Increasing requirements characterize the situation in product design and development. Competition in terms of time, cost and quality is one of the most important topics within industry and these points are linked to the need for higher flexibility, functionality and multidisciplinarity within our products and our processes. Because of these reasons the enhancement of qualification of the staff, a continuously adapted organization of all business processes, and the introduction of - again and again - new and additional IT-tools and methods characterize the daily business within enterprises. The focus of this paper is based on an engineer’s view on working methods in design and development. There is of course the need for additional views from psychology, business sciences, etc. Some of these additional aspects have had strong influence on this paper. What happens to our staff, if we reorganize the processes within our company? All employees have to be trained, failures occur, the preplanned processes have to be adapted to the real requirements, coaching is necessary and we have to be carefully concerned with the motivation within the company. In addition there may be influences on customers and suppliers. Similar questions occur, when we just introduce
new IT-tools and methods. Some reasons for introducing new methods had been given above. Other reasons are new standards (e.g. ISO 9000), laws, and requirements of the customer, successful consultants convincing responsible persons of their specific offer of methods. In addition in a huge number of universities and research institutes new methods are been developed day by day. For at least one decade researchers of the design science community claim, that their methods are still not accepted by industry in the way they expected. Surveys quite often show, that just a few engineers in industry work with methods developed by the design researchers. Additional views on methods will help and are necessary to optimize the usage of methods and the methods itself and deliver a basis to adapt methods to the given situation and to develop new methods. This paper should help to support the use of working methods in industry and to develop methods in science as well as in industry.

Stichworte: Methods; methodology; quality measures and analysis of methods

Kongress- / Buchtitel: 7th International Design Conference DESIGN 2002

Kongress / Zusatzinformationen: 14.-17.05.2002

Konferenzort: Dubrovnik (Croatia)

Verlag / Institution: Sveucilisna tiskara

Verlagsort: Zagreb

Jahr: 2002

Sprache: en

Occurences: Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung (Prof. Volk komm.) > Konferenzbeiträge

Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung, Konstruktionssystematik und Leichtbau (Prof. Zimmermann) > Konferenzbeiträge

Entries: