

---

# Continuous and Autonomous Job Crafting Support in the Home Environment

**J. J. Laenen**

Eindhoven University of

Technology

Den Dolech 2, 5612AZ, The

Netherlands

[j.j.laenen@student.tue.nl](mailto:j.j.laenen@student.tue.nl)

Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honored. For all other uses, contact the owner/author(s).

*CHI 2020 Extended Abstracts, April 25–30, 2020, Honolulu, HI, USA.*

© 2020 Copyright is held by the owner/author(s).

ACM ISBN 978-1-4503-6819-3/20/04.

DOI: <https://doi.org/10.1145/3334480.XXXXXXX>

*\*update the above block & DOI per your rightsreview confirmation (provided after acceptance)*

## **Abstract**

Job crafting can be a useful tool to improve one's job. And although different interventions have been developed to support employees in their job crafting process, they have limitations regarding their suitability for continuous and autonomous job crafting in the home environment. This study aims at creating a process which facilitates continuous and autonomous job crafting in the home environment. An application called the Job Crafting Journey was tested for two weeks with 10 participants. The results provide several

factors which can contribute to autonomous and continuous job crafting support. From here, a new continuous action-reflection job crafting process is proposed, which can be implemented in digital job crafting applications.

### **Author Keywords**

Job Crafting Support; JD-R; work-home balance; digital job support

### **CSS Concepts**

H.4.m. Information systems applications: miscellaneous  
H.5.2 Information interfaces: User Interfaces; H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous;

### **Introduction**

Job crafting (Wrzesniewski, & Dutton, 2001) is the activity by which an employee designs the activities within one's job. Especially now, where the remote working trend keeps increasing (Jarrar & Zairi, 2002; Ouye, 2011), and therefore our whole working context changes, job crafting can be a relevant tool for employees to keep in control of their work situation. Traditionally, the work context influences the home context and vice versa (Ten Brummelhuis & Bakker, 2012). However, when working from home, the work context and home context start overlapping, which can remove the barrier between home activities, and work activities.

Several interventions have been designed to support job crafting, like the Job Crafting Intervention by Van den Heuvel, Demerouti, and Peeters (2015). Here, employees learn the principles of job crafting during a workshop, after which they have a four-week executing

period and a reflection session. However, workshop-based interventions have several limitations. People are dependent on when a workshop starts, how long it takes, and how many people can participate. This limits the scalability, and personal freedom of participants in their job crafting process.

The aim of this study is to explore how employees can be supported in their job crafting process at home, without the need for human intervention, and while retaining full autonomy within this process. From this, the research question is as follows:

*How can a job crafting application facilitate continuous and autonomous job crafting behavior for employees working from home?*

### **Design: the job Crafting Journey**

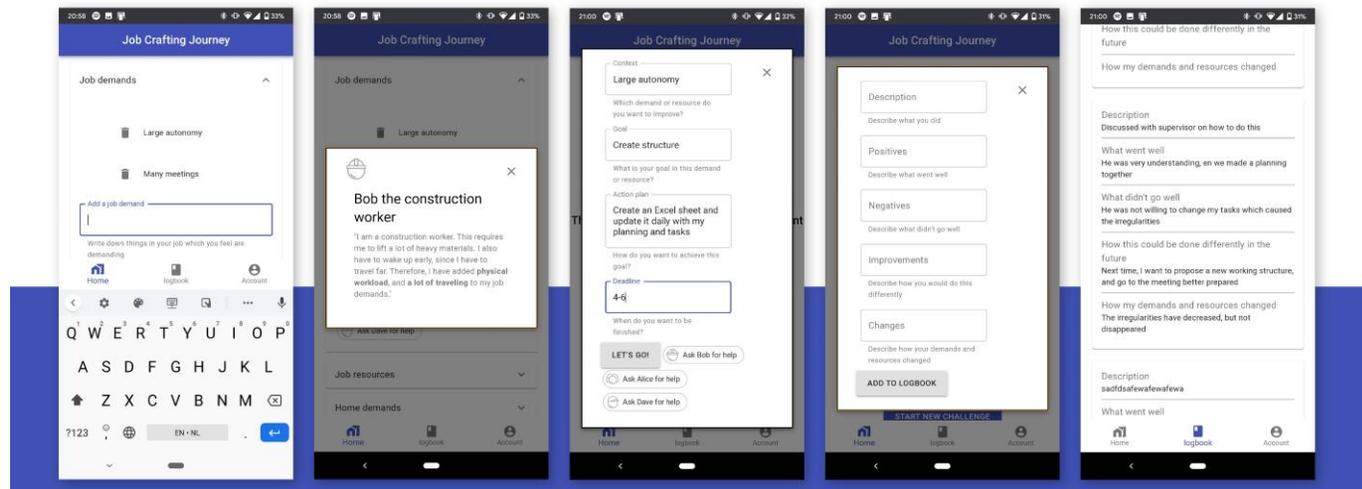
The Job Crafting Journey is a tool to support people in their job crafting process, based on the job-demand resources (JD-R) model, (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001), and the work-home resources model (Ten Brummelhuis & Bakker, 2012). The JD-R creates an overview of one's job demands and resources. Demands could be e.g. physical, mental, or emotional, like heavy lifting or abstract problem solving. Resources could be e.g. a high level of autonomy, or a good salary. The demands and resources are related to employee's motivation and strains, and from there factors can be found which influence burn-out and work engagement (Demerouti & Bakker, 2004). This model is extended to the home context in the work-home resources model.

