

# Case Study

## Aconex Helps Mandarin Oriental Open its Doors on Time

### The Project

In late 2005, Mandarin Oriental International Limited undertook a comprehensive renovation of its flagship property, the Mandarin Oriental, Hong Kong. Built in 1963, and overlooking Victoria Harbor, the Mandarin Oriental is an iconic institution in Hong Kong and is regarded as one of the world's legendary hotels. The US\$140 million renovation program was intended to reposition the property by upgrading the facilities and services, while maintaining its classic, Chinese-influenced design.

As part of the development, the number of hotel rooms was reduced from 541 to 503, with the number of suites increased to 69. A new presidential suite features a double height living room, with views of Victoria Harbour and the surrounding cityscape. A major component of the work was the enclosure of the hotel's balconies, which increased the size of the guestrooms and created more spacious bathrooms. The latest in-room entertainment and technology systems were incorporated into all rooms.

The hotel's public areas, restaurants and bars were also refurbished, and a reconfiguration of the ground floor increased the rental space for luxury retail. A new 6,800m<sup>2</sup> luxury spa, with swimming pool, fitness centre, salons and treatment centers was positioned over three floors. The exterior of the building was also upgraded in keeping with the contemporary facades of the hotel's commercial neighbors.

### Project Requirements

Rather than completing the work in stages, Mandarin Oriental completely shut down the hotel and undertook most of the refurbishment in a nine month blitz, starting on December 28<sup>th</sup>, 2005, with doors reopening on September 28<sup>th</sup>, 2006. Since the hotel would not be generating any revenue when closed (and newspaper adverts were promoting the reopening date) there was no margin for error in terms of scheduling.

Delays and wasted time can often be traced back to late, inaccurate, inadequate or inconsistent information, so the Client, Mandarin Oriental, and head contractor, Gammon, recognized early on that effective information management would be important in order to meet the deadline.

Adding to the challenge was that the project would involve a range of dispersed project teams and international consultants. With such a tight timeline, the project team couldn't afford to wait days for couriers to deliver documents between teams and could not risk someone not having access to the most current construction drawings.

Also a key consideration, particularly for the Client, was that Mandarin Oriental is a landmark property with a strong reputation and valuable brand to uphold. It was therefore vital that the quality of the work was of the highest standard, which required the most accurate, up to date version of drawings and documents being easily accessible.

### Solution

Gammon made the decision to use the Aconex online information management service. Throughout the project, the web-based collaboration solution stored project information online so that drawings, documents and correspondence were available in a single, shared platform that was accessible to all authorized team members. This enabled participants to view, track, share and archive their information at any time and from any location.

In practice, using Aconex meant that feasibility studies, drawings, approvals, schedules, specifications, standards, procedures, etc. could be viewed online. Team members could add comments, issue notices, instructions and requests for information. Documents could be published singly or in batches and, when documents were superseded, revision numbers were automatically updated, meaning everyone was working on the most up-to-date and accurate information.



From the Client's perspective, Aconex reduced exposure to risk by holding all information in a secure, central archive and tracking 'who did what and when'. This eliminated the chance of information loss and work being undertaken using outdated documents, hereby reducing exposure to defects and disputes.

## Results

Aconex facilitated collaboration between more than 530 project participants from 82 organizations, enabling Mandarin Oriental to meet its timeline and open its doors on schedule. From design through to completion, team members used Aconex to store and manage more than 381,000 pieces of correspondence and 138,000 drawings and documents.

The advantages of using an online collaboration system on the Mandarin Oriental project were evident at every phase – planning, building and operating. During the early stage of development, Gammon was able to communicate in a structured way with key consultants such as the architect, designers, engineers and quantity surveyors. The system made it easy to move large files between participants and to collaborate on concept drawings in real time.

***“The time savings were the biggest factor in using Aconex.”***

Russell Clewes of Gammon, Senior Project Manager on the Mandarin Oriental project, said: “The time savings were the biggest factor in using Aconex. At any one time we had 50 works contractors to collaborate with, including consultants in Singapore, Kuala Lumpur and London. Using paper documents and couriers, getting information to them would normally take 3-4 days but with Aconex information dissemination is instant.”

Because the initial development work was carried out using Aconex, the preliminary documents were then available in one place, ready for distribution to the wider consultant team for detailed design.

“Well over 90% of our project information has been captured on Aconex,” said Clewes. “If the system wasn't so simple to use, people just wouldn't have used it. Aconex is very user-friendly and the support ensured thorough implementation.”

As the project moved into the building phase, Aconex was used to manage the submission and approval of drawings, processing of claims and payments and defect management.

As important as the technology, were the service and support Aconex provided in order to ensure a smooth implementation. Aconex supplied unlimited training to all Mandarin project participants, then round-the-clock support throughout the project.

### Aconex provided all participants with:

- A single point of access to information, regardless of time or location
- Fast creation, distribution and tracking of correspondence
- Automated control of drawings and documents
- Tracking features for documents and records, with automatic version control
- Incorporation of workflow in order to generate status reports and ensure accountability
- An archive of all project information upon completion

“The training was instrumental in getting everyone to use Aconex. The time needed on this was critical, as people had to know how to use Aconex quickly and be comfortable with it. Following implementation, the ongoing support was excellent,” said Clewes.

***“(We) required less than half the number of administrative staff we would otherwise need.”***

Through storing and managing information electronically, Aconex also reduced administration and distribution costs, decreasing the volume of printed documents, reducing courier and stationery costs, reducing unrecoverable variations, and reducing the costs associated with storing and managing paper documents.

Clewes said: “Although time saving and productivity were our primary reasons for using Aconex, we also experienced a range of cost savings. We saved around 50% on printing volume, required less than half the number of administrative staff we would otherwise need, and saw a large reduction in courier costs. Without question, we would definitely use Aconex on our next project.”