

The Jewel in Changi's crown

While adding retail attractions is important, Changi is also thinking ahead to Terminal 5 and using smart technology to future-proof its role as a leading airport in the world

Jochen Wirtz

For *The Straits Times*

Equipped with more than 200 shops and restaurants, a hotel, a multi-screen cinema and 14,000 sq m of indoor air-conditioned gardens, Changi Airport's new Jewel complex has been designed as the new centrepiece – both physically and metaphorically – of the award-winning airport.

It is also a \$1.7 billion glass-and-steel-domed commitment to keeping Changi's position as the gold standard among the world's airports.

But, some might say, why bother? An airport is an airport, right? Somewhere that you transit through on the way to or from somewhere else, perhaps grabbing a bite to eat or a spot of shopping to pass the time.

Why do airports need to be competitive?

The short answer is that the air travel industry is changing rapidly, and many other airports in the region are fast catching up. Unless it acts now, Changi may find its eminent position challenged.

For Changi, building on its culture of being service-centred and customer-centric, opening the Jewel is a key part – but only a part – of its overall strategy to keep travellers and airlines coming to Singapore.

CHANGI OVER THE YEARS

Since it opened almost four decades ago, there is no doubt that Changi has excelled at being an airport. It is regularly voted the best in the world and travellers around the world sing its praises for efficiency, ease of use and cleanliness.

It has also built a reputation as a leader in service innovations, rethinking every part and process of the customer experience and pioneering the use of technology in areas such as automated check-in, baggage handling and even live customer feedback on the cleanliness of its bathrooms.

In large part, Changi has set its own high standards. To stay competitive, it must raise the bar again, moving beyond being just a service and logistics facility for passengers and cargo, and rethinking what it means to be an airport in the 21st century.

The 10-storey Jewel complex is one part of this drive, intended – according to the airport's publicity – to position Changi as a "lifestyle destination".



As Singapore's main airport, you might not think Changi faces much in the way of competition. Yet the business of airports is highly competitive, driven both by changing passenger expectations and the fast-evolving business of aviation itself.

Airports compete for passengers, but also for airlines which select airports based on a combination of factors, including passenger demand as well as the efficiency and cost effectiveness of the airport's various handling services.

REGIONAL COMPETITION

Another key element is the number of other airlines serving that airport – particularly airlines in the same alliance – which allows them to offer passengers a wider network of destination choices.

As a major Asian hub, Changi competes with nearby airports such as Kuala Lumpur, Bangkok and Hong Kong. But it is also facing a fierce challenge from airports and

airlines in the Middle East, among them Doha, Dubai and the huge new airport in Istanbul. The latter, when completed in 2025, will be able to handle up to 200 million passengers annually, well over twice Changi's current capacity.

Elsewhere, airports in China are also growing rapidly and emerging as new hubs, with the massive Beijing Daxing airport, capable of handling more than 100 million passengers annually, due to open towards the end of this year.

At the same time, the air travel industry itself is changing and becoming ever more competitive. Developments, such as the boom in budget leisure travel and the emergence of new generations of aircraft, are two factors shifting how people travel.

For decades, Singapore has been a key Asian air travel hub and a prime stopover point on the so-called "kangaroo routes" between cities in Europe and Australia. Recently, however,

advances in aircraft technology have led to the development of new long-range, fuel-efficient aircraft, opening up the prospect of point-to-point routes that bypass Singapore altogether.

Last year, for example, Australian airline Qantas launched the first non-stop flights between Perth and London. Such routes are seen as especially appealing to business travellers who are willing to pay a premium for quicker, more direct journeys.

Building on that, Qantas has challenged Boeing and Airbus to come up with an aircraft capable of flying non-stop between Sydney and London by next year.

It is against challenges like this that Changi needs to future-proof itself.

That is not to say that the hub model of airport is becoming obsolete. It remains the most efficient system for airlines to manage their network strategy and deliver value to customers.

But as competition intensifies from other airports and passenger traffic shifts to new ultra-long-haul routes, Changi must up its game to give travellers and airlines more reason to pass through. The Jewel is designed to strengthen Changi's hand.

SMART NATION, SMARTER AIRPORT

Yet, it is not just about the Jewel alone. Construction is also well under way on Changi's next super-terminal, Terminal 5, which is due to open in the late 2020s and promises to be one of the largest and most advanced terminals in the world.

By offering increased capacity – and therefore more network routes – as well as efficient aircraft handling and attractive passenger facilities for retail, dining and recreation, the new terminal is another step in Changi's strategy to remain a top choice for both airlines and passengers.

To underpin this, Terminal 5 will incorporate a range of innovations, many of which Changi is already testing in its existing terminals, using sensors, analytics and artificial intelligence to make the customer experience as seamless and efficient as possible.

Systems include facial and fingerprint recognition designed to slash queues at check-in and boarding, and technology that monitors baggage handling to reduce errors and ensure bags are moved quickly and accurately between aircraft or to reclaim belts.

Another system is designed to provide real-time data on taxi demand across the airport, allocating taxis where they are needed most.

Such customer-centric innovation has become part of Changi's culture and, in my own teaching at the National University of Singapore Business School, we frequently use Changi as a case study of an organisation with an intense focus on service excellence.

One recent initiative, for example, is the Changi Airport Living Lab. Launched in 2017, it partners established companies and start-ups to test and develop technologies that improve the airport's efficiency, productivity and service – reducing costs for airlines, lowering emissions and improving the passenger experience.

Another initiative, the Smart Airport Programme, is making use of sensors, analytics and artificial intelligence to boost services across all areas of Changi's operations.

One such project is an AI-driven system designed to predict aircraft arrival times up to two hours in advance, helping to optimise the deployment of ground service crews and reduce aircraft taxi time. This helps cut delays, lowering costs for airlines, speeding up passenger transit times and cutting carbon emissions.

The Jewel, then, is one component of Changi's ongoing innovation drive, designed to position the airport as a destination stopover – somewhere that airlines and passengers specifically choose to visit.

stopinion@sph.com.sg

• Jochen Wirtz is professor of marketing and vice-dean (graduate studies) at the National University of Singapore Business School.