

after writing on them instead of waiting until their turn for presentation. In this case, the pictures also encouraged participants to transfer each note individually instead of digitalizing them in pre-sorted clusters. Yet, this is likelier to occur with inexperienced first-time users that are curious about the interface itself. Consequently, a future study should measure the effects on the workflow with a longitudinal approach. Overall, we can summarize that *interaction techniques within T5 generally did not conflict with the workflow of affinity diagramming* whilst providing additional functionality at the same time.

CONCLUSION

In this paper we presented our approach for designing reality-based interfaces for creative group work. Based on an observational study of the design technique affinity diagramming, we decided on specific tradeoffs to preserve embodied practice and for adding computational power. On the basis of these tradeoffs, we designed a workspace that integrates an interactive table and tangible tools with a vertical display. A preliminary user study showed that by combining this workspace with digital pen & paper and multi-touch interaction, we can still preserve the basic workflow of the design technique. The study also indicates that an additional vertical display may be used for supporting reflection-in-action and for enhancing the visibility of artifacts. Regarding our research question, we may conclude that we were able to preserve the general workflow by still adding some power with a digital tool. However, a more focused longitudinal user study with creative professionals and more extensive design sessions should be applied to measure the potential benefits that are introduced with the tradeoffs. Nevertheless, we argue that our approach represents a unique example for supporting important aspects of collaborative creativity with reality-based interfaces. At the moment, our system is limited to a maximum of five users due to the size of the table and available rim space. We are currently improving it by adding more power to our clustering functionalities and by providing a larger rim space. The general workspace design and some of the described interaction techniques can be adapted to other design techniques that share the phases of ideation, presentation and discussion. Therefore, in future work, we will also focus on extending the basic interaction model with other paper-based artifacts for supporting sketching techniques or creativity workshops.

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