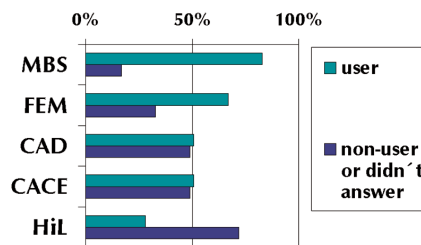


Survey: Future of CAE-Tools

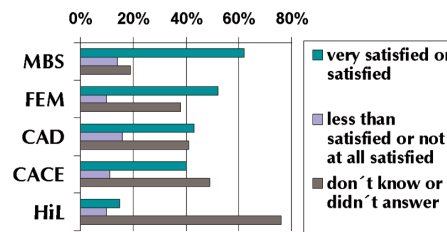
In the last SIMPACK News, December 2000, a survey of CAE users concerning the future of CAE tools was conducted. 63 questionnaires were completed and returned for which we would like to thank everybody for their participation. Here are the results of the survey.

Of the people that answered, most have had many years experience of using simulation software, with at least 80% having had more than four years. As expected most of the replies were from MBS software users (82%); however, many of these MBS software users also work with other CAE tools .



Use of Modelling Tools

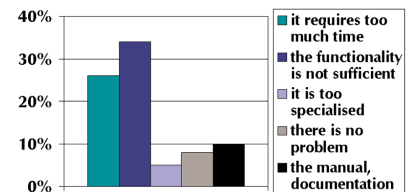
Almost two thirds of MBS software users are satisfied with the product they use.



Satisfaction with Simulation Tools

In regards to the problems experienced when using CAE tools, over 30% men-

tioned the lack of functionality, 26% the time necessary to perform the simulation and about 10% the lack of documentation.



Problems with Simulation Packages

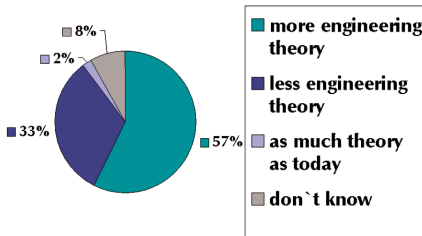
As mentioned, many engineers use a combination of different software packages which are currently linked via interfaces. We asked which CAE product integration would be of most interest. From the responses we found that 38% would be most interested in integrating MBS and FE software, followed by MBS and CAD and then MBS and CACE.

There are many users who use a combination of simulation tools in parallel. We asked how often data had to be entered more than once. The response showed that when using MBS and CAD, FE and CAD or MBS and FE an average of 50% of data has to be entered twice. However, some responses showed that only 10% of data had to be re-entered, whilst other users believed it was

nearer 100% - the percentage appears to be dependent on the particular application of each individual user.

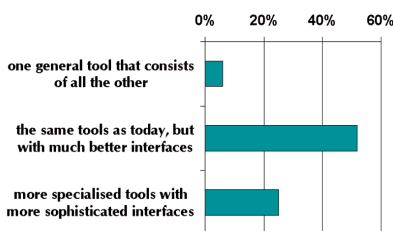
We also were interested if in future it will be necessary to know more or less engineering theory than today for using a modelling tool.

Nearly 60% of those that replied felt that in the future more engineering knowledge will be needed to work effectively with simulation tools.



Future: More or Less Engineering Theory Necessary?

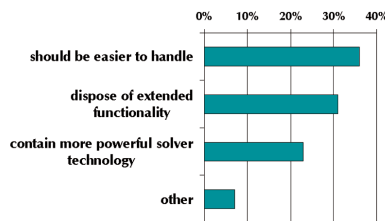
We were interested in how people envisaged CAE tools in 10 years time. Half of the respondents believed they would still exist in a similar form as they are today. However, they felt the software interfaces would be improved. A quarter of respondents think there will be more specialised tools with more sophisticated interfaces and only six percent think there will be just one general tool that achieves the results



Future Form of CAE-Tools

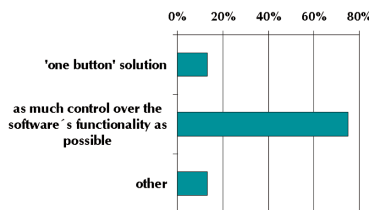
of numerous specialised tools.

Another area of particular interest was the functionality of the CAE tool. We wanted to know, from CAE users, what developments should be made to the CAE tools of today: if it should be easier to handle, dispose of extended functionality or contain more powerful solver technology. 36% think their simulation tool should be made easier to handle.



Functionality of a CAE Tool

Finally we wanted to find out how much control the user would like to have over their software functions. Within the two offered solutions 75% answered that the future should bring as much control over the software's functionality as possible – only 13% preferred a one-button-solution.



Handling of a CAE Tool

On the whole our readers believe that CAE tools should, in the future, have an improved functionality and allow the user to have as much control as possible of how the software operates, whilst enhancing their overall user-friendliness.

We congratulate Mr. Thomas Ille from MAN Nutzfahrzeuge who won the Psion 5mx Pro which was raffled off to all those who participated in the survey!



Mr. Ille, MAN Nutzfahrzeuge, Ms Engert, INTEC

