Data & Digital Platforms: Driving Tourism Growth in Asia Pacific

A Pacific Asia Travel Association (PATA) and Oxford Economics Report
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FOREWORD

Dr. Mario Hardy, CEO, Pacific Asia Travel Association

Technology is the driving force behind many of the innovations that are affecting various aspects of today’s world. As we move towards an exponential future, these innovations are now characterised by their velocity, speed of development and the impact that they are having – and will have – on existing systems.

Recent technological advances offer significant potential for the travel and tourism industry and knowing how to navigate this new landscape is crucial as consumers find new avenues online to be inspired and plan their trips. In addition, the ever-increasing use and accessibility of smart phones, apps, wearables, and payment platforms, as well as new software, only adds to the many challenges ahead.

How do travel and tourism organisations leverage current advancements to differentiate themselves from their competitors and become successful in today’s environment?

To provide a one-step solution would be virtually impossible, as new technologies emerge daily and new businesses launch products and services that are reshaping the industry and disrupting traditional models.

It is essential that organisations obtain a thorough understanding of current technologies and innovations to make smarter and more informed decisions. This comprehensive report on digital platforms and data driven innovation provides important insight into the need in embracing the technological changes and developing a growth mindset.

Even as the growth momentum of Asia Pacific is set to continue over the next five years, the growth in international arrivals across Asia Pacific is often unequal with subtle changes and shifts occurring as travellers discover new destinations and increasingly turn away from those that do not offer the experiences and memories that they seek and demand. Organisation can adapt and stay ahead of these changes through the proper collection and analysis of data and the informed use of available digital platforms.

As the Pacific Asia Travel Association (PATA) acts as a catalyst for the responsible development of travel and tourism to, from and within the Asia Pacific region, we understand that adopting policies to support a thriving digital ecosystem can only be achieved through the concerted efforts of the private and public sector working together to enhance access to digital products and services and facilitate cross-border data flows.

This report lays the foundation towards this goal and should be shared with all travel and tourism stakeholders in order to maximise the full potential of the opportunities available.
EXECUTIVE SUMMARY

Destinations in the Asia Pacific region can maximise tourism growth, and in turn job creation, by expanding their online presence. As travellers organise trips online more frequently, destination management organisations and businesses should leverage available tools and digital platforms to engage with them throughout the planning process. Data generated by online interactions can be leveraged to further drive innovation and growth. There are opportunities to generate over 9 million new jobs in the region. This would stimulate GDP growth by up to an additional 1% destination-by-destination with an average 5% rise in the Travel & Tourism sector.

TOURISM DRIVES GROWTH IN ASIA PACIFIC

Tourism is a large and rapidly growing sector across the Asia Pacific region. Currently, the sector supports 181 million jobs, or roughly 1 in 11 of all jobs, according to research by WTTC & Oxford Economics¹.

The sector has grown in importance by outpacing wider activity in recent years. GDP generated by Travel & Tourism grew at an average annual rate of 7.3% over the past five years, compared to economy-wide GDP growth for the region of 4.2% (in constant price terms).

Growth is driven by a range of factors including rising wealth in key source markets, increased air connectivity to both short- and long-haul markets, as well as improving digital connectivity. This report focuses on 12 destinations across the Asia Pacific region with a wide range of sector performances and digital behaviours, all of which can benefit from continued tourism growth.

Digital Travel Footprint

% tourism organised online by destination, 2018 estimate

Source: Tourism Economics

¹ Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
TRAVELLERS HAVE BECOME DIGITAL

Around 80% of global travel is reliant on online research\(^2\), and according to Tourism Economics estimates, reliance is similar across the Asia Pacific region. As economic development and travel continue to grow alongside greater internet penetration, the importance of digital research will only increase.

Utilisation of online travel research is high despite relatively low internet penetration in the region. Currently, only 48% of the population in the region has access to the internet, compared to 62% of the population of the rest of the world\(^3\).

Between 62% and 92% of travel to 12 key Asia Pacific destinations, from origins worldwide, are estimated to be currently organised online. Discrepancies in reliable broadband access are partially responsible for this disparity, while prohibitively high costs are an issue for some more remote areas. Broadband costs are up to 18% of average income, well above the target of 5% set by the UNESCO Broadband Commission\(^4\).

TRAVELLERS MAKE MORE INFORMED DECISIONS

Due to a wealth of information available through digital sources, travellers are more informed throughout the planning process than ever before. Planning for the average trip occurs over a period of almost 3 months\(^5\), including over 250 unique research moments in some instances\(^6\).

Additionally, travellers continue to visit travel sites beyond the initial planning and booking period for research on destinations and attractions, including once they have arrived at their destination and even afterwards. Almost 70% of travellers share their experiences online\(^7\).

Hence, there are opportunities for businesses and destination management organisations to engage with travellers throughout all five stages of the planning process.

DATA INNOVATION SUPPORTS GROWTH

Digital interactions throughout the planning process create data which enable businesses and destinations to better understand traveller needs. For example, The Road Trip in New Zealand has successfully invested in analytics to better understand and reach potential customers. The examples of Grab and Airbnb demonstrate clear benefits to performance by employing machine learning to better meet demand.

Data are an integral element for driving business performance through technological development and global market connectivity. Productivity growth

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\(^2\) Visa Global Travel Intentions Study, 2018  
\(^3\) Internet world stats  
\(^4\) Internet Society, Mobile Internet Usage Trends in Asia Pacific, 2016  
\(^5\) Worldwide Travel Path to Purchase, TripAdvisor, 2017  
\(^6\) GfK & Google research for Australia, 2018  
\(^7\) Visa Global Travel Intentions Study 2018
Data are a key part of digital innovation which should be employed to support growth.

Digital platforms are at the heart of all online interactions throughout the travel planning process, generating usable data to support growth.

Data & Digital Platforms: Driving Tourism Growth in Asia Pacific

is fostered by opening avenues to new domestic and international markets. The OECD notes that “data-analytics is increasingly driving innovation.” Productivity can be 5-10% higher for businesses which innovate with data⁸.

The benefits of data innovation are particularly clear for tourism due to the importance of demand from international markets. Better knowledge of traveller needs from both short- and long-haul source markets can improve targeted advertising as well as focused product innovation.

As the costs of data storage and processing fall, smaller businesses can take advantage of these benefits and compete more effectively with larger players in domestic and international markets. However, the OECD notes that most businesses outside of the ICT sector are not fully taking advantage of these benefits due to data management skills shortages.

Platforms support the digital ecosystem throughout the Five Stages of Travel Planning and generate usable data to support growth

- **Dreaming:** travellers identify aspirational destinations for future trips
- **Planning:** active research as options are narrowed
- **Booking:** time and cost savings ensure a greater likelihood of booking
- **Experiencing:** travellers optimise trips by accessing digital information, including mobile apps
- **Sharing:** experiences are shared during and after trips to inspire other travellers

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⁸ OECD, *Data-driven innovation for growth and well-being*, 2015
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Digital Platforms Maximise Ecosystem Benefits

Travellers rely on platforms to provide them with information throughout all stages of travel planning. They can benefit from better informed decisions and are increasingly taking research tools with them as a result. Around 61% of travellers download travel apps before trips\(^9\) and 87% of millennials said their smartphone was their most essential travel item\(^10\).

Shared experiences can reach and inspire new travellers. For example, the Mekong Moments programme is turning social media traffic into a commercial platform for destinations in the Mekong River basin.

Businesses, including SMEs, can more easily reach potential travellers in both domestic and international markets. In turn, they have experienced positive impacts on sales. For example, Klook was developed to connect travellers with a wide range of travel businesses within Asia Pacific destinations, and it is now the largest booking platform in the region.

Destinations benefit from sustainable growth in GDP and employment as well as improved visitor management, including the ability to direct visitors to secondary destinations, widening benefits and reducing overcrowding.

Opportunities for Growth

Asia Pacific destinations have gained market share by embracing digital content to meet demand in source markets. This has produced an average annual growth premium for international arrivals of 1% over the past five years.

Growth in the coming years will be maximised by continuing to adopt best practices for using data and digital platforms. There is an opportunity for an estimated average 5% additional growth, and up to 8% destination-specific growth, in sector GDP over the next five years. This is equivalent to a 0.5% growth premium for overall GDP on average, and up to 1.0% by destination. This would entail the creation of over 9 million new jobs over the next five years.

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9. Visa Global Travel Intentions Study, 2018
RECOMMENDATIONS FOR POLICY MAKERS IN ASIA PACIFIC

• Digital network:

Continue to invest in high-speed internet to ensure availability for travellers, the resident population and local businesses. In both India and Indonesia, only 22% of households have access to reliable internet\(^\text{11}\), and the proportion of the population covered by a mobile network is also lower than average (93% in India and 95% in Indonesia compared with a global average of 98%\(^\text{12}\)). Travellers are less able to leverage platforms to access information when visiting these destinations.

Encouraging service providers to extend their reach into new regions can stimulate investment in digital networks\(^\text{13}\) and can allow travellers to access consistent and reliable platforms regardless of their destination.

• Digital skills:

Address skills shortages in data management, especially among SMEs, to ensure that they can compete effectively with larger businesses in international markets and take advantage of affordable digital technology.

Equip tourism businesses with best practices for reaching their audience, including translation of relevant content into key languages, and the means to better understand potential travellers. Governments should consider appointing a Chief Data Adviser.

• Facilitate data innovation:

Develop policies that facilitate the use of data as a vital resource to drive productivity and tourism growth. An average increase in productivity of 5-10% has been identified for businesses which innovate with data\(^\text{14}\). By contrast, according to research by Bauer et al.\(^\text{15}\), the imposition of data localisation measures in Asia Pacific destinations would reduce GDP across a range of economies: from -0.1% in India up to -1.7% in Vietnam.

Destinations can also benefit from sustainable market development as efforts can be made to smooth demand flows across a wider area and timeframe with a better understanding of demand patterns.

• Support a thriving digital ecosystem

Encourage destination management organisations and businesses to leverage the best available tools to engage with tourists throughout the planning process and encourage traveller feedback through reviews and social media. For example, one fifth of millennials surveyed in a PATA report were directly inspired in making travel choices by what their friends posted on social media\(^\text{16}\).

Maintain a policy framework that promotes innovation and allows competition between small local businesses and global players. Benefits are evident for both travellers and local businesses alike under these conditions.

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\(^{11}\) World Bank, World Development Indicators
\(^{12}\) World Economic Forum, Travel & Tourism Competitiveness Report 2017
\(^{13}\) Brookings Global Economy and Development, Regulating for a Digital Economy, 2018
\(^{14}\) OECD, Data-driven innovation for growth and innovation, 2015
\(^{15}\) Bauer, Lee-Makiyama, van der Mare, Verschelde, The Costs of Data Localisation, 2014
\(^{16}\) PATA Youth Travel Report: Stepping Out of the Crowd, 2016
2. THE ASIA PACIFIC TOURISM SECTOR

KEY POINTS

- Tourism is a key sector in the Asia Pacific region, supporting 180 million jobs in the region, equivalent to 1 in 11 of all jobs.
- GDP generated by Travel & Tourism has grown by 7.3% on average relative to 4.2% growth in the wider economy.
- International tourism arrivals in APAC destinations have grown faster than all other world regions over the past decade.
- Short-haul travel, from source markets within the Asia Pacific region, has outpaced long-haul travel demand growth over the 2007-17 period, growing by a cumulative 83%. However, long-haul demand remains important and will be supported by developing connectivity.
- Asia Pacific destinations have gained market share, aided by gains in digital connectivity.

2.1 CURRENT TOURISM SECTOR SIZE

Inbound tourism arrivals in APAC reached 317 million in 2017, up from 180 million a decade before. International tourism arrivals in APAC destinations have grown faster than in any other world region over the past decade. Between 2007 and 2017, arrivals grew 76%, an average annual growth rate of 5.8%. This is a full 2 percentage points higher than the equivalent average rate of world travel growth over the same period.

Inbound Tourism Growth by Region

Index, 2007=100

Source: Tourism Economics
Short-haul travel, from source markets within the Asia Pacific region, accounts for almost four-fifths of international arrivals. Of the total number of trips to Asia Pacific destinations, 251 million were from short-haul markets.

