

# Creative collaboration in virtual space



Setup of a virtual workshop using a digital whiteboard and a video-conferencing tool

**Abstract**

Creative collaboration and creative brainstorming are considered success factors for innovative companies. Often times creativity techniques are used that allow a structured process. Through digitization more and more often, creative processes have to be conducted digitally.

In this thesis it was examined whether creativity processes can be seamlessly transferred to digital space and how a digital environment influences the communication behavior, creativity and overall satisfaction of the participants. Using the Lean UX approach and the user-centered conception various interaction elements were validated through user tests to determine their influence on the above factors.

An interaction concept was developed that allows conductors of creativity workshops to easily create room for engagement of all participants. Various methods and elements were identified that allow for an interactive exchange in a virtual setting. The results showed that structured processes like creativity techniques can be easily transferred to digital tools and a high degree of flexibility can be achieved.

**Special Focus**

In order to develop a user centered concept an iterative approach was chosen. Using the Lean UX process five steps were taken:

1. User research was done through personas and user interviews. 2 preparatory user tests in a virtual setting were conducted.
2. Using the feedback of the participants as well as observations potential areas for improvement were identified.
3. Using the digital whiteboard tool "Mural" an MVP was built and an interaction concept was developed.
4. 4 digital user tests and a user test in a physical scenario were conducted using the 6-3-5 method.
5. Feedback was gathered through a mixed method approach using the participants' feedback as well observations.

A special focus was put on communication patterns, creativity and overall satisfaction of the workshop participants. Interaction elements were defined to influence the willingness of the participants to engage in the discussion.



Improved version of the MVP after the first iteration



Interaction concept for creativity workshops in virtual space

**Result and Future Work**

The validated interaction elements showed that the willingness of the participants to engage can be influenced in a virtual setting. An interactive exchange can be achieved more easily in a digital scenario than in a presence scenario. It also became evident that the satisfaction of the participants is directly related to the amount of interactions.

The moderator of a digital creativity workshop functions as a coordinator and a communication partner at eye level. Due to their flat hierarchies digital environments offer plenty of room for creative thinking.

In the near future ways should be found to encourage social interactions in virtual settings since social proximity is considered an important factor for creativity and well being of the participants.

Furthermore interaction elements need to be developed that allow for small talk in virtual workshop settings. Chit chatting during coffee breaks and thus social bonding are currently difficult to perform in virtual settings.



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