

Developing Visual Collaborative Tools

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Collaboration has been increasingly required to address the current challenges faced by organizations. With digitalization, these challenges are more and more complex but have common characteristics: they concern the organization as a whole, involve different and heterogeneous stakeholders, and evolve during the organization's lifetime. Moreover, they are at the heart of a paradox: they are of paramount importance for companies, but they are very difficult to grasp. Although practitioners have developed very different definitions and perspectives, each challenge needs to be collectively addressed as the result of discussion and inquiry from different perspectives. These challenges are, for instance, developing innovative solutions to face rapidly changing environments, digitalizing processes, developing business ecosystems, defining projects or initiatives, fostering creativity, or designing and evaluating a new business model.

Recently a "new" generation of tools has appeared. These tools are commonly called "canvas" as they were initially inspired by the Business Model Canvas. In fact, we designate this family of tools as visual inquiry tools or visual collaborative tools. These tools have common features that allow diverse stakeholders that face a joint problem to address the aforementioned challenges:

- First, developing a shared language and understanding of the problem they are trying to solve.

- Second, assisting diverse groups in exploring and/or brainstorming on a given problem thanks to their support for structuring and bounding the problem.
- Third, supporting a less linear and more creative and innovative process mainly relying on design techniques as they allow a social design process, which has been proven useful to increase engagement within projects.

Given the increasing amount and use of such visual inquiry tools, it seems crucial to accumulate knowledge on how to develop and evaluate them. Research is needed both into the design processes of such tools and/or their modelling, as well as their ontological and/or cognitive foundations. For the second year, this has been the main motivation to organize this mini-track at HICSS-53, as we believe that the IS discipline is well-suited to contribute to the design of such visual collaborative tools as it has a long tradition in design science research, modelling and UX.

With this mini-track, we aim at gathering and reinforcing the knowledge on such tools' design, development, related theoretical explanations, justifications, as well as empirical evidence of using them. The ultimate goal is to provide a clear and rigorous conceptualization on the form and function of such tools.

We thank the authors who have submitted to this mini-track. The three selected papers (out of six submissions) are all concerned with a specific and important organizational challenge, such as developing innovative solutions to face rapid

changing environments, assessing and changing organizational culture or designing and evaluating a Data-Driven Business Model. Each of them relates the design and evaluation process of a visual collaborative tool to address this challenge. The first paper, **Software tools for supporting reflection in design thinking projects**, by Thorsten Schoormann, Julien Hofer and Ralf Knackstedt, relates how to design tools that can support collaborative reflection in creativity-driven projects. Based on Reflection Theory, the authors propose a first instantiation in a concrete software-based prototype and its evaluation.

In the second paper, **Assessing and Changing an Organization's Innovation Culture with the**

Workspace Catalyst Canvas, Katja Thoring, Roland M. Mueller and Petra Badke-Schaub explain the design process of a canvas-based collaboration tool and its evaluation through a workshop. This visual collaboration tool aims to facilitate the assessment and the design of creative workspaces for their impact on corporate culture.

Finally, in the context of new data-driven business model, the third paper **Formative Evaluation of Data-Driven Business Models – The Data Insight Generator**, by Babett Kühne and Tilo Böhmman, describes the design and test of a tool – the Data Insight Generator- that aims to provide support for developing, understanding and analyzing such business models.