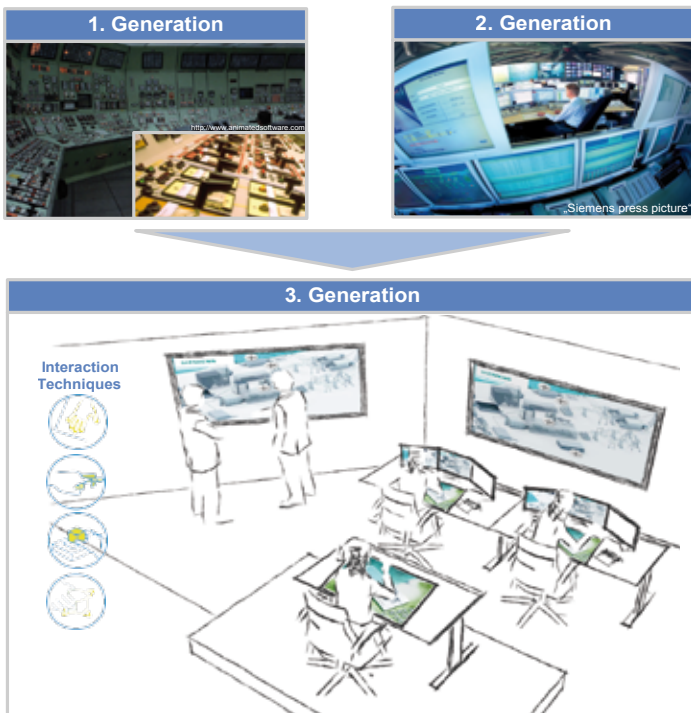


Holistic Workspace

The next Generation Workplace in Control Room

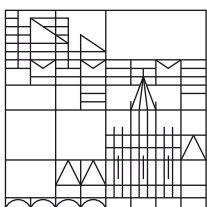
The project "Holistic Workspace" is concerned with the following questions: "How will the workspace of control rooms in the future look like? How can new technologies and supporting systems assist operators with their daily work?"

Today, process management is marked by the use of closely geared human-machine systems, highly relevant to security. Due to a steadily increasing automation level, the people controlling those systems, the so-called operators, have to deal with a high degree of complexity. This claims superior requirements to the human and can impose excessive demands on users caused by information flood. Thus, making the complexity controllable is a big challenge of today's human-machine-interface design. In order to adequately support the operators it is highly necessary to adapt systems to human skills and not vice versa. Due to the steadily increasing competitive pressure, this "usability of systems" has also become a crucial factor to advance customer loyalty.



A concentrated, holistic and broad view on the issue "control room" as claimed by this project can make an important contribution to the exchange of knowledge and the use of synergies between sectors of industry. It can additionally provide a solution which merges different modules and devices into one, consistent interface without losing track of the human being. Thus, psychological constructs like perception, planning and regulating courses of action as well as understanding human errors and their contribution to accidents are of major importance for the project progression

In collaboration with a well-known industry partner, the objective of this project is to optimize operators' workspaces in control rooms by developing a forward-looking and holistic workstation. Within the project's scope, current workplaces of different domains are viewed and analyzed holistically. Based on this analysis, considering new technologies and approaches – as e.g. the principles of "reality-based interaction" – a holistic concept of today's workplace is going to be developed. The next generation of control room design also considers previous generations in case they have proven themselves. So, a new and innovative concept evolves, perfectly uniting the benefits of former developments. At this juncture, a system that considers user's experiences and skills in order to support him to accomplish his tasks and to integrate him into his working environment sees the light of the day.



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