

Case Study

Venetian Macau and Marina Bay Sands

Managing Information on Casino and Hospitality Developments

Aconex is providing its online project collaboration service to two of the world's largest casino resort developments, the Venetian Macau in the People's Republic of China and the Marina Bay Sands in Singapore.

Aconex has helped to keep both projects on track by managing the thousands of documents and mail items that are created each day. In doing this, the system has linked the hundreds of organizations from around the world that are involved in these developments.

The developer and other lead organizations agree that Aconex is an essential part of the project and, without the system, there would be a greater risk of delays, disputes and quality issues.

The projects

The US\$1.8 billion Venetian Macau is the largest single structure hotel building in Asia and the third-largest building, by floor area, in the world. It includes the world's largest casino – 600,000 square feet of gaming space – as well as 3,000 hotel suites, 850,000 square feet of retail, a 15,000-capacity arena and a 1.2 million square foot convention center.

The Marina Bay Sands integrated resort is no less impressive. When complete in 2009, Singapore's first casino will feature three 50-storey hotel towers providing 2,500 rooms, 1.2 million square feet of convention space, one million square feet of retail space and three entertainment venues capable of accommodating 52,000 people. The development will be crowned by a one hectare Sky Park, which will form a bridge across the towers and offer 360-degree views of Singapore.



Venetian Macau

Collaboration challenges

As well as being high value projects with tight construction schedules, casino developments have additional characteristics that can make collaboration a challenge:

- They can involve hundreds of organizations and consultants
- Specialist participating firms can be located around the world
- A very large volume of information needs to be shared efficiently between thousands of team members and stakeholders.
- Security is a primary concern

The task is made more difficult by the limitations of traditional tools for managing files and correspondence, such as paper, email and self-hosted document management systems. These tools were not created for the collaborative environment and certainly weren't designed to cope with the complexities of a large-scale casino development.

Solution

The developers of the Venetian Macau and Marina Bay Sands selected to use the Aconex project collaboration system to manage information and link the project team.

Aconex is a web-based system that allows project team members to view, track and distribute their files using a secure, central platform. No matter where team members are in the world, participants can review, approve and make changes to documents in real time – streamlining the collaborative process.

To promote accountability, an audit trail of every action is maintained which tracks ‘who did what and when’. With a few clicks, project managers can run reports, view outstanding items and identify bottlenecks.

Aconex in Action

Construction of the Venetian Macau involved organizations that were based in China, the Philippines, Singapore, Vietnam, Australia, the UAE, the US, Canada and the UK.

From when the project commenced in 2005 to the grand opening in August 2007, **Aconex stored and managed 2.7 million documents and 6.8 million project mails** Aconex was used by more than 3,000 team members to manage 2.7 million documents and 6.8 million project mails, resulting in 4.2 terabytes of data being stored on the system.



Marina Bay Sands

Tim Linton, Venetian Macau’s Director of Construction, said, “Venetian Macau wanted a system for controlling the flow of documents amongst their consultants, their construction managers and as many as 300 contractors involved on the project. Following a detailed review of our options we decided to employ Aconex for the project.”

Currently under construction, the Marina Bay Sands development also involves a project team that is spread across four continents. Aconex is facilitating collaboration between more than 100 organizations, 40 of which are based outside of Singapore, including 14 in the United States.

In a single month on the project, participants are using Aconex to manage in excess of 100,000 documents and 200,000 project mails.

On both projects, Aconex has provided face-to-face training and 24/7 support to all internal and external project participants to ensure that everyone is proficient in using the system.

Results

Using Aconex on the Venetian Macau and Marina Bay Sands projects has saved time through allowing fast access to and distribution of information, and reduced costs such as printing, postage and data storage. Most importantly, Aconex has been a powerful risk management tool. The system has reduced the chance of errors caused by miscommunication, delays caused by an inability to locate files, and quality issues resulting from works being carried out using outdated drawings. These benefits have supported the achievement of the time, cost and quality goals that the projects strive for.

Aconex, www.aconex.com, is the world’s largest provider of online collaboration to the construction and engineering industries. The company services more than 100 casino and hospitality developments.