Changing tracks
Five make-or-break factors to unlock rail travel in Asia Pacific
Foreword

Recently, I was lucky enough to ride on China’s brand new high-speed rail link from Shanghai to Kunming.

I landed at Pudong International Airport and took the world’s fastest train, the Transrapid Maglev, into the city. From there, I made my way to the vast Shanghai Hongqiao Railway Station, and was soon on the world’s longest high-speed line – accelerating through a picture-perfect landscape of snow-capped mountains, deep canyons, tropical forests and ethnic villages.

It was as though I was glimpsing the future of rail. And I had a real yearning to extend my journey – maybe continue through Laos to Thailand, from where I could head south through Malaysia, return east towards Vietnam, or west into the Indian sub-continent.

Right now, that would be a very long and fractured journey. But, in a few short years, it could be entirely different. Across Southeast Asia, the long-discussed plans for a pan-regional rail network are edging closer to reality. Rail operators are drawing inspiration from peers in countries like Japan, Taiwan and South Korea, which benefit from well-established networks, with a deserved reputation for customer-centricity and a service so reliable that punctuality is sometimes measured in seconds.

Meanwhile, in India and its neighbouring countries, rail has been the dominant mode of transport for almost two centuries. And, despite the challenge of managing ageing infrastructure, we are seeing some interesting developments – like the emergence of online booking services, the rapid deployment of free Wi-Fi across hundreds of Indian stations, and the proposal for the country’s first high-speed rail corridor which is set to transform travel time and experience.

This resurgence of rail coincides with the rapid growth and evolution of the wider Asia Pacific travel market. And there is huge potential for rail to play an even greater role in supplementing and complementing the wider travel industry.

In some cases, rail could drive a more seamless multimodal offer. In others, it could leapfrog air travel altogether to provide a convenient city-centre-to-city-centre experience. And, in any case, it should be an attractive option for experience-hungry inbound travellers.

In this report, we take stock of the rapid development of the Asia Pacific rail market and identify five make-or-break factors, which we believe can enable operators to uncover their true potential and maximise ridership and revenues.

Pierre-Yves Guillaume
Head of Rail, Asia Pacific, Amadeus
The Asia Pacific rail market – united in diversity

Right now, there is little that unites rail in Asia Pacific. The fragmentation that characterises rail in other world regions is, if anything, magnified. And the market is best thought about in terms of four broad sub-regions:

**North Asia**
**China, Hong Kong, Japan, Korea, Macau, Taiwan**
In terms of the network, this is arguably the world’s most advanced region for rail travel. In countries like Japan and Korea, customer-centricity is a given and punctuality can be measured in seconds, whereas China is home to the world’s busiest, newest and fastest-growing networks.

**Southeast Asia**
**Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam**
Overall an ageing infrastructure but several pockets of investment, with some new rolling stock and several very impressive metros and airport links. The entire region has a long-stated ambition to modernise and extend the network, provide greater access to rural areas and introduce cross-border and high-speed lines, which could liberate untold potential.

**Indian Subcontinent**
**Bangladesh, India, Nepal, Sri Lanka**
An extensive but ageing infrastructure which suffers from historical under-investment, but nonetheless includes some interesting pockets of technological adoption and innovation. Rapidly losing out to low-cost carriers at the premium end, but remaining exceptionally busy at the lower end.

**Pacific**
**Australia, New Zealand**
A relatively mature network of state-owned, state-run railways linking the major towns and cities, supplemented by a mix of state-owned and privately-owned metros and airport links. Aside from commuters and intra-regional travel, trains today are used primarily by people who are keen for a cheaper, slower, more scenic mode of transport.
FOCUS: The Pan-Asia Railway Network – the big game-changer

A pan-Asia network of railways has been envisaged since the days of the British and French imperialists. Linking Kunming in southern China, this would extend east to Laos, Vietnam and Cambodia, and eventually head west through Myanmar to India.

Throughout the 20th century, world events kept the railways fragmented. Then, in 2006, 18 countries signed the Trans-Asian Railway Network Agreement. Although progress has been slow, momentum is now building.

In December 2016, for example, construction of the new 414 km China-Laos railway commenced. In February 2017, it was reported that Thailand and Malaysia would restart talks on a proposed 1,500 km high-speed rail link between Bangkok and Kuala Lumpur. And, by 2026, the game-changing high-speed rail link between Kuala Lumpur and Singapore is scheduled for completion.

Legend

- **Central Route**
  - Kunming → Yuxi → Mohan → Vientiane → Bangkok → Kuala Lumpur → Singapore

- **Western Route**
  - Kunming → Dali → Baoshan → Ruli → Yangon → Bangkok → Kuala Lumpur → Singapore

- **Eastern Route**
  - Kunming → Yuxi → Mengzi → Hekou → Hanoi → Ho Chi Minh City → Phnom Penh → Bangkok → Kuala Lumpur → Singapore

Changing tracks: Five make-or-break factors to unlock rail travel in Asia Pacific

FOCUS: China – the world’s fastest growing rail market

Already home to the world’s fastest rail link (the Shanghai Maglev Train or Transrapid) and its longest high-speed line (the newly opened Shanghai-to-Kunming railway), the rate of growth in the Chinese rail market is nothing short of astonishing.

Like its rail counterparts in Japan, China is keen to export its expertise, and so-called railway diplomacy looms large in the discussions over the long-muted Pan-Asia Railway Network.

2016

- 2.77 billion passenger trips were taken
- more than half of which were aboard high-speed trains
- The record for a single day was 14.53 million trips during October’s Golden Week holiday
- 4 new high-speed lines were opened

2017

- The China Railway Corp estimates that passenger numbers will increase by more than 9% to break the 3 billion barrier (for context, all of the world’s airlines carried a total of 3.7 billion passengers in 2016)
- This growth is fuelled in part by the rapid expansion of the network
- Across the network as a whole, an additional 2,100 km of track is due to be added taking the total to more than 126,000 km

China high-speed rail

Legend

- Commercial operation over 250 km/h
- Commercial operation less than 250 km/h
- Under construction or planned over 250 km/h
- Under construction or planned less than 250 km/h


3 Source: http://www.uic.org/high-speed-database-maps/#&gid=1&pid=21
Given all of the ongoing interest and investment, the future looks bright for rail operators across Asia Pacific. But, what more can they do to uncover the true potential of rail? How can they maximise their ridership and their revenues? And what can they do to deliver a standout passenger experience?

Based on our global experience and expert interviews with leading figures from across the Asia Pacific rail and travel sectors, we identify five make-or-break factors – which, together, have the potential to shift the future prospects for rail.
1. Capturing customers old and new
Capturing customers old and new

Traditionally, many rail operators have catered to a captive audience.

For commuters and those living near to rail networks, the train has long been a logical choice. Familiar with the service on offer, these travellers have found it easy to weigh-up the relative cost, comfort and convenience of rail travel, and have made their decisions accordingly.

In the future, operators will be vying for the attention of a more diverse and active audience. These travellers may not be so familiar with the service on offer, and may also be considering new modes of transport like lift-sharing and self-driving cars, in addition to more traditional competitors like low-cost airlines and luxury coaches.

To engage with this audience, marketing and merchandising will become more of a priority, and ticketing will need to extend beyond the operators’ existing closed channels. As new travel choices emerge, it will also be necessary for operators to maintain their relevance among core passenger segments – and particularly the higher-yield segments.

The fact is, rail does offer considerable advantages which can sometimes be overlooked, especially among infrequent travellers and those arriving from other countries: sometimes they are looking for convenience; sometimes they want a city-centre-to-city-centre service; sometimes they want to mix-and-match between several modes of transport; sometimes they are more interested in the predictability of travel times – which can be a particular consideration in Asia’s congestion-prone cities.

“The low-cost carriers are specifically targeting the higher-yield, first-or-business class air traveller. For now, the rail operators may be relatively relaxed if they are still running full trains. But the challenge will be to hold onto the top-end.” Prashanth Kuchibhotla, Director, Strategy and Business Development, Expedia

“On long-distance trains, our core market is the people for whom flying may not be an option or something that they do not want to do. As flying becomes more affordable and alternatives like luxury coach and self-driving cars evolve, our big challenge is to remain relevant in a much more competitive market.” Grant Swinbourne, Head of IT, NSW Trains

“Airlines are no fun. It’s an hour to the airport, an hour in the airport, an hour boarding the plane, and then the same thing all over again at the other end. That shouldn’t be too hard to compete against.” Alexey Abolmasov, Founder and CEO, 12Go Asia

“When I land in Kuala Lumpur, I know the train ride to city centre will be 28 minutes (it’s that precise). When I land in Manila I know that, unless I take a taxi to the nearest LRT station, I could be looking at a three-hour drive into town. In Shanghai, the maglev ride is just eight minutes. When you are in Asia, this ability to control your travel time is very precious.” Sim Howe Chai, Managing Director, APAC Rail and Transit Industry, Accenture

“Private cars have always been our biggest competitor. As self-driving technologies mature and it becomes less tiring to drive long distances, we will have to work harder to attract passengers. We will need to increase our distribution and integrate with other forms of transport.” Min Chen, CIO, Taiwan High Speed Rail Corporation

“Those who are familiar with rail services use them. Those who aren’t can’t use them. To play a greater role in the wider travel ecosystem and increase ridership, rail operators need to meet the needs of infrequent as well as frequent travellers.”

Prashanth Kuchibhotla
Director, Strategy and Business Development, Expedia
2. Make timetables, booking and data universally available
Make timetables, booking and data universally available

It is probably true to say that, traditionally, rail has been an insular and inward-looking business.

Every operator in every country tends to have its own particular way of doing things – including its own booking and ticketing systems, pricing models, rules and regulations, and even its own way of presenting timetables and route maps.

For your average traveller, this is accepted as ‘just the way things are’. But, for less frequent travellers, and particularly those from other countries, it can be mystifying and intimidating – many would resort to a taxi rather than work out how to ride the metro, or go for a long-distance train.

The biggest barrier is the fact that rail timetables and booking information can be so difficult to find and understand. Even in North Asia where the rail networks are extensive and efficient, it is often a real challenge to work out when and when trains run, and how to buy tickets.

Beyond the sharing of timetables and ticketing information, there is also an opportunity for rail operators to make their data more open and available, particularly their real-time performance data. This can help travellers keep track of their journey. It can also be used to feed third-party services and applications, which can bring additional and often unexpected improvements to the traveller experience.

Meanwhile across the region, we see a move towards self-managed travel. It should therefore be easier for travellers to search for and book their flight, hotel and train ticket at the same time, from the same place. The fact is, rail is not nearly as searchable and visible to travellers or travel sellers as other modes of transport. As a consequence, many travellers and even travel sellers, including online and offline travel agents, don’t consider when booking trips given it doesn’t easily show up as an option in their searches.

The integration of rail content in Global Distribution Systems (GDSs) is a crucial step to making this a reality. If rail travel routes are made available through local travel agents as well as online giants, travellers will have more choices available to them. They will also be able to book and pay for different journey options in a single transaction, instead of going through the existing convoluted process of identifying multiple routes and purchasing multiple tickets.

Operators could perhaps look to their peers in Europe, where the industry is being encouraged to open up and collaborate for the benefit of the traveller, and true multichannel, multimodal, multi-country propositions are emerging.

“Travellers want everything as simple as possible, which is not how it is right now. You cannot painlessly book with any railway. Sometimes there are issues, and the one thing that a traveller doesn’t want is issues. This presents an opportunity for a service like ours – we remove the complexity because railways haven’t been able to.” Alexey Abolmasov, Founder and CEO, 12Go Asia

“We need a robust infrastructure that enables us to sell tickets through many channels. That includes direct channels like mobile and the Internet, but also indirect channels like travel agents, airlines and even hotels. We want to be able to connect with all our business partners.” Min Chen, CIO, Taiwan High Speed Rail Corporation

“The overall trend is to be more open and integrated. That is partly about integrating with other providers, so people can see, book and plan from their mobile device. It’s also about opening up access to our data to third-party developers. Here in Australia, for example, there’s an app called Stop Announcer, which is fed by our real-time data and helps people with disabilities keep track of their location. A rail operator would find it hard to develop something like that, but we can still enable it to happen.” Grant Swinbourne, Head of IT, NSW Trains

“Even though I am from India, I suspect I would find it difficult to book intra-India rail tickets. Yet, for a tourist, it’s the ideal way to see the country. Rail can play an important part in promoting travel and tourism to atypical destinations. Most people visiting Asia go to the well-known, big cities, most of which have good air connections. But there are dozens of attractive, out-of-the-way locations that you can only get to by rail. The lack of knowledge and difficulty of booking rail for inbound travellers means these places miss out economically. It could be a huge latent opportunity.” Prashanth Kuchibhotla, Director, Strategy and Business Development, Expedia

“We want for rail what we already get for air, namely some easy, online ways to plan, compare, manage, predict, book and pay. The integration of different channels is the dream of every traveller – as well as every travel agent.”

