

Team Charlie's Angels

Team members

1. Prasanna Apurva
2. Choy Wei Feng
3. Yanice Mako Kusuma
4. Tina Nirmal

Project

Data warehouse optimisation

Sponsor

Assistant Professor of Operations Management, Lim Yun Fong
LKCSB (Lee Kong Chian School of Business), SMU

The Experience

The idea for this FYP first came up during an Operations Management class that the group took at the SMU School of Business.

The course professor for a class on warehouse management had remarked to them how painstaking it was to draw the layout of a warehouse in Microsoft Excel and to “colour” the items in the virtual warehouse.

The problem for Professor Lim Yun Fong was that he had to redo the process for every class where he had to change the layout of a warehouse.

Trust a team of SIS students to come up with a solution. Their answer: a warehouse layout tool that could automate the process using smarter software.

Team Charlie's Angels – made up of, who else, but three girls and a guy – developed a desktop application which lets Prof Lim create virtual warehouses on his PC to his whim.

He can specify the dimensions of the warehouse and then insert different types of products into a fixed number of pallets, just the way someone would plan the layout of a warehouse he was managing.

“We started in January 2008, and were ready to finish up a lot of the coding by August,” says third-year student Yanice Mako Kusuma, of Charlie's Angels.

After that, it was a matter of testing and fine-tuning it to clean up bugs and ensure user-friendliness, she adds.

By mid-November in 2008, the team was ready to deliver the completed package to Prof Lim, who had by then agreed to the system.

Prof Lim can now use the new software tool to teach his classes. With the tool, he spends less time creating the little virtual warehouses, and can concentrate more on teaching instead.

Like many “final year projects” completed by SIS students, this tool for teaching about warehouse layout management is another one that will be used by its client and provide real-world benefits.

“It’s a good feeling to be able to not just complete our course work but actually create something that really benefits someone,” says Yanice.

By doing the project, the students not only learn how to go end-to-end on delivering an IT solution; they also learn a lot about the problem domain, which in this case was operations management, and in particular, warehouse layout.

For two members of the team, operations management was their second major. And this project helped them to bring together the knowledge and skills from both their IS primary major and operations management second major.

For the two other members, their second majors were in marketing and finance. This project helped to cross-train them in another business area beyond the one they chose for their second major.

This exemplifies that when SIS students create IT solutions, they learn as much about the business problem as they do about technology.