The tool is shown in figure 1 and will be explained in the next paragraphs. In the tool, users can indicate the

demanding factors in their work and home context, and the resources which support them (screen 1). All demands and resources are divided into four expandable menus. During the whole process, participants are guided by three characters. These characters exemplify three different living and working conditions, based on either physical, mental or emotional demands. One is a construction worker who lives with a family, one a psychologist who lives alone, and one is a student who lives in a student house. For every step, they can click on a character for an explanation (screen 2). All three characters indicate at

resource which should be changed, what they want to achieve, what their action plan is, and what the deadline is.

When a goal is finished, they can tap the “write reflection” button, after which a new form appears (screen 4). Here, the user can write a reflection to be able to formulate futures steps. This reflection largely uses the same steps as the Generic model of self-regulation and goal attainment (Grant, 2003). All reflections can be found in a chronological digital logbook (screen 5).



**Figure 1:** The Job Crafting Journey, including the five screens as described in the text.

every step what they have done, based on their personal situation.

Afterwards, users can start a challenge by tapping the “start new challenge” button. A form appears (screen 3) Here, they can set goals by defining the demand or

## Methodology

The tool was tested for two weeks with 10 participants between 20 and 60 years old. 2 participants were male, 8 were female. All of them had office jobs which required frequent social contact. Every week, the participants got two reminders to use the tool.

Additionally, they were interviewed at the beginning of the experiment, after one week, and again after two weeks about their work-home experience, and their experience with the tool.

## **Results**

The interviews were analyzed with a thematic analysis (Braun & Clarke, 2012). From here, several themes were found, related to autonomous and continuous job crafting, and application properties.

### *Autonomous job crafting*

To provide support for autonomous job crafting, participants desired a combination of theory and examples as a guide. Additionally, they desired feedback in the form of progress updates, or feedback on their performance. Participants also desired to set reminders themselves, based on their workflow. Additionally, they wanted to fine-tune and prioritize their demands and resources, to indicate how prominent they were in their work or home situation.

### *Continuous job crafting*

Continuous job crafting consists of factors which allow participants to implement job crafting in their daily life as a continuous process. It is divided into three sub-themes: Continuous action-reflection journey, natural link between demand & resources and goals, and seamless integration into workflow. Regarding the whole process, they desired a clear link between formulating a demand or resource, creating and executing an action plan, reflecting, and continuing with a next goal. Related to this, participants wanted to be able to quickly use the tool in-between events to integrate it in their workflow. Additionally, some

participants desired a deeper integration, for example by implementing the tool in Outlook.

### *Application properties*

Above results were reflected in the properties of the tool. To integrate the application in their workflow, participants desired a simple interface with a quick overview of actions which needed to be performed. Additionally, they wanted to be supported by (interactive) media, to explain the concepts and to provide feedback.

## **Discussion**

Based on the results, a new job crafting support process is proposed. This new process is based on quickly formulating, executing, and evaluating one's personal context and goals. While current interventions like the job crafting intervention by Van de Heuvel et al. (2015) rely on an introduction session, which is followed by an executing session, and finally a reflection session, I propose that for a continuous and autonomous job crafting process, these steps should become smaller and more frequent.

