

WG#5 SIM-BENEFITS

Working Group General Information	
Working Group Title	Quantitative Benefits of Simulation
Working Group Short Name	SIM-BENEFITS
Short Summary of the Working Group Topic	
<p>The purpose of the working group is to assist Sim-Serv to assemble a database of quantitative benefits of simulation regarding different industry sectors and applications. The database is seen as one of the key elements for making industrial users to understand the substantial benefits of using simulation and convincing and encouraging them to take-up simulation as a tool for more successful improvement projects.</p>	
Short Summary of the Working Group Goals	
<p>The working group will involve Sim-Serv suppliers and users to collect and provide information for Sim-Serv project database emphasising the quantitative benefits of simulation projects. The members will discuss and decide which information shall be included in the database and how the database will be structured. The members will discuss and agree on the modalities of collecting, providing and accessing data. Further the group will promote the culture of performance measurement in improvement projects.</p>	

Working Group Description

Short description of the Working Group topic
<p>The purpose of the working group is to assist Sim-Serv to assemble a database of quantitative benefits of simulation regarding different industry sectors and applications. The database is seen as one of the key elements for making industrial users aware of substantial benefits of using simulation and convincing and encouraging them to take-up simulation as a tool for more successful improvement projects.</p> <p>The database could have two tiers. The first tier would be entirely public and freely accessed on Sim-Serv web site. The second tier could be restricted to those Sim-Serv suppliers and user members who have provided confidential information about their simulation projects to the database. The database could be arranged so that confidentiality is maintained and no individual project/supplier data can be seen. The output of the database would be average figures for an industry sector and application/modelling domain.</p>
Background. Reasons why this Working Group is needed.
<p>Although the benefits of simulation have been widely accepted among researchers and academia and simulation has been declared as one of the key technologies of 21st century, many potential industrial users are still not convinced about the benefits and regard simulators as toys. Even if they admit that benefits are potentially there they are not eager to proceed unless there is substantial evidence of cost/benefits. Even when talking about important soft benefits of simulation like better understanding of processes, education and training of employees, testing and validating plans and designs before construction to avoid setbacks and faster commissioning, the question remains in the air: what is the bottom line. This is the question that Sim-Serv is committed to answer.</p>
Working Group goals.
<p>The working group will involve Sim-Serv suppliers and users to collect and provide information for a common Sim-Serv project database emphasising the quantitative benefits of simulation projects. The members will discuss and decide which information shall be included in the database and how the database will be structured. The members will discuss and agree on the modalities of collecting, providing and accessing data. The group will collect case studies of simulation applications seen as “best-in-class”.</p> <p>The group promotes the culture of performance measurement before and after the improvement projects. One of the goals is that the suppliers start to collect quantified information of new projects in a systematic manner. The key performance metrics should be defined in the beginning of project, the values of those metrics should be measured, quantified improvement goals should be set and measurements will be repeated after the improvements are implemented.</p> <p>The tasks for the group:</p> <ol style="list-style-type: none"> 1) To discuss, review and decide on the database specification provided by Sim-Serv

- 2) To discuss and decide on the modalities of data provision and access to ensure full confidentiality and fairness of using the data
- 3) Collection and provision of data
- 4) Initiate a benchmarking club around simulation benefits to continue after Sim-Serv project

The expected impact of the working group.

If the goals of the group can be achieved Sim-Serv project database will be a comprehensive and constantly growing tool to be used in convincing and encouraging industrial companies to use simulation technologies in their improvement projects. The network of Sim-Serv suppliers will be able to use the tool in dissemination and sales. Convincing references and quantified benefits are expected to reduce sales efforts and help getting new customers and improve tender hit rates.

Expertise already possessed by the proposed members.

Sim-Serv members and users possess large experience of successful simulation projects testified by already around 40 successful case studies reported on Sim-Serv web site. This information can be seen not entire information available rather a tip of an underlying ice berg. The assumption is that the knowledge is out there and the purpose of the group is to motivate, involve and encourage Sim-Serv suppliers to contribute to the collective database and further utilise it in promotional and sales activities.

Expertise that should be added. What kind of additional members would be required to make the group successful? SIM-SERV will try to engage the relevant persons to the working group if the topic is accepted.

Involvement of an expert on running benchmarking clubs, procedures and database would be valuable to the group. Consultation on procedures ensuring confidentiality and fairness of data access.