**International Tourist Arrivals to APAC, Short- vs. Long-haul**

Arrivals, mn

<table>
<thead>
<tr>
<th>Year</th>
<th>Long-haul</th>
<th>Short-haul</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>150</td>
<td>50</td>
</tr>
<tr>
<td>2008</td>
<td>160</td>
<td>40</td>
</tr>
<tr>
<td>2009</td>
<td>170</td>
<td>30</td>
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<tr>
<td>2010</td>
<td>180</td>
<td>20</td>
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<td>2011</td>
<td>190</td>
<td>10</td>
</tr>
<tr>
<td>2012</td>
<td>200</td>
<td>0</td>
</tr>
<tr>
<td>2013</td>
<td>210</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>220</td>
<td>0</td>
</tr>
<tr>
<td>2015</td>
<td>230</td>
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</tr>
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<td>2016</td>
<td>240</td>
<td>0</td>
</tr>
<tr>
<td>2017</td>
<td>250</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Tourism Economics

China welcomed 61 million international tourist arrivals in 2017, more than any of the other Asia Pacific destinations in this study. Of these arrivals, 85% were from short-haul markets (including the large volumes of travel from Hong Kong SAR and Macao as short-haul international travel is in line with published national statistics). China received the second largest volume of long-haul arrivals (9.3 million), although they only accounted for around 15% of all travel.

Thailand is the second largest select destination market in APAC with 36 million arrivals in 2017, 74% of which came from short-haul markets.

**International Tourist Arrivals to Select APAC Destinations**

Arrivals, mn, 2017

<table>
<thead>
<tr>
<th>Destination</th>
<th>Long-haul</th>
<th>Short-haul</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>70</td>
<td>0</td>
</tr>
<tr>
<td>Thailand</td>
<td>60</td>
<td>0</td>
</tr>
<tr>
<td>Japan</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>40</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Indonesia</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Australia</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Vietnam</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Philippines</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>New Zealand</td>
<td>5</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Tourism Economics

India received the largest number of long-haul arrivals in absolute and proportional terms.
Bangladesh and Sri Lanka. When taking average length of stay into account, the importance of these long-haul markets is accentuated further. Germany, France and the Russian Federation are all larger than Sri Lanka as source markets when measured in terms of nights spent within India.

Vietnam received the lowest volume of arrivals from long-haul markets among these destinations. The proportion of arrivals from long-haul markets was also the lowest accounting for only 4% of total demand.

Chinese Taipei and Hong Kong SAR also receive a low proportion of visits from beyond the region, just 11% and 12%, respectively. Travel from China is counted as part of short-haul international travel, consistent with national data sources.

2.2 TOTAL TOURISM SPENDING

Tourist activity in the region generates large revenues for businesses, tax revenue for governments, and increased employment. The large domestic travel markets must also be considered for a complete view of the impact of tourism by destination. In many Asia Pacific destinations the number of domestic overnights dwarfs the number of international overnights.

Domestic overnights represent around 90% Chinese travel and totalled 2.4 billion in 2017, dwarfing the 295 million international overnights. Domestic demand comprised a similar proportion of total tourism spending in China.

Domestic travel is also important in Japan, accounting for almost 85% of travel demand, with 435 million domestic overnights in 2017, compared to just 84.6 million international overnights. This is the destination with the second largest share of domestic demand within the region after China.

Tourism Spend in Select APAC Destinations, Domestic vs. International

![Tourism Spend Chart](chart.png)

Source: Tourism Economics

International travel volume surpasses domestic volume only in Hong Kong SAR and Chinese Taipei, helped by the large influence of travellers from Mainland China which are counted as international in official statistics.
The bulk of tourism spending across the region is generated by leisure travellers, according to the WTTC annual economic impact research, carried out in conjunction with Oxford Economics. Japan and the Republic of Korea have the highest proportion of revenue generated by business travel at 32% and 34%, respectively. In China, just 20% of spending was business travel related.

India has the smallest business travel segment, accounting for only 6% of all travel and tourism spend in 2017. The business market in Chinese Taipei was also relatively small (in both share and in absolute terms), accounting for just 10% of its total travel and tourism spend of US$17.4 billion. In Australia, the business share was also relatively small, accounting for just 12% of its total travel and tourism spend of US$24.9 billion in 2017.

2.3 ECONOMIC CONTRIBUTION OF TOURISM

To assess the true value of the Travel & Tourism sector for Asia Pacific economies, it is crucial to consider direct, indirect, and induced effects. The direct benefit of spending by tourists is mapped to GDP by counting only the value-added components. This includes the revenue, profit and value-added for traditional providers of tourism services such as hotels and airlines, as well as new service providers that are powered by digital platforms, such as Airbnb, Uber, and Grab.

Wider Travel & Tourism impacts include the indirect benefits throughout the supply chain and the induced impacts of consumption from wage income effects.

The Travel & Tourism sector has a significant impact on GDP in the APAC region. The sector directly generates 3.3% of total GDP and supports 9.8% of total GDP including indirect and induced impacts, according to prior Oxford Economics analysis on behalf of the World Travel & Tourism Council (WTTC).

Contribution of T&T to GDP in Select APAC Destinations

<table>
<thead>
<tr>
<th>Country</th>
<th>Direct</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese Taipei</td>
<td></td>
<td></td>
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<tr>
<td>Republic of Korea</td>
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<tr>
<td>Indonesia</td>
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<tr>
<td>Japan</td>
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<tr>
<td>Vietnam</td>
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<tr>
<td>India</td>
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<tr>
<td>APAC</td>
<td></td>
<td></td>
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<tr>
<td>Australia</td>
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<td></td>
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<tr>
<td>China</td>
<td></td>
<td></td>
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<tr>
<td>Hong Kong SAR</td>
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<tr>
<td>New Zealand</td>
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<td></td>
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<tr>
<td>Thailand</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
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</tr>
</tbody>
</table>

Source: WTTC, Oxford Economics

Within the Asia Pacific region, Travel & Tourism makes the largest contribution to whole economy GDP in the Philippines. The direct impact in 2017 was 8.8%
of total GDP and including indirect and induced effects the impact was 21.5%. Thailand’s whole economy GDP is also heavily supported by the presence of a thriving Travel and Tourism sector. In 2017, it directly accounted for 9.5% of whole economy GDP, and 21.4% in total including indirect and induced impacts.

In absolute terms, these impacts were largest in China, where direct Travel & Tourism impacts totalled US$405 billion in 2017, or US$1,355 billion including indirect and induced impacts.

Travel & Tourism also supports a comparable proportion of employment within the region. On average, 4.0% of APAC employment is directly generated by the sector. In total, 9.4% of all jobs are supported by the sector, equivalent to 1 in 11 of all jobs. Development in the Travel & Tourism is an important tool for job creation.

Tourism activity provides the highest proportion of support to a labour market in New Zealand – 22% of all jobs are supported by Travel & Tourism activity.

Contribution of T&T to Employment in Select APAC Destinations

Source: WTTC, Oxford Economics

Travel & Tourism supports over 180 million jobs in the region.
Overall, Travel & Tourism supports over 180 million jobs in the region, 80 million of which are within China. Travel & Tourism also supports over 40 million jobs in India and directly employed 26.1 million workers in 2017.

### 2.4 TOURISM GROWTH TRENDS

International tourist arrivals growth over the past ten years was strongest in Chinese Taipei out of the destinations under consideration, with average annual growth in arrivals of 13.8%.

**International Arrivals Growth to Select APAC Destinations, 2007-17**

![Graph showing international arrivals growth to select APAC destinations. Chinese Taipei leads with a CAGR of 14%, followed by Japan and Indonesia.](chart)

Source: Tourism Economics

Japan also saw strong growth over the period, with international tourist arrivals growing on average 13.1% per year. This was due to exceptional growth in the last five years following relative stagnation in prior years. Crucial to this growth was the relative weakening of the yen and an ability to attract ever greater numbers of Chinese visitors.

Despite the large size of the market, international travel to China grew just 1.1% on average per year over the ten-year period. This was the weakest growth of international tourist arrivals across all selected destinations.

Short-haul travel from source markets within the Asia Pacific region has outpaced demand from long-haul markets to Asia Pacific.

Short-haul travel has outpaced long-haul travel demand, growing at an average annual rate of 6.2%. This has resulted in cumulative growth of 83% over the past 10 years.

This expansion is related to rapidly rising income levels within the regions’ developing economies, which has led to the formation of millions of new middle-income households with a complementary appetite for international travel. This is particularly notable in China where an estimated quarter of all households earn above the threshold value at which travel is affordable. Ten years ago, fewer than 10% of households could afford travel. However, according to the China Tourism Academy, only around 10% of the Chinese population hold passports and in comments made by Dai Bin, head of the CTA, “overseas travel has not yet become a national trend” 17.

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17 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
The size of the global middle class is forecast to increase from 1.8 billion to 4.9 billion by 2030 and 85% of this growth will come from Asia. This will continue to support intraregional demand and growth in the Asia Pacific region will again outpace other world regions.

Long-haul demand growth of 54% over the past ten years should not be discounted. Over the 2007-17 period, arrivals to APAC destinations from Europe grew 50% (4.2% CAGR), arrivals from the Americas grew 60% (4.8% CAGR), and arrivals from MEA source markets grew 59% (4.8% CAGR). Continued expansion in both physical and digital connectivity will support further growth.

Arrivals from Europe grew 50%, from the Americas 60% and from MEA 59% over 2007-17.

Arrivals growth over the past five years has been compared against key drivers in Tourism Economics’ modelling to understand the relative importance of different factors in explaining growth. Economic drivers and outbound demand...
growth from source markets comprise roughly four-fifths of the growth across
the region on average, although there is significant variation by destination.

Faster or slower growth than that dictated by source market developments
involves shifts in market share. The shifts are typically due to price
competitiveness; more facilitative travel policy (including changes in visa
regimes or marketing); developments in connectivity; or the impact of natural or
geopolitical events. The Republic of Korea and Hong Kong SAR lost market
share over this period due to geopolitical developments that caused travellers
from some key source markets to stay away.

Both physical and digital connectivity are important factors for accessing new
source markets and greater use of digital resources to reach potential travellers
can boost growth. Physical connectivity, including the rise of Low Cost Carriers,
explains a proportion of the growth observed across the region. Digital
connectivity is becoming increasingly important as a driver of growth.

Unsurprisingly, GDP generated by the Travel & Tourism sector has outpaced
advances in the wider economy over recent years, albeit by a lesser amount
than international growth since domestic demand growth has been slower.
Over the past ten years, the GDP contribution of Travel & Tourism in the region
grew at an average annual rate of 7.3% compared with 4.2% growth in whole
economy GDP.
3. ONLINE ACTIVITY & DIGITAL PLATFORMS

**KEY POINTS**

- Internet penetration in the Asia Pacific region is 48%, which is lower than in the rest of the world on average. Internet speeds also vary markedly across destinations and high costs are evident in some regions.
- Mobile connectivity varies, which can affect day-to-day behaviour and mobile use within foreign destinations.
- Online travel planning and booking is widespread in the Asia Pacific region, with a high digital footprint. 80% travel is organised online.
- It is essential that platform use by businesses and destination management organisations matches source market preferences, including the rise of mobile access.
- Continued investment in digital networking is essential to realise growth opportunities.

3.1 INTERNET PENETRATION REMAINS LOW IN ASIA PACIFIC

Internet penetration in the Asia Pacific region is lower than in the rest of the world. On average, 48% of the population in the Asia Pacific region has access to the internet, compared with 62% of the population of the rest of the world\(^{19}\). Penetration is much higher in developed regions such as North America and Western Europe and only Africa has lower internet penetration. Despite this, the Asia Pacific region accounts for nearly half of the world’s internet users.

**Internet Penetration by Destination**

% households with online access, 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>% Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>34</td>
</tr>
<tr>
<td>Indonesia</td>
<td>53</td>
</tr>
<tr>
<td>China</td>
<td>55</td>
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<td>Philippines</td>
<td>63</td>
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<td>Vietnam</td>
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<td>Australia</td>
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<tr>
<td>Republic of Korea</td>
<td>93</td>
</tr>
<tr>
<td>Japan</td>
<td>93</td>
</tr>
</tbody>
</table>

Source: Internet World Stats, Oxford Economics

\(^{19}\) Internet world stats
However, the overall figures for the region conceal wide variation among destinations. In advanced economies, such as Japan and the Republic of Korea, penetration is over 90%. By contrast, in less developed economies, such as India, penetration is as low as 34%.

Around 2.3 billion people in the region are still without regular access to the internet, two-thirds of which are in India (0.89 billion) and China (0.64 billion). There remains significant potential for future growth in connectivity and associated benefits.

Wealthier destinations are more likely to be online. There is a clear correlation between internet penetration and average income, defined as the proportion of middle class households able to afford travel. A threshold value of US$20,000 has been identified as an indicator of middle-class household income at which point travel (domestic and international) becomes affordable.

Internet speed also varies by destination, and unsurprisingly the most connected destinations also enjoy higher internet speeds. Slower internet speeds are an inconvenience to residents and affect businesses’ ability to embrace new digital platforms and strategies for reaching customers. Crucially,
internet speed may also impede travellers as they attempt to access trusted platforms on mobile devices.

The Philippines, for example, has relatively high penetration, as over 60% of households have access to the internet, but average speeds are among the slowest in the region at 5.5 Mbps. Its average peak connection speed of 45.0 Mbps is comparable only with India and China in the region. President Duterte has approved a plan to deploy a national broadband network, to host a national portal, and to connect more remote areas of the country\(^\text{20}\).

Even when broadband is available, the costs can be prohibitively high for businesses. This is particularly the case in landlocked Asian countries and small island states in the Pacific, where broadband can be up to 18% of the monthly average gross national income – much higher than the UNESCO Broadband Commission’s target of 5%\(^\text{21}\). There is an apparent correlation between average broadband costs and national income, but there are also significant outliers.

![Household Income & Average Broadband Cost](chart.png)

Chinese Taipei and the Republic of Korea have particularly low costs relative to average incomes while residents are overwhelmingly online with high connection speeds.

Indonesia, the Philippines, Vietnam and India have particularly high costs relative to average incomes, which may partly explain the relatively low connectivity in these countries.

By continuing to invest in digital networks, the number of people connected to the internet and connection speeds will increase and costs should fall. This will allow destinations to realise further benefits of digital interactions. By 2021, according to the CISCO VNI forecast\(^\text{22}\), 62% of the Asia Pacific region’s population will be using the internet at an average speed of 64 Mbps. This will be faster than the global average connection speed and will entail 2.9

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\(^{20}\) Akamai’s State of the Internet Q1 2017 report

\(^{21}\) Internet Society, Mobile Internet Usage Trends in Asia Pacific, 2016

\(^{22}\) CISCO Complete Visual Networking Index Forecast, 2017
networked devices per individual. Under these projections, the Asia Pacific region will represent almost 40% of all data traffic, up from 35% just five years earlier. Mobile connections will account for the bulk of the growth. In a survey by the Internet Society, 47% of respondents use a mobile device as their primary means of going online. This figure is higher among respondents below 25 years old (61%), and those who live in South East Asia (52%). This is a case of leapfrogging, whereby those in developing economies have moved straight to mobile devices rather than following the established technology adoption taken by more developed nations.

3.2 TRAVEL IS ORGANISED ONLINE

Low internet penetration in a destination does not necessarily mean that its residents are less likely to organise travel online. India is the highest ranked digitally dependent traveller-nation, followed by China and Indonesia23, according to a study across 19 destinations by Travelport.

Travel Share of Accessed Sites & Average Connection Speed

![Travel site share of unique visits (%)](image)

Source: Akamai, comScore*, Oxford Economics

* data available for 9 destinations. Estimates included for the Philippines, the Republic of Korea and New Zealand

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23 Travelport, Digital Traveller Survey, 2017
The internet is a trusted data source in the Asia Pacific region and travel is already widely organised online. Across the region, 30% of those with internet access regularly visit travel sites. This proportion rises in line with internet penetration and average access speeds across destinations.

Online travel research and booking is apparently a function of the online market maturity within an economy. As online interactions become more reliable and more trusted, a greater proportion of travel activity will move online. Tourism typically involves greater research than other consumer products because the nature of travel requires a financial investment without any ability to ‘pre-test’ the product. Recommendations from friends and relatives have traditionally been the most trusted source of information among travellers. The rise of social media means such interactions are increasingly moving online. Online tourism research is facilitated by digital interactions and a range of trusted and specialist platforms.

The proportion of travel organised online has already risen sharply, as the share of travellers using offline sources of information for trip planning fell from 82% in 2015 to 47% in 2017. Asian travellers are the least likely to use offline methods to book accommodation. However, the proportion of tourism activity organised online does not match source market demand in all cases. Destinations and businesses must understand and embrace the online preferences of key source markets to maximise the efficiency of online interactions.

There is also considerable variation in internet travel behaviour by age cohort, with younger travellers viewing it as the norm. Over 70% of APAC millennial travellers book transport and accommodation online.

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24 Visa Global Travel Intentions Study, 2018
By combining several data sources, Tourism Economics has estimated the digital travel footprint (the proportion of tourism organised online) for each destination.

On average, almost 80% of travel is organised online across 12 Asia Pacific destinations, similar to the 83% of travel organised online worldwide. There are wide variations by destination in the proportion of travel organised online, ranging from just 62% in Vietnam to 92% in Japan.

Those destinations with a higher proportion of travel organised online have already realised many benefits, including those related to platforms, but can still benefit from continued data innovation. Destinations with lower digital footprints have opportunities for faster growth and greater market development by adopting best practices observed in more successful digital destinations.

3.3 PLATFORMS FACILITATE ONLINE TRAVEL BEHAVIOUR

A wide range of platforms enable digital interactions throughout the five stages of the travel planning process: Dreaming, Planning, Booking, Experiencing, and Sharing. Travellers interact with online platforms such as specialised travel content apps, general search sites and company websites to gain information at each stage. These digital interactions, in turn, generate data which can be used by businesses and destination management organisations to improve products and services for travellers and drive future growth.

Platforms support the digital ecosystem throughout the Five Stages of Travel Planning

1. Dreaming
Travellers identify aspirational destinations for future trips

2. Planning
Active research as options are narrowed

3. Booking
Time and cost savings ensure a greater likelihood of booking

4. Experiencing
Travellers optimise trips by accessing digital information, including mobile apps

5. Sharing
Experiences are shared during and after trips to inspire other travellers

Digital Platforms facilitate online interactions generating data to support growth

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Visa Global Travel Intentions Study, 2018
Dreaming – travellers identify potential destinations for future travel through a variety of sources, including content posted by other travellers online. Of the 73% of travellers who use online sources to decide on their destination, 35% rely on content posted by other travellers. This is considerably higher than any other information source, including family and friends. When considering 18- to 24-year olds, the reliance on online opinions rises to 38%.

The utilization of search, social media and other platforms in this stage generates usable data for destinations and businesses to understand potential visitors as well as perceptions of their destination compared to competitors. However, this may involve some very long lead times as aspirational destinations may be identified and investigated well before actual travel can become a reality. One in five Asians are directly inspired by what their friends posted on social media.

Planning – more active travel planning occurs during this stage as options are explored using the wealth of available information. Online reviews and responses to reviews are critical in shaping travel decisions. Destinations and businesses can effectively reach a large audience to influence decisions by harnessing the right platforms.

Travellers are more informed than ever before and have access to a wealth of information throughout the planning process. Online trip planning involves access to more information than offline planning. Planning for the average trip occurs over a period of almost 3 months, “amounting to 259 unique online research moments. Online search sits right at the centre, helping travellers navigate back and forth between different touchpoints.”

Although research is now overwhelmingly online, booking does not always rely on the same platform or medium and one in three travellers book offline. Data generated by travellers in planning should be analysed separate from booking data as it can provide further usable information.

Booking – by using trusted platforms, travellers have greater confidence that they are basing decisions on unbiased information. They are emboldened to book additional trips and increase their length of stay to fit in extra attractions. Destinations benefit from the extra visits, nights and associated spending, while consumers benefit from lower costs by finding better deals.

Data generated by digital booking and research platforms should be combined to form a holistic understanding of how much time travellers spend on each aspect of research before booking. There is considerable overlap between the benefits of platforms and data innovation as shown in the example of Klook.

Since many connected travellers want to leave planning the more granular details of their travel until they arrive at their destination, it is important to have more flexible routes to research and booking. Connected travellers currently

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27 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
28 TripAdvisor, Worldwide Travel Path to Purchase, 2017
29 GfK & Google research for Australia
30 TripAdvisor, Sizing Worldwide Tourism Spending & TripAdvisor’s Economic Impact, 2018
use smartphones more frequently to “find things to do” (67% travellers) than for booking accommodation (37%) or for organising their trip (44%). The right platforms and mobile access are key to reach travellers and benefit businesses and destinations.

Case study: Klook

Digital platforms transformed the travel industry by allowing consumers to optimise searches for airline flights and hotel reservations. Now comes the race to help travellers plan things to do once they reach their destinations.

Founded in 2014, Klook has become one of Asia’s leading travel activities and services booking platforms. The platform allows travellers to discover and book popular attractions, local tours, rail passes, food options, and unique experiences around the world on its website and mobile app. The site claims 30 million unique visitors per year, and, according to the chief revenue officer Anita Ngai, transactions and unique visitors are growing by triple digits annually and are expected to reach US$1 billion this year. About one-third of its customers are based in mainland China, another third in South East Asia, and about 20% in Japan and the Republic of Korea.

About 70% of Klook’s customer interactions take place via mobile phones, compared to about 30% for comparable online travel agents (OTAs)—and a disproportionate number of those customers are Millennials. Meeting market demand means emphasizing services like instant confirmation via mobile devices when users book a guided tour or outdoor adventure.

“This is all driven by consumer behaviour,” Ms. Ngai says, referring to the ubiquitous use of smartphones among Asian millennials. “The expectation of our users is that everything will be instantaneous.”

Klook’s next step is allowing customers direct entry into the events they book. “The most difficult part of our business is the redemption and fulfilment part,” Ms. Ngai says. Klook is working with providers like Hong Kong rail to provide a QR code so that purchasers can download an electronic ticket directly to their mobile device and then show their phones to an agent to validate their travel.

See Appendix 1 for the complete case study

Experiencing – trips are increasingly optimised through continued access to platforms during travel, including the widespread use of mobile devices. Travellers can continue to explore options and effectively navigate destinations by integrating digital platforms into their travelling experience, also generating a wealth of data about activities undertaken.

Use of platforms within destinations is now widespread. Travellers in the Asia Pacific region lead the way in terms of travellers accessing TripAdvisor and OTAs via mobile devices. The most common planning method for 83% of young Asian travellers was to ‘make a basic plan first and then work out the rest when I arrive’.

31 Visa Global Travel Intentions Study, 2018
32 TripAdvisor’s TripBarometer, 2016 (Traveller Trends and Motivations, Global Findings)
33 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
Travellers are also increasingly relying on online and contactless payments instead of traditional cash-based methods of payment. Hospitality businesses need to meet this demand, while retaining trust that transactions are secure. They can do this by showing charges in each traveller’s own currency and avoiding unnecessary additional charges.

**Digital Interactions are Widespread During Trips**

- 61% travellers download apps before trips
- 87% millennials say that smartphones are their most essential travel item
- 88% travellers access digital information during their trip
- 48% millennials use ride-sharing apps
- 70% travellers share experiences online
- 20% millennials are directly inspired by social media when making travel choices

Source: Visa Global Travel Intentions Study 2018; PATA Youth Travel Report: Stepping Out of the Crowd, 2016

**Case study: Grab**

Just five years ago, it could be risky for a single woman in South East Asia to hail a taxi and feel confident she would get to her destination safely, without being harassed or overcharged.

Today, ride-hailing apps have changed the situation drastically by allowing riders to tell friends and family where they are heading, and by vetting drivers before they are hired. The core proposition of Grab, the leading service in South East Asia, is that “someone who gets in our car gets a safe, affordable ride,” says Ditesh Gathani, the company’s head of engineering in Singapore.

A Singapore-based start-up founded by two Malaysian graduate students while at Harvard Business School, the Grab app has been downloaded more than 100 million times, and lets customers order taxis, cars, and even motorbikes on-demand.

Another key innovation is a translate function in Grab’s in-app chat feature, so that a Singaporean visitor landing in Phuket need not speak Thai to communicate with her Grab driver.

*See Appendix 1 for the complete case study*

**Sharing** — travellers are increasingly sharing experiences both during and after travel. This information on social media then helps others in the dreaming process as recommendations from friends and relatives are still widely trusted by travellers.

Social media clearly links the dreaming and sharing stages, and to a lesser extent the experiencing stage. In 2017, 69% of travellers surveyed shared their
travelling experience via social media platforms. By facilitating sharing of photos and experiences, destinations can begin to reach a wide audience in the early stages of travel planning.

The prevalence of social media among millennial travellers suggests that the influence of online content will only continue to grow. Experiences must match marketing propositions because both positive and negative opinions can be rapidly and widely shared. This presents an opportunity for regional travel bureaus to use positive ratings to generate visitor interest.

Case study: Mekong Tourism

The large and growing influence of social media is having an outsized influence on the tourism industry across Asia. Millennial travellers are everywhere expressing an interest in discovering unique experiences they can photograph and share with their friends online, and regional travel bureaus are seeking ways to generate visitor interest around these social media contributions.

