Poster paper

# Event Layout Design System

**David Wade** **Lyndsay Roger** **Andrew Sewell** **Samuel Mann**

Department of IT and Electrotechnology
OtagoPolytechnic, Dunedin, NZ
smann@tekotago.ac.nz

This poster components of the development of an Event Layout Design System (ELDS) for The Dunedin Centre (TDC). This is a tool that produces graphical images and equipment schedules that assist with communication about event layouts between TDC customers, staff and consultants. The project process has allowed us to put previously learnt theory into practice by producing an IT solution for a client that we can be proud of. We have experienced lows and highs, been taken outside our comfort zones, scaled steep learning curves and expended precious resources. The reward though is that our product has positively affected the daily operations of The Dunedin Centre.

The system developed by the group fully met the functional requirements (table below) solving the business opportunity for the client by producing a product that they can use. They were implemented in full by customising MS-Visio.

| | Functional Requirement | Class |
|---|---|---|
| 1 | **The system shall store, update and output event layouts and schedules.** Includes output to screen, printers and as an image that can be e-mailed. | Mandatory |
| 2 | **The system shall have appropriate representative 2D plans of Dunedin Centre event facilities for laying out events that are dimensionally accurate.** Plans shall be read only template type images. | Mandatory |
| 3 | **The system shall have appropriate representative 2D images of Dunedin Centre equipment.** Equipment shall be dimensionally accurate where required and representative icons where required. | Mandatory |
| 4 | **The system shall provide generic shapes for representing non Dunedin Centre equipment.** Required for representing hired in equipment. | Essential |
| 5 | **The system shall provide drag and drop type usability for placing individual equipment items onto the facilities plans to form event layouts.** | Essential |
| 6 | **The system shall produce a schedule of equipment from an event layout.** The schedule shall include items such as types and numbers of chairs and tables required for the event layout. | Essential |
| 7 | **The system shall provide tools for manipulating individual or multiple equipment items (TDC) once placed on event layouts.** Adjustments like table placement, rotation and number of seats at a table etc. | Desirable |
| 8 | **The system shall provide required user feedback on (TDC) layout status.** Feedback such as informing the user (when requested during an event design) how many seats have been provided etc. | Desirable |
| 9 | **The system shall provide tools for assisting users in accurately laying out an event.** Tools that allow distances between equipment to be calculated and presented etc. | Desirable |
| 10 | **The system shall have appropriate representative 2D plans of Dunedin Centre event facilities for indicating locations of specialist services / features of the facilities.** Items like power and data points etc. | Desirable |

The system was developed following a SDLC/ prototyping approach. The first working prototype was installed just over half way through the project. This was beneficial in that it ensured that the final deliverable was extremely robust, having been the result of five months actual use and much valuable feedback. We knew the final install would be fairly seamless, as by the end of prototyping we had already installed three releases of working prototypes on the clients machines. Networking and printing issues had been resolved when installing previous prototypes. This prototyping did, however, have drawbacks. The first working prototype was used for real events even though it had limited functionality. To fill in the gaps of lacking functionality the client used the system in a way that we knew it should never be used in the final implementation. This meant re-training the client later on to get them out of bad habits.

The ELDS has already become a part of TDC business system. The floor staff now expect to receive an event layout plan for each event. To date the client has used the system to manage 84 events.