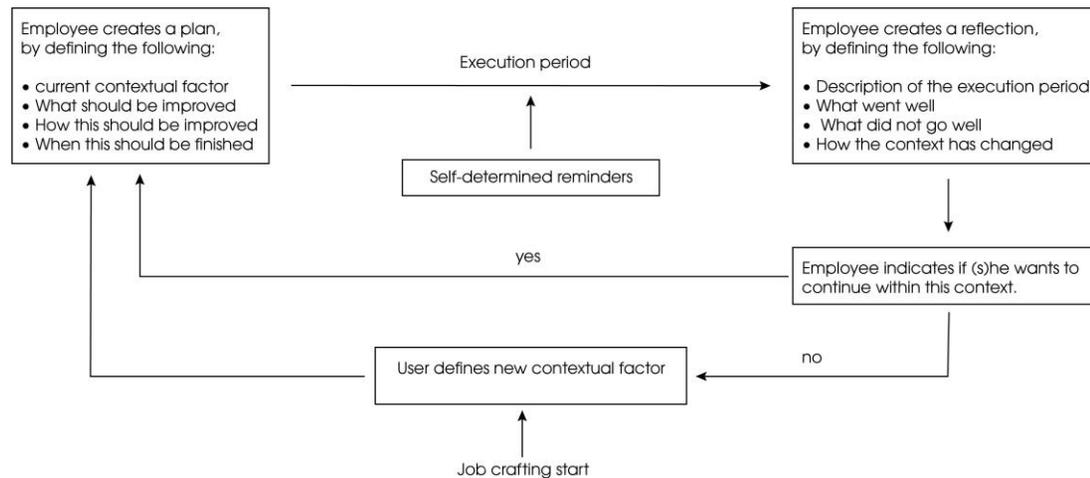
From the interviews it became apparent that filling in the demand and resources resulted in two bottlenecks: the time required to fill these in was a barrier to start with the job crafting process. Afterwards, selecting a demand or resource to work on posed a second bottleneck, since it was hard to prioritize. Both bottlenecks can be eliminated by asking employees to think of one possible job or home factor which they feel need improvement, on which the job crafting plan follows directly. Within the plan, users indicate an aspect of their current context (demands or resources) they want to work on, what they exactly want to

improve, how they want to improve this, when they want to be reminded, and when they want to be finished. This way, employees do not have to choose, and the process to start job crafting is significantly shorter. When a goal is completed, the employees should directly reflect, instead of waiting for a reflection session. Users can then choose to build further on an existing demand or resource with a new challenge or create a new one by starting a totally new challenge.

By ending this reflection with a new goal, the job crafting process can be continued in an organic way. By implementing this new structure, instructions and

doubts regarding their progress, or how they approach their challenges. This can be in the form of a coach, but also by providing feedback (e.g. comparison to others, or an overview of one's progress overtime) in a digital application, and by providing general theory and examples. The process is displayed in figure 2.

To translate this process to a digital application, a good opportunity is to look at how it can be implemented in one's digital workflow, to account for the remote work location. In this digital workflow, the application should be able to bring attention to the users at the right moment, without disturbing the user for a long period



**Figure 2:** the autonomous and continuous job crafting process

feedback for the job crafting process can be tailored at what the employee is working on in that given moment. Additionally, employees can perform the job crafting process at their own pace, for an unlimited amount of time. During this process, support can be beneficial to motivate continuous usage, or to eliminate the users'

of time. The application should provide feedback on the user's performance. A possibility is to implement metaphors as described by Kim, Hong & Magerko (2010). This way, employees could implement job crafting in their daily life, without the need for human support, and in a continuous loop.

## References

- [1] Braun, V., & Clarke, V. (2012). Thematic analysis.
- [2] Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), 499.
- [3] Grant, A. M. (2003). The impact of life coaching on goal attainment, metacognition and mental health. *Social Behavior and Personality: an international journal*, 31(3), 253-263.
- [4] Jarrar, Y. F., & Zairi, M. (2002). Employee empowerment—a UK survey of trends and best practices. *Managerial Auditing Journal*.
- [5] Kim, T., Hong, H., & Magerko, B. (2010, August). Design requirements for ambient display that supports sustainable lifestyle. In *Proceedings of the 8th ACM Conference on Designing Interactive Systems* (pp. 103-112).
- [6] Ouye, J. A. (2011). Five trends that are dramatically changing work and the workplace. *Knoll Workplace Research*, 1-14.
- [7] Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 25(3), 293-315.
- [8] Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work-home interface: The work-home resources model. *American Psychologist*, 67(7), 545.
- [9] Van den Heuvel, M., Demerouti, E., & Peeters, M. C. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, 88(3), 511-532.
- [10] Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of management review*, 26(2), 179-201.