The Mekong Tourism Coordinating Office (MTCO), a consortium of six countries that together share the Mekong River basin, is pioneering a new effort to turn social media traffic into a viable commercial platform that generates higher web exposure, aggregates visual content, and helps draw new visitors into less-developed areas of South East Asia. The organisations’ roll-out of a campaign focused on the hashtag #MekongMoments, and an accompanying website, is meant to build regional IT capacity while generating more interest in hotels, restaurants, and tourist experiences across the region.

“Mekong moments was developed as a social commerce platform to encourage folks to share visual content and experiences,” says Jens Thraenhart, executive director of the Mekong Tourism Coordinating Office (MTCO).

Individual hotels or restaurants offer awards or discounts to encourage visitors who are already posting images or selfies to their social media pages to add the Mekong Moments hashtag to their posts. All tagged images are then aggregated into the platform and then organised and edited to help expand the appeal and reach of the website.

The Mekong Moments operation also helps build internet capacity in lesser developed parts of the region because tagging an individual establishment on the platform automatically creates a simple website for the business if it didn’t already have one, Mr. Thraenhart said. The programme enables business to create their own social media contest and help them build their own web presence. “Every experience gets their own simple website for free,” and the businesses can add more functionality for additional cost. “Essentially, we make it easy for any experience to obtain a website and become be part” of the Mekong moments campaign, he said.

The Mekong Moment programme only began operation in March of this year, but has already generated images of 10,000 specific regional experiences and upwards of 50,000 shares. Mr. Thraenhart hopes to begin using data generated from the campaign later this year to add additional programmes, including some sort of loyalty or rewards programme that incentivises visitors to return.

See Appendix 1 for the complete case study

34 Visa Global Travel Intentions Study, 2018
4. DATA INNOVATION

KEY POINTS

- Online interactions are data that should be used to gain a fuller picture of demand, preferences and behaviour of travellers.
- Data are vital resources which can boost productive potential and generate spillovers. Immense volumes of new data are redefining intelligence capacity and provide a new source of economic growth.
- Productivity is 5-10% higher for businesses which embrace data innovation.
- Data driven innovation aids in understanding traveller needs and allows tourism enterprises to provide higher quality and tailored services.
- A positive feedback loop exists between platform improvements and data innovation which benefits businesses, destinations and customers.
- Use of data requires technological investment, upskilling employees and a strategic willingness of enterprises to adopt new technologies.
- Smaller businesses are better able to compete in global marketplaces by embracing data and data analytics.
- The policy framework must allow data flows across borders or risk severe economic and welfare losses associated with the restriction of such flows.

4.1 DIGITAL DATA AS A VITAL RESOURCE FOR INNOVATION

The generation and use of vast amounts of new data are redefining global intelligence capacity and shifting social and economic landscapes. This, in turn, is kick-starting new industries, processes and products, and creating significant potential competitive advantages.

Data-driven innovation (DDI) has become a key pillar of economic growth for its potential to significantly enhance productivity, resource efficiency, competitiveness and wellbeing. The ongoing shift of economic and social activities to the internet and the advent of the Internet of Things (IoT), coupled with falling data collection costs and rising computer power, means that data-analytics is increasingly driving innovation and is an important new source of growth.

Data is a form of capital that cannot be depleted and that can be used for a theoretically unlimited range of purposes. Physical capital, such as roads and bridges, generate spillover benefits, by fostering trade and social exchanges. In a similar manner, greater access to data also has beneficial spillovers as it can be re-used to pursue significant, unforeseen growth opportunities.

OECD, Data-driven innovation for growth and innovation, 2015
There is a positive feedback loop created through greater digital engagement via platforms and data innovation that benefits travellers, destinations and businesses. Platforms ensure travellers are better informed throughout the travel planning process, generating additional demand. These digital interactions create large amounts of data which successful businesses can use to better understand their market and competitors. Then, improved products and services can be created, boosting the supply-side of the economy.

There is a virtuous cycle between platforms and data innovation to benefit travellers, businesses and destinations.

Given the interconnected nature of platforms and data it is hard to separately identify the incremental benefits of each of these. For example, Airbnb is has grown largely through its platform and is now gaining from detailed analysis of data generated in digital interactions.

However, governments and businesses risk under-investing in data and data analytics as some of the benefits cannot be fully quantified. For example, behavioural changes are less tangible than sales improvements, and associated risks may be overemphasised.

Proposed data localisation measures in Asia Pacific would restrict the storage and use of international data flows and may arise from undervaluing potential benefits. Such measures would limit growth in productivity, foreign direct investment (FDI) and GDP, as well as social development.

Bauer et. al. quantified the losses resulting from data localisation requirements in a range of markets, and related data privacy and security laws which discriminate against foreign suppliers. Access to foreign markets and globalised supply chains are a major source of growth in all seven jurisdictions examined in the report (Brazil, China, the EU, India, Indonesia, the Republic of Korea and Vietnam). Results ranged from a 0.2% loss of GDP in Brazil to a 1.7% loss of GDP in Vietnam from currently proposed measures. Full data localisation measures would be even more restrictive.

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36 ITIF, Cross-Border Data Flows: What are the Barriers, and What Do They Cost?, 2017
37 ECIP, the costs of data localisation: friendly fire on economic recovery, 2014
Restrictions on the free transborder data flows may have more of an impact on developing economies38, as purpose limitation rules can hinder the combination and repurposing of datasets that are so important to innovation.

SMEs and start-ups also have more at stake than larger firms because of their limited capacity to adjust to data flow restrictions. Freedom of data flows will allow them to compete with larger companies in domestic and international markets, reduce compliance costs, and gain access to cloud-based services based in other markets39.

This is not a new issue, as the 1985 OECD Declaration on Transborder Data Flows recognised “the growing importance of transborder data flows and the benefits that can be derived from transborder data flows”. This is even more true today with the large volumes of data generated by online interactions, including international travel planning.

The declaration also included intentions to: “promote access to data and information and related services, and avoid the creation of unjustified barriers to the international exchange of data and information”; and to “seek transparency in regulations and policies relating to information, computer and communications services affecting transborder data flows”40.

OECD continue to recognise the economic and social benefits of data flows in their updated “Privacy Guidelines”41, but also recognise that personal data should be protected. According to the guidelines, personal data collection and storage should only be carried out with the consent of the subject and only to the extent that it is necessary, while further guidance is given on cooperation in data sharing. However, this document also recommends the continued free flow of data to realise benefits.

Destinations must act to seize benefits from data innovation, by encouraging and training more data scientists, reducing barriers to cross-border data flows, and encouraging investment in business processes that incorporate data analytics. To maximise gains, governments should encourage investment in “innovative data analysis and promote data sharing and reuse”42.

Innovative use of data can also be promoted by appointing a “Chief Data Advisor” who can “provide independent advice on data-related policy proposals” as well as driving an improvement in the use of data within government agencies43.

Most businesses outside of the ICT sector are not currently taking full advantage of the potential benefits. This is despite large-scale reductions in the cost of data storage and processing. A 2017 EyeForTravel survey of 450 leading international brands across all world regions showed that 54% said that

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38 Analysys Mason, Data-driven innovation for emerging Asia–Pacific: supporting economic transformation, protecting consumers, 2016
39 Asia Cloud Computing Association, Cross-Border Data Flows Case Studies, 2018
40 Declaration on Transborder Data Flows (Adopted by the Governments of OECD Member countries on 11th April 1985)
41 The OECD Privacy Framework, 2013
42 OECD, Data-driven innovation for growth and innovation, 2015
43 Sapere Research Group & Covec, Data Driven Innovation in New Zealand, 2015
they only had a limited ability to understand the data generated by their customers and prospects across devices or could not do so at all\textsuperscript{44}.

### Understanding Customers & Handling Online Data

Do you have a single view of your customers/prospects across devices & touchpoints?

![Graph showing data understanding across devices and touchpoints]

Source: EyeforTravel

New areas of data innovation and growth are opening-up as the internet moves from being an Internet of Information, operating between computers, to being an Internet of Things (IoT), operating between personal and embedded devices. Data obtained through the Internet of Things (IoT) are already being re-used to optimise the efficiency of machines and commercialised in the form of new services (e.g. after-sales services). Such methodologies are percolating through to the tourism sector as well.

Tata Consultancy has found that companies in the travel industry lead other sectors in IoT adoption. Euromonitor International identifies Singapore, Japan and the Republic of Korea among the top 10 economies where the Internet of Things is most likely to be adopted. The IDC Internet of Things Forecast suggests that from 3.1 billion connections in 2015, there will be 8.6 billion connected devices in Asia by 2020\textsuperscript{45}.

For the accommodation sector, IoT technologies are already being used in ‘back of house’ operations and are now moving into keyless entry. Some hospitality groups are now offering apps to allow guests to monitor and control the temperature of their room remotely.

Proximity beacons have already been deployed in 90% of airports so that retailers can connect with travellers and to improve processes in baggage handling. Furthermore, airlines can use IoT technologies to better monitor fuel consumption and improve replacement of aircraft parts.

The presence of proximity sensors in destinations, along with the emerging use of mobile positioning data enables destination management organisations to better understand patterns of visitor behaviour. The ability to better segment different types of travellers allows more targeted information provision and optimises tourists’ experiences. Airbnb provides an example of how similar

\textsuperscript{44} EyeforTravel, Understanding the Travel Consumer, 2017

\textsuperscript{45} Internet Society, Issue Paper: Asia Pacific Bureau. Internet of Things, 2017
benefits are generated for multiple stakeholders from data innovation, and platforms.

**Case study: Airbnb**

In just 10 years, Airbnb has gone from renting out a handful of air mattresses in a San Francisco apartment to remaking the hospitality industry. Employing advanced technologies and social media tools that allow guests to develop trust with potential hosts, the company has turned the home-sharing experience into a viable global business. Today about two million people per night stay at Airbnb-brokered accommodations, with five million listings on offer in 81,000 cities around the world.

The company helps “diversify tourism and travel in terms of where visitors are going and what they are doing,” says Anita Roth, head of policy research for the privately-held company.

By diverting travellers from areas that could be considered “over-touristed,” and by reducing the need for cities to build excess hotel capacity for special events that might later go unfilled, Airbnb seeks to boost environmental sustainability. The company also offers local hosts greater opportunity to share the economic benefits generated by the global tourism economy by encouraging travellers to stay in residential neighbourhoods with more authentic, local, flavour.

Airbnb was built on technology and continues to focus on digital investments, including an increasingly-robust mobile platform and investments around AI,” Ms. Roth said. Airbnb is also improving the platform’s performance by harnessing machine learning to help anticipate spikes in demand around big events, like a World Cup soccer tournament, or an arts festival. The company is experimenting with ways to analyse user preferences and guest reviews to optimise matches between vacationers and potential home-stay hosts. “We are using data to figure out where we build supply,” Ms. Roth explains. “Machine learning is particularly helpful in helping ensure that both hosts and guests find what they are looking for.”

*See Appendix 1 for the complete case study*

### 4.2 BUSINESS BENEFITS OF INNOVATION

Businesses are clear beneficiaries of data innovation. With a better understanding of groups of travellers’ preferences, businesses gain the ability to provide better products and services and to raise activity.

For example, KKday is one of Asia's largest travel-experience e-commerce platforms, based in Chinese Taipei. KKday is applying data analytics to drive business decisions and refine current offerings to customers. Their goal is to identify opportunities in new markets.

Productivity gains from data driven innovation have been identified in several studies, with an average gain of 5-10%. For example, Brynjolfsson, Hitt & Kim (2011) identified that output and productivity of firms adopting data-driven decision making are 5-6% higher than would otherwise be the case (a study of

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*46 Brynjolfsson, Hitt, Kim, Strength in Numbers: How Does Data-Driven Decision-making Affect Firm Performance, 2011*
330 companies in the US); while Bakhshi, Bravo-Biosca, & Mateos-Garcia (2014) identified that businesses that make greater use of online customer data are 8-13% more productive as a result (500 UK firms).

Fiji Airways has also benefitted from using data analytics to better understand their customers. By analysing the full ‘buying journey’ across all touchpoints, direct online bookings rose by 50%, with a 63% rise in profit contribution, beating their own targets.

Using Ambient Intelligence (AmI) enables enterprises to anticipate the desires of unique travellers by matching behaviour to preferences of similar groups of travellers.

