

GAN – MVL User Survey

Some Design Implications



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Trust: (Questions 5 – 11):

The users seem to have good experiences with trust in the professional background of the participating colleagues. This is a very important for the acceptance of the collaboration tools the project will develop.

In some projects, responsibilities weren't clearly defined (Q 10). This results in a potential need for assistance in project management. This could be guidelines for the implementation of collaborative projects using MVL, proposals for workshop designs, or implementation of project management tools within MVL.

Forms of communications (Questions 12 – 17):

The main forms of communication in previous collaborative projects seem to be face-to-face and email communication. There are nearly as much users that rate telephone and video conferences important in previous projects as users that rate it as unimportant. Instant messaging and chat were mostly unimportant.

Electronic communication tools (e.g., videoconference, mail, chat) were more used by accelerator user, operators, and physicists, and less by other users; we can thus hypothesize that these tools are perceived to be more useful for "routine" work, and not perceived to be useful (or not well known) in design / planning / management activities.

As long as communication within MVL would be based very much on video conferences and chat, these features should be implemented as user friendly as possible reducing the needed knowledge and experiences to use it.

Considering the answers in Q. 17 (disadvantages of computer mediated communication (cmc)), video conferences reduce the perceived impersonality of communication. In addition, there seem to be some concerns regarding the technical implementation (technical difficulties, lack of technical competencies/ equipment). This could result in a solution with lower technical demands to the client system.

This could also result in an intelligent help system guiding new users through MVL.

Finally, according to question 13-16, data and/or video sharing seems to have been useful for some users.

Previous Projects (Questions 18 – 27):

The potential users seem to have relatively good experiences with comparable projects. Based on these experiences, the majority seems to be willing to use the system as host or as expert. In addition, the idea of developing a communication tool to enhance communication is perceived as very useful.

Activities to be supported by MVL (Questions 28 – 34):

The list of proposed activities should be examined by people with technical knowledge. However, from the list, users seem to perceive the more “hardware-sided” activities as unimportant. It is unclear if users can imagine how activities like assembly of accelerator equipment or equipment maintenance can be supported by MVL. Moreover, users seem to perceive MVL as more useful in accelerator maintenance and routine operations, and less useful in design and testing of new equipment; this is also restated by some free comment at the end of the survey.

Users perceive MVL as a reasonable and not too ambitious project. The willingness to use the tool seems to be high.

Cooperation with off-site experts (Questions 35 – 44):

In principle, remote cooperation between experts and control room operators with MVL is perceived as positive. There are some concerns about problems with not speaking the same mother tongue.

In addition, there should be some face-to-face meetings on-site to get to know the accelerator and the staff there.

The only critical aspect seems to be the observation of control room operators with cameras. If this feature will be implemented, there should be a mechanism that allows observation only by permission of the observed operators. There are also legal aspects in some countries that have to be considered.

Elements of MVL (Questions 45 – 52):

In general, video, audio and mobility of the solution seem to be important.

The only critical point in this part seems to be that 3-D audio is perceived by some participants as not important. Corresponding to that, there are some remarks about the technical implementation. Some users would prefer a more simple and stable tool instead of implementing “fancy” technical features.

From question 46 (and free comments at the end of the survey) it seems that some users fear that MVL, in the effort of unifying different functions into a single tool, will be technically obsolete in a few years (i.e. it will be difficult to integrate upcoming technologies).

Some users fear also that the project may be too ambitious or is considering a too wide set of functionalities, and suggest the MVL should, at the beginning, concentrate on a few functionalities and test them.

From question 47, it seems that many users are interested in video/application/desktop/pointer sharing (i.e., tools for synchronous collaboration). This may suggest that we should focus on usage scenarios of synchronous communication / collaboration.

Other users point out the availability of help/system experts. Again, it seems that a well-designed and effective help functionality (either provided by the system or human experts) could be an important aspect of the system.

Remote Access to Accelerator (Questions 53 – 59):

Safety is perceived as an issue; according to users, the project should investigate to point out clearly what MVL will do with respect to safety on the accelerator site. Simply allowing remote users to observe is not perceived as a good solution (too limiting?), but security / safety mechanisms are needed.



Benefit of MVL (Questions 60-61):

Wider availability of experts (and generally, wider participation) is perceived as the greatest benefit; Another aspect (which is not so typically brought to justify distance collaboration tools) is the social benefits of reduced traveling.

In general , users trust (but not completely) that MVL will give them these benefits.