

Simio Case Study Guidelines

Eligibility: Case studies are welcomed by any Simio user whether commercial or academic. In some situations case studies are required (see specifics below).

Commercial Case Studies: We will provide assistance and work with you to generate a new item, case study or a longer paper. This could be as simple as an item on a forum, could be publicized on a web site, or even a paper published at a conference or periodical. If you have the project and general content, we are happy to work with you to polish it and arrange appropriate promotion.

Academic Case Studies: The remainder of this document refers to academic case studies. While commercial case studies are free to follow these guidelines as well, it is not required.

When is a case study required? The intent of free or highly discounted academic software is to support simulation training. When academic software is used for the benefit of commercial organizations, a brief case study is required. See more details [here](#). No proprietary information need be disclosed. It is desired but not required that the company name and student names be disclosed.

What is a case study? A case study does not have to be large, detailed, or time consuming and does not have to disclose any proprietary information. Typically the required information can be extracted from your project report or presentation. The case study components are:

- **Title:** A 30-80 character description that will serve as the page caption. It should include key words because web search engines will use this to help find your case study. Consider using the form “*{University X} does {Main Benefit} for {Beneficiary}*”. Including key words in the Problem, Solution, and Results will also help search engines find your case study. If you have permission, using the company name and/or logo adds credibility.
- **Organization:** At what academic institution did you do this work?
- **Category:** Pick one of the existing categories or suggest a new one.
- **Problem:** State problem and challenges in a paragraph or two.
- **Solution:** Describe the project objectives and what you tried to accomplish in a paragraph or two.
- **Results:** State the objective results and conclusions in a paragraph or two. The more concrete the results the better. “Increased throughput by 17%.” Is better than “Improved efficiency.”
- **Participants:** Optionally identify the participants. An email and/or link to a bio is appropriate if you want to gain contacts.
- **Animation/Screen Shots:** Include a short animation if possible as well as at least one screen shot, all with captions. Including the model and any project report or other supplemental materials is also helpful although they will not be posted.

You do not need to format your submission exactly as illustrated - just provide the content mentioned above.

By submitting a case study you are asserting that you have the rights and permission to divulge the information included.

You can see many samples of previous submissions at: <http://www.simio.com/academics/student-projects>. See Figure 1 for an annotated example.

Simio Academic Program: Increasing Customer Satisfaction At Antalya Airport

Organization: University of Pittsburgh

BY --



All Projects

- ▶ Transportation [+]
- ▶ Education [+]
- ▶ Manufacturing [+]
- ▶ Logistics [+]
- ▶ Healthcare [+]
- ▶ Sport And Rec [+]
- ▶ Misc [+]



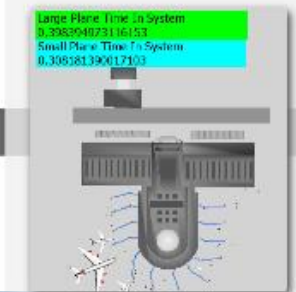
A short video to show where the Antalya Airport is located.

Problem

Management at the Antalya Airport in Turkey wanted to improve customer satisfaction in the International Terminal II. The current set-up causes customers to experience delays in arrivals and departures. Management debated whether increase the capacity of the Terminal II by adding new gates or adding a new runway.

Solution

Students at the University of Pittsburgh were asked to use Simio to help with this decision. Students simulated adding new gates to the terminal and adding a new runway to the airport. The managers of the airport provided the students with average times for each part of the process: from landing to arriving at a gate, unloading luggage, passenger unloading, and cleaning the aircraft before reloading.



The airport, terminals and planes.

Result



As the simulation runs, the information changes on the pie charts to show changes in the category.

The students created various scenarios. The simulation showed that adding a runway improved times OR adding four extra gates improved times, NOT both. The students created a model that allows future use for airport management to assess additional changes for any part of the airport depending on future needs.

Title

Organization

Category

Video

Caption

Problem

Screen Shot with Caption

Solution

Result

Screen Shot with Caption

Figure 1 - Annotated Sample Case Study