Sands China was the first hospitality company in Asia Pacific to adopt machine learning technology to this scale, to deliver a clear understanding of the entire customer journey, leading to an improved ROI and better customer experience. A custom-built prediction model has delivered a 1.5 times higher conversion rate and two-fold increase in bookings. It can predict which users are more likely to book a hotel stay within the coming month; as well as identify potential customers who were more likely to be interested in live shows and music. These users were served ads showcasing the brand’s entertainment packages, driving further business for Sands China’s hospitality and entertainment divisions.

Case study: Grab

Grab’s substantial investment in data analytics, and computer scientists who can mine data and quickly develop applications – Grab operates six research and development centres – is key to its rapid growth and its migration into other areas of commerce.

At the core of the business lies a massive trove of data. “Today we have one of the biggest geographical data sets in South East Asia,” Mr. Gathani, the head of engineering, says. “We know where people go and when they go there, and that allows us to optimise the experience,” for drivers and passengers. This ensures that customers get a quick ride, and that drivers easily locate passengers without having to idle.

The company has also exploited advances in machine learning capabilities to determine the preferences of individual drivers, so that the company is more likely to suggest rides that a specific driver will accept. “Using multiple inputs, we can determine the probability by which a driver will take a specific job, so we can then target jobs to drivers most likely to accept them. This keeps drivers happy, and it keeps passengers happy. Driver-satisfaction scores shot up after this new tool was introduced, he says.

See Appendix 1 for the complete case study

Businesses also can gain a better understanding of clients who advocate for them and provide free marketing content in the process. This could include

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47 NESTA, The analytical firm: estimating the effect of data and online analytics on firm performance, 2014
48 Fiji Airways/Dynamic Creative, Fiji Airways bookings soar by 50% with Dynamic Creative and Google AdWords, 2018
49 Think With Google, Sands China Embraces Machine Learning to Focus on High-Value Consumers, 2018
Data & Digital Platforms: Driving Tourism Growth in Asia Pacific

rewarding client-advocates or merely seeking out their distinctive characteristics. IDC Research measured that in 2016 only one in ten companies had a programme to reward client-advocates. In just one year that proportion rose to two thirds\(^5\). If a business knows who its advocates are, then it can develop strategies to generate more of them.

Potential business benefits are particularly large for smaller firms as technology allows them to better compete in international markets. However, skill shortages may be more apparent in smaller firms.

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### Case study: Yanolja

Yanolja, a start-up travel platform in the Republic of Korea, has found its own niche by catering to young Koreans who seek a different class of lodgings: short-stay, lower-priced accommodations, many of them family-owned. These might include motels and even establishments known as "love hotels" that once offered customers privacy by the hour.

Yanolja is the first platform to make all types of hotel accommodation available for booking online, says Jeff Jongyoon Kim, the firm’s chief business officer. The company, founded in 2005, at first offered only hotel listings, not bookings, a legacy that enables the current strategy. "We have three to five times more booking partners compared to other platforms," says Mr. Kim, citing a list of some 20,000 motels, lodges, and love hotels across the country that cater mostly to local Korean tourists.

Tapping into a less-served market and rapidly increasing the supply of available rooms has driven strong growth for Yanolja since its booking platform went live in 2015. Today the company says its revenue exceeds 200 billion Korean won, from a mere 20 billion in 2014, representing a compound annual growth rate of over 80% in the past five years. It now employs 450 people, up from 100 five years ago, and estimates it has more than 9 million monthly active users. It has also committed to including user reviews and generating buzz on social media; Ms. Cho says that Yanolja has 2 million followers and more than 550K reaches on its Facebook and Instagram every day.

Technology has helped Yanolja differentiate itself from other, global OTAs, Mr. Kim says. That includes an aggressive effort to install sensors in a variety of small motels so that Internet of Things technology can be employed to help boost the efficiency of motel operators and increase occupancy.

See Appendix 1 for the complete case study

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### 4.3 CONSUMER BENEFITS OF INNOVATION

Travellers benefit from data innovation when businesses better understand their preferences and provide them with more relevant information. Travellers are in turn better informed before and during trips and can make the most out of their time abroad.

Travellers can be presented with more personalised experiences based on inferences built upon spending patterns of similar travellers. This benefit can

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\(^5\) IDC Research, The role of marketing in consumer advocacy, 2017
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arise during planning stages as well as while travellers are in the destination as shown in the example of Sands China.

The planning process for travel further improves as travellers are even better informed. Outbound travel to new destinations presents a source of uncertainty to travellers. They are unable to ‘pre-test’ the destination and therefore rely on research before investing in the trip.

Clearer understanding and communication of the true nature of destinations and attractions allows more informed decisions and a better sense of true quality. This reduction in information asymmetry improves market interactions. Any concerns about venturing beyond the main metro areas are also allayed as the increase in trusted information allows travellers to safely discover authentic experiences.

4.4 DESTINATION BENEFITS OF INNOVATION

Destination management organisations can carry out more effective marketing operations with a clearer understanding of their market, in the same way as private sector tourism businesses. For example, Chinese Taipei was facing a loss of tourism revenue and tourist arrivals due to a dramatic decrease in mainland Chinese tourist arrivals since 2016. The tourism board utilised analytics to identify target destinations and run successful campaigns in newer source markets. Large gains in market share have resulted from this targeted marketing.

The Singapore Tourism Board (STB) has also used data innovation to help grow travel to its destinations. In response to a slump in the mid-2010s, the Singapore Tourism Data Hub was established. This service pulls together information from multiple sources, including forward airline bookings and hotel data, to predict room availability. The Hub also examines social media comments to understand feedback from travellers. STB has now moved beyond simply tracking and are able to put out a targeted marketing campaign within a week in response to a downturn in business. New areas of research include the Internet of Things, mobile payments, near field communications, voice activated solutions and augmented reality.

Destinations can also better manage visitor flows by understanding visitor patterns and behaviour. This includes seasonal patterns throughout the year as well as variations during a typical day, in the same way that Grab are able to understand and predict peak passenger demand. Destination management organisations can then plan how to better accommodate this demand and redirect visitors when necessary. Cities that are overcrowded with tourists can lose their authentic appeal, so directing visitors to cover a wider area will reduce congestion while driving total tourism revenue and improving the visitor experience. Emerging use of mobile positioning data to track tourism flows will help build this understanding of demand and also provide real-time monitoring.

Effective incentives can encourage visitors to move beyond the main tourism hotspots and visit additional attractions using a similar approach to that employed by Airbnb. By leveraging trusted platforms and a clear understanding
of demand, destinations are able to encourage greater dispersal of visits, including assurances of quality and safety.

For example, Chinese visitors to Australia who used the internet as a source of information for bookings were more likely to visit regional areas than non-users. Around 29% of visitors who used the internet as an information source travelled to regional areas compared to 18% of non-internet users.

The strategy of the ‘Holland City’ campaign, run by NBTC Holland Marketing between 2016-2020, is to position Holland as a city destination rather than a country. They seek to highlight how easy it is for visitors to travel around the country by “mentally making Holland smaller than it is”. For visitors from metropolitan areas such as Beijing, travelling out of Amsterdam to a secondary destination in the country may be quicker than their daily commute.\(^5\)

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**Case study: The Road Trip**

The Road Trip provides personalised, high-end guided tours across New Zealand and has been cited by the consulting firm Deloitte as one of the fastest-growing small businesses in New Zealand, thanks to its effective use of Internet marketing to attract a new demographic of travellers from across South East Asia.

Success is attributed to the use of targeted digital strategy. Having grown more than 265% in its first three years of operation, The Road Trip now employs a staff of about 20, including seasonal guides, and boasts annual revenues that exceed US$2 million.

A conversion tracker allows the ad team to understand where contacts and sales are coming from to ensure effective ad spending. Today some 80% of the company’s marketing budget is directed toward targeted ad words on Google search; by employing specific ad words in specific countries, The Road Trip has succeeded at narrowing its promotional spending and can focus on markets where the pitch will be most effective. The company also invests in content like blogs that can boost its organic search rankings.

See Appendix 1 for the complete case study

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\(^{51}\) PATA Youth Travel Report: Stepping Out of the Crowd, 2016
5. THE GROWTH OPPORTUNITY

KEY POINTS

- Increased use of appropriate platforms, supported by improved digital networks, will generate new demand for destinations in the Asia Pacific region.
- There is a significant growth opportunity for the tourism sector by increasing digital interactions and embracing the virtuous cycle of growth between platforms and data innovation.
- Productivity of firms is typically 5-10% higher due to data driven innovation with large potential gains for the tourism sector.
- Restrictions on free flow of data across borders will limit the growth potential.
- A 0.5% increase in GDP across the region can be realised, including up to 1.0% growth in some economies.
- Over 9 million new jobs can be generated.

5.1 DIGITAL OPPORTUNITY BY DESTINATION

Destinations within the Asia Pacific region have benefitted from embracing more digital content over the past 5 years. This has helped growth exceed source market demand, delivering gains in market share (see section 2).

Arrivals Growth Decomposition: 2013-18

Source: Tourism Economics

Growth in international arrivals would have been on average almost 1% point slower per annum over the past five years without growth in digital interactions and the benefits of data innovation. Tourism Economics has been able to estimate this specific impact by incorporating the evolution of the region’s digital footprint and other metrics of data innovation into the existing model of tourism flows. Around one-fifth of the growth observed across the region is due...
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Market share gains have been greater for destinations which have increased digital footprint.

The gains from increased digital content vary by destination and unsurprisingly the destinations with a higher digital footprint and the greatest expansion thereof have benefitted the most.

Online Influence & Market Share, 2013-18
% growth premium in inbound arrivals over average growth in source market demand

Hong Kong SAR and the Republic of Korea are outliers on the downside as geopolitical factors have resulted in some loss of market share, unrelated to gains in their digital footprint.

By contrast, internet penetration in Japan has increased and the proportion of travel organised online grew even more rapidly. Foreign arrivals grew at an average annual rate of 24%, aided by improved price competitiveness as the Yen depreciated, and driven by increased online connectivity internally and with China.

Arrivals Growth Decomposition Detail: 2013-18
CAGR: contribution from non-price competitiveness effects

Importance of digital interactions has varied by destination, and has been a key driver of market share gains in many destinations.
Digital travel innovation explains the bulk of the gains in market share experienced in Australia and New Zealand in recent years, accounting for around one-quarter of all international arrivals growth.

China has received virtually no benefit from digital travel innovation over recent years as the proportion of travel organised online has fallen from 78% to 70%. Growth in domestic travel has occurred as new middle-class households can afford to travel, and internet penetration has increased. However, online travel planning has fallen within China as the newly affluent households are following different patterns.

Policy makers should ensure continued digital network investment in China (connection speeds are low) and address any skills shortages to realise the growth they are currently missing.

As more connected millennial travellers begin to dominate the market, the proportion of travellers to China seeking to organise trips online should rise again. By 2030, the largest proportion (57%) of 15 to 34-year olds in the world will live in Asia. China will become home to 333 million millennials. It is reasonable to assume that the proportion of travel organised online will rise again in the years to come.

The contribution of Travel & Tourism to GDP in China has still grown in recent years. Domestic travel within China has continued to grow, albeit by less than international demand in many destinations, helped by the rise in importance of new travelling households.

Excluding China, greater use of platforms and an increased digital footprint is clearly related to faster growth in the GDP contribution of the Travel & Tourism sector. For example, the Philippines enjoyed the greatest increase in the proportion of travel organised online and in GDP generated by Travel & Tourism, while Chinese Taipei lagged.

### Online Influence & GDP Contribution, 2013-18

<table>
<thead>
<tr>
<th>Destination</th>
<th>Difference in share of travel organised online</th>
<th>Difference in share of GDP generated by Travel &amp; Tourism</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>-6%</td>
<td>8%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>India</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>-2%</td>
<td>0%</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>-4%</td>
<td>-2%</td>
</tr>
<tr>
<td>Australia</td>
<td>6%</td>
<td>4%</td>
</tr>
<tr>
<td>Philippines</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Japan</td>
<td>-4%</td>
<td>-2%</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>-6%</td>
<td>-4%</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>-8%</td>
<td>-6%</td>
</tr>
</tbody>
</table>

Source: Tourism Economics

Significant opportunities for further growth remain in the region, driven by increased use of platforms in order to improve each destination’s digital

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52 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
footprint. Source market demand at all stages of the planning process can be met by learning from more successful destinations. This will result in further growth in overall activity beyond just a shift from offline to online research and booking.

