

Redesigning the user experience of Togetr's ERP planning solution

A bachelor's thesis by A.C. Wijnveen

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Togetr, a Veenendaal-based corporate software company, is developing a production planning solution for the making industry as part of their enterprise resource planning (ERP) software package. ERP software supports companies in their daily processes, for instance customer relations, capacity or resource management, human resource management or planning.

This complex business-to-business application is currently perceived as not user friendly and non-intuitive, keeping it from further implementation at client companies. This study, commissioned by Togetr, aimed to identify current problems, and subsequently deliver an interface proposal in order to improve the user experience of their planning solution.

The central question of the study was *'How can the user experience of Togetr's planning tool be improved to make it more accessible and learnable?'* The project started with a preliminary investigation, consisting of a literature study, observations, interviews, and an analysis of the current interface. Subsequently, a new interface was developed and evaluated. For the Evaluation part of the assignment, two evaluation theories were used: The participatory design theory of Schuler (1993) and the contextual inquiry theory of Beyer and Holtzblatt (1998).

The analysis shows that the current interface suffers from two major issues, expressed in terms of Nielsen's ten heuristics (1990): a lack of displaying the system's status and a lack of intuitive and fluent user interactions, affecting the system's accessibility and learnability. In the proposed redesign, these issues were resolved by implementing four major changes: adding a side-bar menu, introducing a new capacity dashboard, usage of consistent user interactions and finally general improvements like colour usage and spacing to create clearer affordances. This redesign was visualized in an interactive prototype, using Figma. An impression of this prototype can be found in the Figures below.

The evaluation sessions, held throughout the project from the very start, show that the new interface is indeed an improvement compared to the current one. It both speeds up the workflow of experienced users and reduces the threshold for learning the system for novice users, thus increasing accessibility and learnability. The different improvements were then prioritized for Togetr to implement them in the current interface.

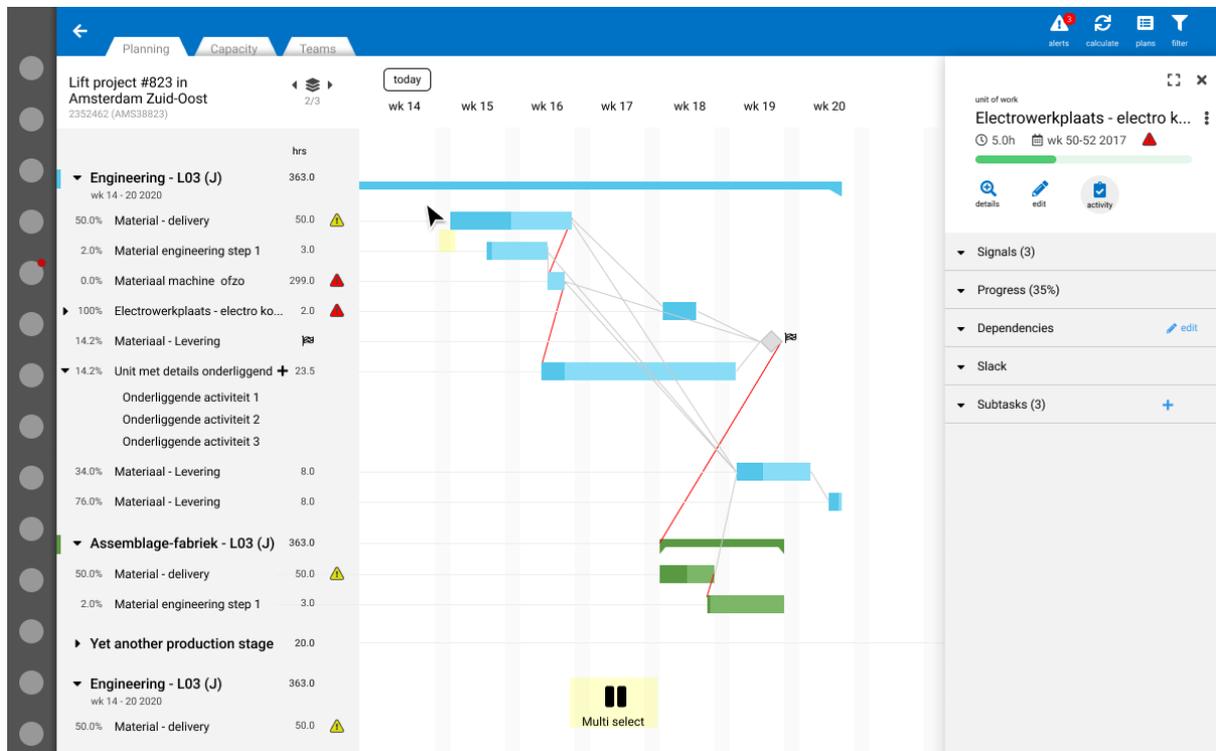
All things considered, this study showed two problems in Togetr’s current user interface, affecting its accessibility and learnability. A new interface was proposed and its evaluation showed that this interface would indeed contribute to solving these problems, helping Togetr in further development and implementation of their planning tool at their clients.

References

Schuler, D., & Namioka, A. (Eds.). (1993). *Participatory design: Principles and practices*. CRC Press.

Holtzblatt, K. & Beyer, H. (1998). *Contextual Design: Defining Customer-Centered Systems*. Morgan Kaufmann, San Francisco.

Molich, R. & Nielsen, J. (1990). Improving a Human-Computer Dialogue. In: *Communications of the ACM*, vol 33(3).



Capacity

Planning Capacity Teams

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Unity Type Set

Unity Type

Date range

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Capacity

Planning Capacity Teams

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Lift voor een groot hotel ergens op Gran Canaria
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▼ **Buitendienst Phase** 37.0
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