The aim of Business Process Management is to create and implement efficient, cost-effective, high-quality processes. But how do you establish efficient processes? How do you identify which process variants are better than others before they are actually implemented? How do you know what resources are required to execute a process or where bottlenecks will arise during process execution based on a given level of resources?

ARIS Business Simulator is a tool for dynamic analysis of process organization and operational structures. The simulation highlights weaknesses in business processes and supports the implementation of cost-effective processes. Key performance indicators obtained using ARIS Business Simulator allow a range of alternatives to be evaluated and the "best" process to be identified before costly process changes are made.

As a rule, the first step toward improving processes is to analyze the existing or planned business processes. This is where ARIS Business Simulator comes into play by scrutinizing the dynamic behavior of both existing and new processes. ARIS Business Simulator tests whether processes are executable, as well as determining their throughput and wait times. At the same time, it identifies resource requirements and utilization levels, costs, and weaknesses relating to the business workflows. To evaluate new processes, process variants are analyzed and the resulting data optimized.

Optimizing throughput Times and Resource Utilization

By collecting a variety of information from a simulation run, ARIS Business Simulator can evaluate the behavior of processes. The statistics delivered by the tool provide a range of information, including data on the various object types and process instances.
For example, function statistics provide information, such as, the number of function executions or waiting process maps, while process statistics enable insights, for example, the number of completed process instances and their throughput times. ARIS Business Simulator provides a wealth of these statistics, which users can activate in accordance with their analysis requirements. Statistics can also be saved or imported into other programs for further processing. It is also possible to display statistical data in ARIS Business Simulator in the form of bar charts, line graphs, or pie charts.

Custom Design of Simulation Runs
ARIS Business Simulator is fully integrated into ARIS Business Architect, from where it can be directly accessed. The interface displays at-a-glance overviews of the simulated models, simulation status, and evaluations in the form of statistical tables and diagrams. Simulation runs can be managed via toolbar, menu, or keystroke. As well as being able to stop and start simulation runs, users can regulate process speed and execute the simulation step-by-step. Speed control and gradual process execution are important for interactive simulation runs. In such cases, model objects are animated on activation, with result attributes being displayed and constantly updated for each object. This is particularly useful for learning more about the runtime behavior of a process. If pure statistics are required, however, animation can be deactivated to speed up the simulation run.

Comprehensive Method Support
The simulation of ARIS model types and BPMN in ARIS Business Simulator includes not only the control flow as mapped in event-controlled process chains or swimlane diagrams, for example, but also organizational structures in the form of organizational charts. This means that if it is necessary for the purposes of staff deployment, the human resources situation can be realistically broken down to the level of individual roles or employees.

To enable process models to be adapted as far as possible to the individual needs of organizations, users can change various attributes of the modeling objects. This may be useful, for example, for specifying times and costs for function execution, defining process execution frequencies, or deploying different resource allocation strategies. Some of these settings also allow stochastic or random values, for instance, when defining function execution times or using rules to manage process maps. The dispersion effects that often occur in reality can thus be mapped.

Despite the variety of method settings available, simulation runs are quick and easy to execute because the settings are not mandatory. Existing models can be simulated without changes, simply to test them for their executability and to gradually bring them closer to reality as and when required.

So now your company can benefit from deploying its best processes!

Benefits of ARIS Business Simulator at a Glance
- Testing of business models using round trips and analysis loops
- Creation of executable, time- and resource-efficient, cost-effective processes
- Reviewing organizational decisions prior to implementation
- Establishment of enterprise-wide benchmarks
- Support for resource planning and deployment: Who will be needed, when, and where, and what is the right quantity of resources to ensure optimal process execution?
- Fully integrated into ARIS Business Architect