**Potential Increase in Digital Travel Footprint**

<table>
<thead>
<tr>
<th>% tourism organised online by destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
</tr>
<tr>
<td>Australia</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
<tr>
<td>New Zealand</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
</tr>
<tr>
<td>Republic of Korea</td>
</tr>
<tr>
<td>Chinese Taipei</td>
</tr>
<tr>
<td>Philippines</td>
</tr>
<tr>
<td>Japan</td>
</tr>
</tbody>
</table>

Source: Tourism Economics

Japan, Chinese Taipei, the Republic of Korea, and the Philippines have the lowest opportunity for new growth. In these destinations, platforms are already widely used by the travel industry, and their practices should be adopted as models by other destinations. The vast amounts of data being generated provide further upside as destinations can develop better products and services using their better understanding of travellers.

The greatest growth opportunity from embracing digital platforms is in destinations with a low current footprint. Vietnam and Australia, despite some significant improvements in recent years, as well as China and India, have significant room for further expansion.

### 5.2 THE IMPORTANCE OF DATA INNOVATION FOR GROWTH

In addition to the demand generated for destinations from platforms, the supply-side benefits of data innovation must be considered to recognise the full growth potential. Modelling the impacts of platforms alone does not sufficiently explain the observed growth premium and market share gains.

Case studies illustrate the considerable overlap between the economic benefits of platforms and of data innovation. The two innovations complement each other, and it is impossible to fully separate the incremental benefit of platforms on demand and of data innovation on supply in historic trends or in the forecast. However, applying conservative estimates of the data innovation growth premium to the proportion of businesses able to collect and use data improves explanatory power and better fits recent growth trends.

Data innovation in the Travel & Tourism sector accounted for almost one-third of the estimated digital growth premium in recent years according to Tourism Economics calculations. International arrivals in Asia Pacific destinations are,
on average, 5% higher than would otherwise have been the case due to increased digital interactions. Approximately one-third of this premium is from data-driven innovation, while the ratio varies by destination. There will be a greater opportunity for data-driven innovation in coming years thanks to the increase in the digital footprint and greater availability of online data.

Estimated productivity impacts for the Travel & Tourism sector are consistent with other studies. Notably, results are in line with the whole economy data-driven innovation benefits for Asia Pacific economies estimated by Analysys Mason, which considered the relative embrace of digital planning by destination and sector size\textsuperscript{53}.

### Estimated Whole Economy DDI Contribution

![Graph showing % GDP estimated whole economy DDI contribution for India, Indonesia, Philippines, Thailand, and Vietnam.]

Source: Analysys Mason, Oxford Economics

Destinations with a larger digital footprint have greater growth opportunities from data innovation.

Destinations which have already embraced platforms are able to generate huge amounts of data which can be used to fully understand travellers and improve products and services. These destinations have the larger opportunity for future growth from data innovation.

Larger firms have led the way so far in embracing data innovation, while small to medium sized enterprises (SMEs) are lagging in technologies such as cloud computing. The cost of such technologies has fallen considerably and is within reach of most firms, but skills shortages remain an obstacle. One efficient solution involves a combined approach, bringing together a range of stakeholders for information exchange and analysis\textsuperscript{54}. As technology improves, data innovation and the use of platforms enables smaller businesses to better compete in international markets.

\textsuperscript{53} Analysys Mason, Data-driven innovation for emerging Asia–Pacific: supporting economic transformation, protecting consumers, 2016

\textsuperscript{54} K Kaur and R Kaur, ‘Internet of Things to promote tourism; an insight into Smart Tourism’, 2016
5.3 OPPORTUNITY FOR GDP AND EMPLOYMENT

Combining the potential benefits of greater use of platforms and data innovation, the additional GDP growth opportunity has been estimated for 12 Asia Pacific destinations.

Travel & Tourism contribution to GDP could be increased by 5% on average across the region, over the next five years, by a greater embrace of digital platforms and data innovation. This growth opportunity is in addition to expected baseline growth under an assumption of no new developments. Over the next five years, Travel & Tourism GDP is expected to grow at an average annual rate of 5% for the 12 Asia Pacific economies in aggregate; this is according to WTTC projections consistent with Oxford Economics’ growth assumptions. Under the assumptions of increased use of data and digital platforms, an average annual growth rate of 6% would be achieved.

The potential growth premium varies from 2.6% in Japan to 8.0% in Vietnam. This includes an assumed increase in the use of platforms to catch-up with more successful destinations in the region and to better match source market demand. More productive use of data is also assumed to drive further growth, with greater benefit in destinations which have already embraced digital tourism.

There is potential for GDP to grow by an additional 0.5% due to an increase in digital platforms and data innovation. This potential impact on GDP varies by economy, according to sector growth and the relative importance of the Travel & Tourism sector. Potential growth benefits range from a 0.1% rise in the Republic of Korea to 1.0% in Thailand over the next five years.

**Tourism GDP Growth Opportunity**

<table>
<thead>
<tr>
<th>Year</th>
<th>Baseline expectation</th>
<th>Opportunity from increased use of data and digital platforms</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>2,000</td>
<td>3,000</td>
</tr>
<tr>
<td>2018</td>
<td>2,200</td>
<td>3,200</td>
</tr>
<tr>
<td>2019</td>
<td>2,400</td>
<td>3,400</td>
</tr>
<tr>
<td>2020</td>
<td>2,600</td>
<td>3,600</td>
</tr>
<tr>
<td>2021</td>
<td>2,800</td>
<td>3,800</td>
</tr>
<tr>
<td>2022</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td>3,200</td>
<td></td>
</tr>
</tbody>
</table>

Source: WTTC, Tourism Economics

GDP would be up to 1.0% higher by economy from these tourism developments.
The relative importance of platforms and data innovation to each destination varies, but on average it is estimated that innovation accounts for around two-fifths of the potential growth. However, given the interconnectedness of the benefits of platforms to demand and data innovation on supply and productivity it is hard to separate these impacts.

Over 9 million new jobs would be generated across the region if this potential growth is realised. Almost 4 million new jobs will be created directly within the Travel & Tourism sector, while supply chain impacts and induced benefits from spending of wages will support the rest.

The largest benefit in terms of additional employment is in China. The potential to create more than 5 million new jobs accounts for over half of the new employment opportunities. The potential boost for the tourism sector is the third largest at over 5%, translating to 0.6% GDP growth potential. The large size of the economy means that this translates to a massive job creation opportunity.

India has the potential to generate over 2 million new jobs, from the fourth largest potential sector growth. The large size of the tourism sector and the
Data & Digital Platforms: Driving Tourism Growth in Asia Pacific

The size of the Indonesian economy also means that relatively modest incremental growth from digital activity will translate into many new jobs (617,000), the third largest amount within the region. Digital interactions are widespread despite high internet costs and relatively low connection speeds. Digital network investment would facilitate growth.

The largest opportunity for GDP growth is evident in Thailand. The importance of the sector means that a relatively modest increase in sector activity will generate a large growth premium for the economy as a whole. There is potential to create 323,000 new jobs.

Vietnam has the largest potential growth opportunity for the Travel & Tourism sector, with opportunity to increase sector activity by 8% as slow connection speeds and high costs are currently impeding activity. This would translate into 0.7% potential GDP growth uplift and 367,000 new jobs. This is dwarfed by the large job creation opportunity in India and China but is the fourth largest jobs opportunity in the region.

The growth opportunity for the Travel & Tourism sector in Australia is the second largest in the region, with potential uplift of over 6%, which would also generate 0.7% increase in whole economy GDP. This would involve 101,000 new jobs.

There is a modest opportunity in Japan, Chinese Taipei and the Republic of Korea in terms of both GDP growth potential and additional jobs as platforms have been widely adopted in recent years, with associated benefits already realised. However, the large volumes of data generated by interactions provide opportunity to improve products and productivity, ultimately leading to more rapid growth.

The Philippines has low growth potential, following some significant improvements in digital networks and a rising digital footprint. But due to the importance of the sector, there is a potential GDP growth premium of 0.6%, which would generate 266,000 new jobs. Faster connection speeds and a reduction in access costs would again facilitate this growth.

Job creation opportunities in Hong Kong SAR and New Zealand are apparently modest at just 24,000 and 23,000 jobs, but this is related to a significant growth opportunity equivalent to 0.7% GDP in both destinations. The Travel & Tourism sector is an important driver of growth in both destinations.
6. CONCLUSIONS & POLICY RECOMMENDATIONS

TRAVELLERS HAVE BECOME DIGITAL

The tourism sector is an important driver of economic growth and job creation across the Asia Pacific region. The sector supports 181 million jobs across the region, equivalent to roughly 1 in 11 jobs. Growth of the sector’s economic contribution has outpaced the wider economy. Continued growth in coming years from domestic and a range of international markets will have a significant impact on overall economic activity.

On average, 80% of travel is organised online in the Asia Pacific region, similar to the proportion worldwide despite lower internet penetration. Just 48% of the population in the Asia Pacific region has access to the internet, compared to 62% of the population of the rest of the world55. In both India and Indonesia, only 22% of households have access to reliable internet56 and the proportion of the population covered by mobile network is also lower than average (93% in India and 95% in Indonesia compared with a global average of 98%57).

Between 62% and 92% of travel is organised online in 12 key Asia Pacific destinations, including travel from all global source markets. This discrepancy is partly due to differences in reliable broadband access. High broadband costs remain an issue for some more remote regions.

Travellers are better informed than ever before, thanks to digital information. Online planning for the average trip currently occurs over a 3-month period58, relying on a wealth of information and over 250 searches59.

Digital interactions are becoming the norm throughout all five stages of the travel planning process, including in real-time with in-destination research on mobile devices. 61% of travellers already download apps before travel60 while 87% of millennials see their smartphone as the most important travel item61. Almost 70% of travellers share their experiences online62 and one-fifth of millennials are directly inspired in making travel choices by what their friends posted on social media63.

Governments can benefit from cooperation with service providers that are seeking to improve their global reach. The shared goal of extending connectivity and improving network speeds can encourage further investment

55 Internet world stats
56 World Bank, World Development Indicators
57 World Economic Forum, Travel & Tourism Competitiveness Report 2017
58 TripAdvisor, Worldwide Travel Path to Purchase, 2017
59 GfK & Google research for Australia
60 Visa Global Travel Intentions Study, 2018
61 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
62 Visa Global Travel Intentions Study, 2018
63 PATA Youth Travel Report: Stepping Out of the Crowd, 2016
in digital networks\textsuperscript{64}. Concerns about regulation may be less important than the desire of the population to connect to international services.

The Republic of Korea represents an example of best practice in terms of its digital network, including some significant improvements in recent years. Over 92% of the population now have reliable internet access, following expansion in recent years. The Republic of Korea also benefits from the fastest average connection speeds out of the 12 destinations of interest, along with one of the lowest average costs; true for both fixed and mobile connections. Low costs are particularly noteworthy when adjusted for average incomes.

Continued investment in digital networks in the Republic of Korea over a number of years has been essential to reach this position, while the government also encourages take-up by ensuring safe online interactions. The Republic of Korea has a particularly low share of firms experiencing security issues. The government provides tax incentives for firms, including SMEs, that invest in digital security products\textsuperscript{65}. As a result, Tourism Economics estimates that 87% of all tourism is organised online in the Republic of Korea.

**Policy recommendation 1: Continue to invest in digital networks**

To ensure travellers are able to leverage platforms to access information in Asia Pacific destinations policymakers should:

- Ensure high-speed internet is available for travellers, the resident population and local business. Travellers are less able to leverage platforms to access information when visiting less-connected destinations. Businesses are not able to connect with new potential travellers during the planning process or while they are searching for activities during their stay.
- Improve both geographic coverage and internet speed across destinations. Both factors are integral in meeting the connectivity expectations of travellers and developing positive digital behaviour.
- Prioritise mobile internet coverage to effectively reach travellers from within the region who are more likely to use mobile devices.
- Co-operate with service providers with the shared goal of expanding connectivity.
- Engage with internet service providers to reduce costs to align with the UNESCO Broadband Commission’s recommendations.

**DIGITAL SKILLS MAY NOT MATCH DEMAND**

The growing importance of the millennial generation, especially within the Asia Pacific region, coupled with continued household income growth in source markets, will lead to continued growth in digital travel for all destinations.

\textsuperscript{64} Brookings Global Economy and Development, Regulating for a Digital Economy, 2018

\textsuperscript{65} OECD Digital Economy Outlook 2017: Spotlight on Korea
The nature of digital planning may change as the millennial generation grows in importance, including a potential reduction in the lead time for travel booking. 83% of young Asian travellers surveyed prefer to ‘make a basic plan first and then work out the rest when I arrive’\textsuperscript{66}. But it will remain essential to reach and understand travellers online to understand evolving travel behaviour within destinations and manage the information flow.

For example, Klook has been developed to target millennials, who extensively use smartphones for research and bookings. Rapid growth has been achieved by reaching this audience in a manner with which it is comfortable.

