Background Following the established tradition of user centered system design leads to the effect that erroneous behavior of human operator and technical system shall be minimized. As this development goal is in most system constellations to advanced the question on avoidable consequences is more suitable. On the other hand erroneous behavior is a source of information and learning for human operators. Methods Experiments with user adaptive systems show that adaptiveness includes the risk that system transparency is reduced and the user is not able to handle erroneous situations. Results The examples show that more information presentation instead of adaptive systems could solve the dilemma and provide learnable environments that keep the user proactive. Additionally it can be shown that there is only limited understanding by the user for technically driven errors in adaptive modules which makes learning difficult at all. Conclusions Interaction design should take into account that an enabled user is an important part of an error robust system. To ensure these capabilities transparent information presentation is a clear alternative to opaque user adaptive systems. Moreover this approach could help to keep software complexity in a manageable level.