Bertrand Saillet
General Manager, South East Asia, FCM Travel Solutions
3. Mobile is a must
Mobile is a must

Of all the world regions, Asia Pacific is arguably the most tech-savvy.

In the more developed economies, the penetration of smartphones is universal. In the rapidly developing economies, entire populations are leapfrogging previous waves of technology and moving straight to handheld devices. And, across the region as a whole, the number of mobile connections is now approximately 4 billion.

As a consequence, rail operators need to take a mobile-first approach to passenger engagement, and consider how mobile can improve the end-to-end experience for the customer.

This is a particular consideration for younger generations and also demanding business travellers, who have high expectations and expect to use their device every step of the way – for planning their travel, reserving their seats, payment, ticketing, keeping track of their journey, understanding their arrival time, and even sharing a review of their rail journey.

At the same time, several operators are beginning to equip their on-board teams with mobile devices. Instead of simply punching or tearing paper tickets, these teams are using mobile passenger manifesto solutions and customer service applications. And, in the future, they may use the same devices to maximise revenues – perhaps by offering a seat upgrade, or selling onward tickets for another mode of transport.

In time, there is potential for more sophisticated technologies, like artificial intelligence, voice recognition and chatbots. But, for now, many operators probably have more pressing priorities.

“The end-state is that everyone will expect to do everything by mobile. They’ll expect seamless connectivity between different transport modes. They’ll expect real-time algorithmic capability to plan and track and adjust their journey. Right now, every market is at a different stage of evolution, but they’re all heading in the same direction.” Sim Howe Chai, Managing Director, APAC Rail and Transit Industry, Accenture

“Travellers rely on their mobile and expect it to do everything for them – understand the schedule, book and pay for tickets, reserve seats, and see the exact location of the station, its facilities and maybe also the nearby attractions.” Min Chen, CIO, Taiwan High Speed Rail Corporation

“Younger generations will become less and less tolerant of the old pain points. They will question it more and more. ‘Why is this?’ ‘What is the point?’ ‘Why should I put up with it?’ Then they will look at new alternatives, like car-sharing, self-driving, easy-to-book luxury coaches, or low-cost carriers.” Prashanth Kuchibhotla, Director, Strategy and Business Development, Expedia

“In Asia, everyone is mobile and digital savvy. If a rail operator wants to address ridership or loyalty or revenue, they have to use mobile as a platform to do it. The fact is, if you don’t have a successful mobile platform, it’s going to be a problem for travellers to view rail as their default, no matter how good the on-board experience.”

Sim Howe Chai
Managing Director, APAC Rail and Transit Industry, Accenture
4. Complement, cooperate and compete
Complement, cooperate and compete

As the travel market grows and travel choices proliferate, rail operators will be expected to fulfil many new and additional roles.

Sometimes they will feed passengers to or from other modes of transport. Sometimes they will take entire legs of a journey. And sometimes they will compete head-to-head as the primary player. But, in all circumstances, passengers will want the ability to make like-for-like comparisons, understand connections and compare costs at the time they plan their travel.

An immediate and easily achievable opportunity is for travel agents to add an airport express train ticket to a traveller’s flight or hotel room at the moment of booking. But ultimately there is huge potential for rail operators to innovate and provide more personalised travel services, bringing a door-to-door experience one step closer to reality.

The fact is, whenever we travel, most of us will use several different modes of transport. But it is rarely possible for any of us to benefit from a true, multimodal experience. Collaboration between key industry players is key to overcome the challenges and enable the traveller of tomorrow to enjoy a seamless travel experience – from their initial search right through to arrival at their destination.

“We are seeing some interesting multimodal propositions emerge in cities like Singapore and Hong Kong. As travel choices proliferate, it will be necessary for more operators to collaborate with other modes of transport – connectivity will be critical, and a technological platform for enabling connectivity will be critical.” Sim Howe Chai, Managing Director, APAC Rail and Transit Industry, Accenture

“For historic reasons, our stations are located away from the main urban centres, yet customers expect a door-to-door service. The challenge is to create intelligent transport systems by cooperating with bus and local rail networks.” Min Chen, CIO, Taiwan High Speed Rail Corporation

“When you get out into the depths of the country, you do have multimodal but it’s not what you’d expect it to be. It’s being created by others, like ferry operators and tourist attractions. They build their services around the rail, to meet travellers from specific trains, and they market that to their customers. It’s as if the tail is wagging the dog.”