It is essential that the correct platforms are understood and leveraged to best reach visitors from different source markets. For example, Mekong Tourism established their platform to leverage the most widely used platforms by travellers, such as Facebook and Instagram. New development will consider expanding this approach to platforms such as weibo and wechat to better interact with Chinese travellers. The Mekong Tourism programme also highlights that some establishments still do not have an online presence as it helps to build capacity by creating a simple website for tagged businesses which do not have one.

Digital interactions generate usable data that allows destinations and tourism businesses to understand traveller behaviours and desires. For example, Yanolja generates large volumes of data from digital interactions, including the Internet of Things, which it has used to better connect businesses and travellers and drive growth.

However, a 2017 Eye for Travel survey of 450 leading international brands showed that 54% "struggle when dealing with data… in a timely manner" or could not do so at all\textsuperscript{67}. Current opportunities for growth are not being maximised due to skills shortages.

Differences in ability to reach travellers effectively with useful information in their preferred format also partly explains the disparity in digital footprint by destination and highlights potential growth opportunities.

Hong Kong SAR has the highest digital skills among the population among the 12 economies of focus in this report according to the World Economic Forum\textsuperscript{68} and also has one of the ranks in terms of firm-level technology absorption. New Zealand is the next highest ranked destination in terms of digital skills and it has also improved its ranking in terms of technology absorption. By contrast Vietnam and India are ranked lowest in terms of skills. Along with other economies with a skills gap, they should aim to achieve similar skill levels as in Hong Kong SAR or New Zealand to maximise potential growth opportunities.

\textsuperscript{66} PATA Youth Travel Report: Stepping Out of the Crowd, 2016
\textsuperscript{67} EyeforTravel, Understanding the Travel Consumer, 2017
\textsuperscript{68} World Economic Forum, Readiness for the Future of Production Report, 2018
Policy recommendation 2: Address digital skills shortages

Skills shortages in using online platforms and data management should be addressed to maximise benefits:

- Ensure SMEs can compete effectively with larger businesses in international markets and take advantage of affordable digital technology, including access to training for accommodation and attraction owners. SMEs comprise a large proportion of tourism businesses.

- Embrace new platforms which seek to commoditise social media traffic, such as the Mekong Tourism programme. Set up websites and provide training for businesses which do not currently have an online presence.

- Train more data scientists to promote innovative use of data.

- Encourage investment in business practices involving data analytics.

- Equip tourism business with clear examples of best practice in reaching international audiences, including an understanding of important platforms for source markets, market preferences and translation of relevant content into key languages. Destination management organisations can provide examples to businesses.

DATA INNOVATION SUPPORTS GROWTH

The data generated by interactions on travel platforms help to develop the supply-side of the market by providing a wider set of potential travellers with information. Data should be recognised by policy-makers and businesses as an important source of innovation that can boost output in the long-run by improving products and services.

Airbnb notes that one-third of users stayed longer or wouldn’t have travelled at all without the home sharing options it offered. By understanding travellers and product gaps, new supply has been added to better meet current demand and generate new demand.

Studies show an average increase in productivity of 5-10% for businesses which innovate with data\textsuperscript{69}, while Bakhshi et al\textsuperscript{70} show even higher uplift of 8-13%.

By contrast, policies which limit the possibility for data innovation will create an economic and social loss\textsuperscript{71}. Data localisation requirements can severely disrupt operations and security capabilities of both controllers and processors and eventually users need to endure such operational and security risks. It is important that policies in Asia Pacific recognise and adopt existing practices and nurture them at international level.

\textsuperscript{69} OECD, Data-driven innovation for growth and innovation, 2015
\textsuperscript{70} NESTA, The analytical firm: estimating the effect of data and online analytics on firm performance, 2014
\textsuperscript{71} ITIF, Cross-Border Data Flows: What are the Barriers, and What Do They Cost?, 2017
According to research by Bauer et al\textsuperscript{72}, the imposition of data localisation measures in Asia Pacific destinations would reduce GDP across a range of economies: from -0.1% in India and -0.5% in Indonesia up to -1.7% in Vietnam. As far back as 1985, the OECD recognised that benefits arise from the free flow of data across borders, which is only heightened with the volume of digital interactions.

SMEs and start-ups have the most at stake because of their limited capacity to adjust to data flow restrictions. Freedom of data flows will allow them to compete with larger companies in domestic and international markets, reduce compliance costs, and gain access to cloud-based services based in other markets\textsuperscript{73}.

Governments should also consider appointing a Chief Data Advisor to oversee public data policy, collection and distribution. The addition of an independent council on Data Driven Innovation can allow new government agencies to manage and capitalise on data with which they already interact\textsuperscript{74}.

The Asia Pacific Economic Cooperation (APEC) forum’s Cross Border Privacy Rules (CBPR) is an example of best practice for data sharing while protecting privacy. This system encourages cross-border data flows by allowing businesses to organise data sharing without government intervention as long as they conform to system-wide privacy constraints. It is designed as a framework for both data enabler and data protection by identifying independent bodies to monitor and enforce these constraints\textsuperscript{75}.

CBPR broadly follows the principles set out in the OECD “Privacy Guidelines” which recognises the economic and social benefits of data-driven innovation but calls for the protection of personal information.

**Policy recommendation 3: Facilitate data innovation**

Destinations should develop policies that facilitate the use of data as a vital resource to drive productivity and tourism growth, including:

- Recognise the importance of data as a tool for innovation. Avoid data localisation measures which will disrupt operations, hamper the flow of data and restrict GDP growth opportunities.

- Allow businesses and destinations to collate and analyse all relevant data, including cross-border data flows, as long as they conform to privacy rules, similar to the CBPR established by APEC, and consistent with OECD “Privacy Guidelines”.

- Consider appointing a Chief Data Advisor, or council, to oversee all data-related policy and provide guidance on how to best use existing datasets to segment customers and develop new products and services.

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\textsuperscript{72} Bauer, Lee-Makiyama, van der Marel, Verschelde, The Costs of Data Localisation, 2014
\textsuperscript{73} Asia Cloud Computing Association, Cross-Border Data Flows Case Studies, 2018
\textsuperscript{74} Sapere Research Group & Covoc, Data Driven Innovation in New Zealand, 2015
\textsuperscript{75} Brookings Global Economy and Development, Regulating for a Digital Economy, 2018
BENEFITS FOR MULTIPLE STAKEHOLDERS

If all opportunities are realised, then there is potential to expand tourism demand and economic activity across the Asia Pacific region, involving more than just a shift from offline to online research and booking. Products and services can be improved through data generation and subsequent use of data to better understand the market.

Benefits are clear for: travellers who are better equipped to plan and book trips with confidence; businesses which can target consumers and increase sales and productivity; and destinations which are able to more efficiently market their destination. By understanding and managing traveller flows, businesses and destinations can generate additional jobs and tax revenues.

For the destinations with high internet usage and a large proportion of travel organised online such as Japan, Chinese Taipei and the Republic of Korea, the focus should be on data innovation. This will facilitate engagement with their online travel market and fully meet evolving consumer demand. The Japanese government formulated its “Future Vision towards 2030” in 2017 including a focus on innovations such as IoT, AI and data analytics which will support this innovation in the tourism sector. As part of the strategy, the Ministry of Economy, Trade and Industry (METI) supports open digital borders and regulation consistent with CBPR76.

In Indonesia, India, Thailand and the Philippines, the proportion of travel currently organised online is greater than would be suggested by internet availability alone. As digital interactions become ever more widespread, new online businesses in these destinations should continue to be encouraged to follow the suit of established online entities.

The Philippines adopted a “Cloud First” approach in 2017, leapfrogging practices in other destinations which embraced digital interactions earlier. Along with prioritisation of digital services by the central bank, and an absence of data localisation measures, this will enable the identified growth opportunities to be realised. However, issues relating to internet access, speed and costs also need to be addressed.

For Australia and New Zealand (and to a lesser extent Vietnam), physical growth barriers are low due to quality existing digital networks. However, these networks are not being fully utilised by businesses or destinations to maximise the available benefits. Any skills gaps should be addressed in these destinations to maximise platform benefits and support data innovation, while data localisation measures in Vietnam will constrain the potential benefits of innovation.

Destinations should seize the opportunity to ensure sustainable growth with a clearer understanding of demand. Sustainability concerns are easier to address before they develop into widespread problems. Tourism can lead to overcrowding of popular destinations and infrastructure without proper controls in place. Efforts can be made to smooth the demand of tourists across a wider

76 EU-Japan Center for Industrial Cooperation, How Digital Trade Can Support Business: Towards an Open and Fair Business Environment, 2017
area and timeframe with targeted marketing or by regulating the price or supply at peak times. Furthermore, if the negative impacts of tourism have exceeded allowable levels, governments can limit access to certain areas and attractions.  

A number of economies in the region support thriving digital ecosystems, allowing some businesses to realise the potential benefits from data and digital platforms. The case study of Yanolja in the Republic of Korea illustrates how a local start-up has been able to effectively compete with global online travel agents and also provide better services to travellers. Government investment in the digital network has helped, along with other prioritisation of digital interactions, including tax incentives for investment in digital security.

**Policy recommendation 4: Support a thriving digital ecosystem**

To maximise opportunities for destinations and businesses, policymakers should:

- Ensure destination management organisations identify and leverage the most appropriate digital platforms to engage with tourists from different source markets, including social media and mobile platforms.

- Encourage businesses, including SMEs, to work alongside destination management organisations to provide a holistic view of the destination for travellers allowing greater competition in international markets.

- Engage with all stakeholders, including residents and local businesses, to ensure sustainable development. Governments and destination management organisations should work with all stakeholders to understand any capacity limits. A greater understanding of demand can ensure market development involves sustainable growth.

- Regulators should become enablers of new technologies and platforms to meet consumer needs rather than strictly adhering to established principles which may favour less productive incumbents.

**OPPORTUNITY TO CREATE NINE MILLION NEW JOBS**

There is a clear opportunity for more rapid growth in tourism activity and GDP by increasing engagement with travellers through platforms and using resulting data to improve products and services. Policies should encourage development of digital networks and skills, facilitate digital interactions, and support use of data to realise potential growth opportunities.

The potential increase in tourism sector activity can boost whole economy GDP by 0.5% on average across the region, and by up to 1.0% by destination.

Over 9 million new jobs can be generated across the region if all potential opportunities are realised.

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DEFINITIONS & ACRONYMS

AmI: Ambient Intelligence
APAC: Asia Pacific Region
Asia Pacific Region: Australia, China, Chinese Taipei, Hong Kong SAR, India, Indonesia, Japan, New Zealand, Thailand, the Philippines, the Republic of Korea, Vietnam
CAGR: Compound Annual Growth Rate
CTA: China Tourism Academy
DDI: Data-Driven Innovation
GDP: Gross Domestic Product
Hong Kong: Hong Kong SAR
ICT Sector: Information and Communications Technology
IOT: Internet of Things
Macao: Macao, China
MEA: Middle East and Africa Region
OECD: Organisation for Economic Cooperation and Development
OTA: Online Travel Agent
PATA: The Pacific Asia Travel Association
ROI: Return on Investment
SME: Small and Medium Sized Enterprises
T&T: Travel and Tourism Sector
UNESCO: The United Nations Education, Scientific and Cultural Organization
WEF: World Economic Forum
WTTC: World Travel and Tourism Council
APPENDIX 1: CASE STUDY DETAILS

AIRBNB

In just 10 years, Airbnb has gone from renting out a handful of air mattresses in a San Francisco apartment to remaking the hospitality industry. Employing advanced technologies and social media tools that allow guests to develop trust with potential hosts, the company has turned the home-sharing experience into a viable global business. Today about two million people per night stay at Airbnb-brokered accommodations, with five million listings on offer in 81,000 cities around the world.

Based in San Francisco, Airbnb focuses on expanding a traveller’s choices. Offering unique listings and experiences, it encourages the adventurous to diverge from the well-worn tourist itinerary. The company helps “diversify tourism and travel in terms of where visitors are going and what they are doing,” says Anita Roth, head of policy research for the privately-held company.

By diverting travellers from areas that could be considered “over-touristed,” and by reducing the need for cities to build excess hotel capacity for special events that might later go unfilled, Airbnb seeks to boost environmental sustainability. The company also offers local hosts greater opportunity to share the economic benefits generated by the global tourism economy by encouraging travellers to stay in residential neighbourhoods with more authentic, local, flavour.

