on gerontology as a way of activism.

After filling the quadrants, the third author reframed the design challenge using the following question, translated into English by the authors: "How to overcome the obstacles of setting limits and stimulating relationships between caregivers, elderly patients, and patients' relatives?"

To meet this goal, the third author created a service called Quali.Vita. Quali.Vita is a health service that improves elderly well-being, connecting families and customers to workers through an online platform.

Quali.Vita has an algorithm capable of setting a price for the healthcare service based on the characteristics of the plan selected by the client: basic, intermediate, or advanced. The plan modality considers the duration of the service, how many days of the week the service would be provided, and how many specialists would be involved in the service team. These plans bridge the problem of establishing a price tag for the service, a question that could deflate meaningfulness for both personas. In addition, this feature provides a contract between providers and clients with a well-defined work schedule, addressing the problems of setting time limits to the service of caregivers and the providers' lack of privacy.

The service has feedback mechanisms either between clients and caregivers or between the caregivers. Clients evaluate the professionals in the following questions: service quality, availability, technical knowledge, and positive impact on the customer, and they can make remarks about the service provided by the caregiver. This feature addresses the need for recognition expressed in the interviews, as having an impact fosters work meaningfulness to them. In the evaluation screen, customers can indicate professionals to others addressing the recognition question and the low wage problem identified in interviews.

Quali.Vita offers the full description of the professionals who attend to each client as a mechanism to facilitate knowledge sharing between them. Spreading knowledge was one path of impacting work meaningfulness, described in the persona Maria.

Discussion and conclusion

The present study developed the Meaningful Work Canvas, a service design tool capable of fostering work meaningfulness and blocking situations that could deflate this experience, blending influences from Job Design and Job Crafting traditions, as the tool had dimensions subjected to direct design actions and to facilitating design actions.

The double influence can be observed in the Quali.Vita feedback mechanism because, on the one hand, the organization provides a space whereby it invites the service providers and the customers to evaluate in several quantitative and qualitative fields. Nonetheless, it is up to the service providers and the customers to foster other people's work meaningfulness, depending on the feedback's quantity and quality.

The feedback mechanism also illustrates another limitation of the models presented in this paper: the lack of collaborative construction of work meaningfulness. The meaningfulness experienced by individuals toward how they impact colleagues and

customers is co-constructed between providers, customers, and peers. Quadrant #2 and quadrant #3 of the tool invite designers to project features whereby professionals establish a collective meaning(fulness)-making process.

The overlap between interviewees' statements in quadrant #1, quadrant #2, and quadrant #4 emerged when the professionals interviewed had a strong calling orientation, either modern or neoclassical (Thompson & Bunderson, 2019). To these professionals, it is imperative having an impact on people's lives or the environment. For them, how individuals build themselves as workers, which is the theme of quadrant #1, is through how they impact customers' lives and society, a theme from quadrant #2. Likewise, this process influences how workers build themselves personally (and not professionally) in work, an inquiry from quadrant #4. The researchers expect this pattern to frequently happen when designers project services to workers with calling orientations through work. Therefore, the Meaningful Work Canvas emerges also as a tool to evaluate how individuals perceive their work.

This study had a didactic role in making students more familiar with meaningful work dynamics. The second persona Ana presented the importance of balance between meaningful work dimensions. She valued the impact of her work in the world, but the lack of peer and financial recognition made her pursue another career by making another graduation. The balance between dimensions is a point of attention for managers and employers, which aim to foster meaningful work experiences in their employees, and corroborates the contemporary understanding of the comprehensiveness of meaningful work.

The current version of the Meaningful Work Canvas is not trivial to employ. It includes many definitions and concepts from the literature in each quadrant; therefore, it requires some training before use.

The researchers observed that Meaningful Work Canvas had developed students' knowledge of meaningful work because the latter could identify how their interviewees derived meaningfulness and develop strategies to foster this experience or block elements that hinder meaningful work. The tool could advance the intentions presented on Workers' Tarot, as it did not only sensitized designers with themes important to workers, but provided tools to designers and workers codesign meaningful work. Future studies may develop new tools for worker-centric design and test the current tool in different contexts, like corporative organizations or in the public sector. This study represents an initiative to fill the gap in Service Design literature about creating services centered on workers.

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