Alexey Abolmasov
Founder and CEO, 12Go Asia
5. Make payment easy
Make payment easy

One of the big sources of disruption in commerce is the emergence of new payment methods, and the travel industry is wrapped-up in the changes.

The success of contactless bank cards and the emergence of mobile payment services like Apple Pay are changing the way that goods and services are sold and delivered.

In travel, we have seen the success of embedded payments in ride-hailing and ride-sharing services like Grab and Uber and accommodation services like Airbnb and Booking.com. These players have discovered that, if payment is automated, another barrier is removed. And rail operators should also be ready to embrace new ways to pay.

A good example of payment innovation is the acceptance of contactless bank cards and mobile payments by Transport for London across all the city’s train, tube and bus networks. By the start of 2017⁴, this was being used for 1.8 million journeys a day, accounting for almost 40% of all pay-as-you-go transactions. And, for Londoners as well as visitors, it has brought a new level of ease and convenience.

Ultimately, there is potential for cashless, ticketless, frictionless travel, and the adoption of new payment solutions can eliminate several of the old pain points.


“Disruption in the rail space can be affected by disruption in the payment space. Everyone is interested by what Transport for London has done with contactless bank card payments. By combining easy payment with ticketless travel, you remove an entire layer of friction. This is set to have a big impact on rail ticketing.” Sim Howe Chai, Managing Director, APAC Rail and Transit Industry, Accenture

“We see a lot of innovation in the world of payments. There could be many different ways to pay for tickets. Our challenge is to make our systems very open, and to accept new payment methods as soon as they achieve critical mass.”

Min Chen
CIO, Taiwan High Speed Rail Corporation
Moving towards a traveller-focused future
Moving towards a traveller-focused future

Given the extreme diversity and fragmentation of the Asia Pacific rail market, there is little that currently unites the region’s rail operators. Each of them is at a very different stage of development and faces very different challenges. Yet we believe our five make-or-break factors relate equally to them all.

Above all, we believe that they are united by a single imperative – to put the customer at the centre of their thinking and give everyone easier, more convenient ways to discover, plan, pay for, book and manage their travel.

Towards this end, we offer four recommendations to rail operators in the region:

1. Migrate towards open and standardised solutions

   Useful lessons can be learnt from Europe, where the regulators are working towards a fully open, pan-regional rail market and operators have adopted a more standardised and technology-centric approach to booking. As well as delivering a much better passenger experience, this is bringing new cost efficiencies and scale economies. In Asia Pacific, there may not be the same regulatory agenda, but operators can nonetheless enjoy the same benefits.

2. Tear down the barriers and open up distribution

   One of the biggest barriers is the arcane and individualistic way that many operators still manage their ticketing. More openness and wider distribution, both domestically and internationally, could become a powerful pull factor. By distributing travel products in multiple ways, across multiple channels, via multiple partners (such as travel management companies, online travel agents and retail travel agents), there is a huge potential to reach new travellers and maximise yields.

3. Cooperate as well as compete

   Many passengers are looking for seamless, integrated, point-to-point travel solutions. By collaborating with non-rail partners, operators can create a superior offer, lift passenger numbers and generate additional revenues. For example, alongside their own tickets, they are ideally positioned to cross-sell tourist attractions, hotel rooms, car rental services, onward coach journeys and even air tickets. In this era of ‘co-opetition’, these techniques are proven to both maximise existing revenue streams and open new ones.

4. Use technology to enhance the customer experience

   By making better use of mobile and e-commerce platforms, operators can offer far more than just a seat. Optional extras could include on-board Wi-Fi, seat upgrades, food and beverage, and limousine, taxi or transit services either side of the actual rail journey. In this way, operators can offer a deeper, broader and more personalised service. But, to do so, they need to recognise that mobile is the most important touchpoint and frictionless payment is an important enabler.

The great news is that travel in Asia Pacific is booming like never before. Rail operators have a clear opportunity to become a more prominent player and capture a far bigger share of this vibrant industry.

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