The IdeaStream application supports you and your team in finding innovative approaches to solve problems by applying computer-supported creativity techniques. IdeaStream was initially developed by Florian Forster as generic creativity support system and proof-of-concept for both the software architecture and a unified model of the creative process.

To take into account the different situations in which creativity can happen, several user interfaces, reaching from distributed to co-located work, were added. Additionally, the system was attached to an innovation-management platform for empowering its use within companies.

Tabletop Interface

In order to reach a co-located situation-sensitive IT-support, a tabletop interface based on multi-touch technology was designed. By using multi-touch gestures as input and rigid body dynamics as simulation-mechanism of real life physics, an easily understandable and realistic interaction is provided.

![Figure 4: Multi-Touch Tabletop-Interface](image)

Text input is realized using virtual onscreen keyboards, to ensure interoperability with other interfaces.

The tabletop is especially promising for applying creativity-techniques that afford increased communication and coordination of the participating users. This could be due to very specific problems requiring multi-disciplinary actors or due to the character of the technique itself.

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Process Model

IdeaStream is built around an abstract process model. The core design concept of the model is based on the observation that a creative process is typically a sequence of convergent and divergent phases. In divergent phases, ideas can be generated and edited. In convergent phases, previously generated ideas can be evaluated.

A combination of phases into a sequence allows the system to model and instantiate several different creativity processes and creativity techniques such as:
- (Anonymous) Brainstorming
- Assumption Reversal
- Brainwriting 6-3-5
- Morphological Analysis
- Osborn checklist
- Random Stimulus Technique

Customized techniques, specifically adapted to a particular context or company, are also possible by using this model.

The system hereby acts as a facilitator, guiding the participants in the creative process as it is intended by the respective creativity techniques.

Web/Mobile Interfaces

As IdeaStream was originally directed towards a distributed usage, the first implemented interface was especially designed for classical web-browsers. Most central element is a (shared) virtual whiteboard, allowing real-time, synchronous and parallel work via AJAX.

Ideas within IdeaStream are typically represented as cards, containing a set of figurative or textual aspects. Collaboration and social awareness in a distributed setting is supported by a chat and visual feedback mechanisms. To enable a broader range of possibilities of distributed usage, another interface addresses mobile clients, especially mobile web-browsers with JavaScript support. The example shown in figure 3 is directed to the iPhone.