“Millennials are searching for Instagram-worthy vacations,” Ms. Roth said. “We think we’ve had some influence in helping people say, ‘I don’t just want to see the Eiffel Tower.’” Airbnb claims that two-thirds of its users choose to stay in areas outside of traditional tourist areas.

Airbnb was built on technology and continues to focus on digital investments, including an increasingly-robust mobile platform and investments around AI,” Ms. Roth said.

Airbnb is also improving the platform’s performance by harnessing machine learning to help anticipate spikes in demand around big events, like a World Cup soccer tournament, or an arts festival. The company is experimenting with ways to analyse user preferences and guest reviews to optimise matches between vacationers and potential home-stay hosts. “We are using data to figure out where we build supply,” Ms. Roth explains. “Machine learning is particularly helpful in helping ensure that both hosts and guests find what they are looking for.”

Machine learning also helps prospective guests find the right accommodation on the Airbnb site. “The technology helps us optimise our product offerings and make sure that people can discover and find the experiences or homes they are interested in more easily.”

Airbnb does some specific personalization but is not yet at the stage where it can personalise location or specific lodging recommendations for all users, though that remains a future goal. Today, the company is investing in technology to make it easier for Airbnb hosts to list their properties, as a number of municipal governments across the world, including in Asia, are demanding that homestay hosts register their properties, or pay a licensing fee or tax; Airbnb is working with local governments to help potential hosts in individual cities understand the regulatory requirements for listing their homes.

Airbnb is now hoping to encourage users to find suitable “experiences” once they have booked their homestay. “We want to help people discover new destinations that might have not have been on the top 10 traveller list,” Ms. Roth said. “This can get people to discover new cities and new places,” and extend the reach of the travel industry.
GRAB

Just five years ago, it could be risky for a single woman in South East Asia to hail a taxi and feel confident she would get to her destination safely, without being harassed or overcharged.

Today, ride-hailing apps have changed the situation drastically by allowing riders to tell friends and family where they are heading, and by vetting drivers before they are hired. The core proposition of Grab, the leading service in South East Asia, is that “someone who gets in our car gets a safe, affordable ride,” says Ditesh Gathani, the company’s head of engineering in Singapore.

A Singapore-based start-up founded by two Malaysian graduate students while at Harvard Business School, the Grab app has been downloaded more than 100 million times, and lets customers order taxis, cars, and even motorbikes on-demand.

Earlier this year, Toyota and other global financial investors invested $2 billion in Grab, valuing the company at more than $11 billion—and cementing its status as the regional leader in its industry. That followed investments by Softbank and Didi Chuxing, the Chinese ride-hailing leader. Today Grab has taken over the Uber franchise in South East Asia, and has expanded into mobile payments, food and deliveries. Grocery deliveries will come soon.

The company’s substantial investment in Big Data, analytics, and computer scientists who can mine data and quickly develop applications – Grab operates six research and development centres -- is key to its rapid growth and its migration into other areas of commerce. Mr. Gathani says that rapidly solving transportation challenges—like how to anticipate where drivers will be needed to pick up passengers during rush hour—is not unlike the complex issues that need to be resolved before launching a seamless payment application. “At its core, many of the problems are similar.”

Grab’s goal is to become a “super app” that can deliver takeout food or groceries, service small retailers, and simplify financial transactions for its customers. GrabPay—once just a method for passengers to pay their driver digitally through their smartphones—is now being adopted by third-party merchants and small businesses who accept their own mobile payments through the GrabPay platform. Grab estimates that more than seven million micro-entrepreneurs are now using the Grab platform to add to their earnings.

At the core of the business lies a massive trove of data. “Today we have one of the biggest geographical data sets in South East Asia,” Mr. Gathani says. “We know where people go and when they go there, and that allows us to optimise the experience,” for drivers and passengers. This ensures that customers get a quick ride, and that drivers easily locate passengers without having to idle.

The company’s ability to gain insight from Big Data allowed Grab to start offering shuttle services in Singapore, where mini-buses travel specific routes during morning rush hour to carry groups of passengers to their workplace destinations. “We’ve developed more than 170 shuttle routes just in Singapore,” he says; all have been created based on data analytics.

The company has also exploited advances in machine learning capabilities to determine the preferences of individual drivers, so that the company is more likely to suggest rides that a specific driver will accept. “Using multiple inputs, we can determine the probability by which a driver will take a specific job, so we can then target jobs to drivers most likely to accept them. This keeps drivers happy, and it keeps passengers happy. Driver-satisfaction scores shot up after this new tool was introduced, he says.
Another key innovation is a translate function in Grab’s in-app chat feature, so that a Singaporean visitor landing in Phuket need not speak Thai to communicate with her Grab driver.

One of the lessons Mr. Gathani says he has learned as the company expands is the need for what he calls “velocity” in bringing new capabilities to market. Whether in improving its transportation services or expanding its food delivery operations, “the name of the game is velocity, to build new functionality as quickly as possible.” In some instances, the company’s engineers take only two or three weeks to build and ship a new feature; one of its new tools that can make payments to a vendor by scanning a QR code, was developed during a weekend company hackathon.

Using technology to push the company forward will remain an important priority, he says. “In South East Asia, we have never had a culture” where technology was seen as the foundation for growing an organisation. “To a large extent, Grab may be the first one.”
KLOOK

Digital platforms transformed the travel industry by allowing consumers to optimise searches for airline flights and hotel reservations. Now comes the race to help travellers plan things to do once they reach their destinations.

“Organizing tourism activity is the next battle front” for travel dollars, says Anita Ngai, chief revenue officer for Hong Kong-based travel company Klook. A robust mobile platform for booking travel services and activities online, she says, is key to the company’s rapid growth.

About 70% of Klook’s customer interactions take place via mobile phones, compared to about 30% for comparable online travel agents (OTAs)—and a disproportionate number of those customers are Millennials. Meeting market demand means emphasizing services like instant confirmation via mobile devices when users book a guided tour or outdoor adventure.

“This is all driven by consumer behaviour,” Ms. Ngai says, referring to the ubiquitous use of smartphones among Asian millennials. “The expectation of our users is that everything will be instantaneous.” Klook’s own data shows that between 60% and 70% of its users book a tour or activity 24 hours or less before the activity is scheduled to start—more frequently than customers on other platforms. As a result, the company has pushed to ensure that some 80% of activities it books are confirmed instantly via mobile phone.

Founded in 2014, Klook has become one of Asia’s leading travel activities and services booking platforms. It obtained venture backing from firms including Sequoia Ventures and Goldman Sachs and completed a $60 million funding round last fall. The platform allows travellers to discover and book popular attractions, local tours, rail passes, food options, and unique experiences around the world on its website and mobile app. The site claims 30 million unique visitors per year, and Ms. Ngai says transactions and unique visitors are growing by triple digits annually and are expected to reach US$1 billion this year. About one-third of its customers are based in mainland China, another third in South East Asia, and about 20% in Japan and the Republic of Korea.

The next chapter: digital fulfilment

Klook’s next step beyond instant confirmation is allowing customers direct entry into the events they book. “The most difficult part of our business is the redemption and fulfilment part,” Ms. Ngai says. “Why book a Disneyland ticket on our platform if you still have to stand on line to get into the park?” Instead, Klook is working with providers like Hong Kong rail to provide a QR code so that purchasers can download an electronic ticket directly to their mobile device and then show their phones to an agent to validate their travel.

Outreach to the provider market is an important element in Klook’s growth strategy. The company’s engineers work with travel service providers to help ensure compatibility with the Klook site. And because many tour operators and guide services are still “mom and pop” operations that use paper and pencil, Ms. Ngai says, Klook’s sales team works to help them get online using the Klook platform. “Making sure suppliers get connected is very important to us,” she says.

In the near term, Klook believes that adding food-related activities—visiting the best food stalls in Bangkok, or a cooking school in Japan—offers a major expansion opportunity. The company also hopes that gaining more geo-local data from mobile phone providers will help provide more personalised travel recommendations.

Klook uses its own data analytics to better understand how to spend its marketing dollars and to develop more personalised recommendations for customers. “No one has quite figured out personalisation of travel experiences,” she says. Cracking that code would be an important driver of growth.
MEKONG TOURISM

The large and growing influence of social media is having an outsized influence on the tourism industry across Asia. Millennial travellers are everywhere expressing an interest in discovering unique experiences they can photograph and share with their friends on Instagram or Pinterest, and regional travel bureaus are seeking ways to generate visitor interest around these social media contributions.

The Mekong Tourism Coordinating Office (MTCO), a consortium of six countries that together share the Mekong River basin, is pioneering a new effort to turn social media traffic into a viable commercial platform that generates higher web exposure, aggregates visual content, and helps draw new visitors into less-developed areas of South East Asia. The organisations’ roll-out of a campaign focused on the hashtag #MekongMoments, and an accompanying website, is meant to build regional IT capacity while generating more interest in hotels, restaurants, and tourist experiences across the region.

“Mekong moments was developed as a social commerce platform to encourage folks to share visual content and experiences,” says Jens Thraenhart, executive director of the Mekong Tourism Coordinating Office (MTCO), which gets financial support from the governments of Cambodia, China, Laos, Myanmar, Thailand, and Vietnam to help boost tourism across the region.

“It has been designed as collaborative platform; the more that visitors participate, the more content is created for the region. And the content generated is not only used on the Mekong moment platform but on other social media platforms as well,” he says.

Individual hotels or restaurants offer awards or discounts to encourage visitors who are already posting images or selfies to their Instagram, Facebook, Pinterest, or other social media sites to add the Mekong Moments hashtag to their posts. All tagged images are then aggregated into the platform and then organised and edited to help expand the appeal and reach of the website.

“The most powerful way to communicate the essence of a destination is by the experiences people have,” Mr. Thraenhart said. “And by creating a mosaic of the experiences people have shared, you create this brand via shared experiences. If we capture these experiences and inspire others to share these experiences, that drives more interest in the region.”

The Mekong Moments operation also helps build internet capacity in lesser developed parts of the region because tagging an individual establishment on the platform automatically creates a simple website for the business if it didn’t already have one, Mr. Thraenhart said. The program enables business to create their own social media contest and help them build their own web presence. “Every experience gets their own simple website for free,” and the businesses can add more functionality for additional cost. “Essentially, we make it easy for any experience to obtain a website and become be part” of the Mekong moments campaign, he said.

Even if a hotel already operates a website for booking reservations for its rooms, the hotel’s restaurant, day spa, or health club might not have its own web presence. If visitors post photos from their restaurant meal, this leads to the creation of a new web presence focused exclusively on that experience.

The Mekong Moment program only began operation in March of this year, but has already generated images of 10,000 specific regional experiences and upwards of 50,000 shares. Mr. Thraenhart hopes to begin using data generated from the campaign later this year to add additional programs, including some sort of loyalty or rewards program that incentivises visitors to return.
In addition, the coordinating office has also created a “Mini Movie” festival where visitors to the region are encouraged to submit 60-second videos illuminating their experiences in the region, and prizes are awarded to the best entries. Naturally most of the videos are shot using smartphones.

In just four months, the Mini Movie campaign attracted submission of about 300 videos, leading to 600,000 video views and reaching more than 6 million people—a significant achievement since the MTCO spent no money on advertising to launch the program.
**THE ROAD TRIP**

The Road Trip is a hot little company that provides personalised, high-end guided tours across New Zealand. Founder Chris Cameron, an inveterate traveller himself, created the site as a way to share his breath-taking and relatively little-known country with global travellers seeking unique and unhurried tourist experiences.

“When we started in 2013, it was just me, myself and I, guiding travellers and doing reservations, and making out the accounts,” he says. Today, The Road Trip has been cited by the consulting firm Deloitte as one of the fastest-growing small businesses in New Zealand, thanks to its effective use of Internet marketing to attract a new demographic of travellers from across South East Asia.

Mr. Cameron, 34, credits the successful use of targeted digital strategy with powering the company’s rapid expansion. Having grown more than 265% in its first three years of operation, The Road Trip now employs a staff of about 20, including seasonal guides, and has experienced rapid revenue growth.

Mr. Cameron has a clear sense of his target market: upscale foreign visitors, aged 40 and above, who seek bespoke, private experiences they can share with family and friends as they explore New Zealand’s unique cities and its stunning volcanoes, forests, and coastal beauty. While Americans and Germans once made up the majority of his client list, a larger portion of today’s customers comes from the rapidly developing economies of South East Asia. Wealthier and more adventurous than many other groups, these customers are drawn in part by increasingly sophisticated online marketing.

“Our customers want a chauffeur and driver with them,” Mr. Cameron says. “They want a private luxury tour. They don’t want to be rushed around on a bus.” Forget tightly managed schedules and rigid itineraries; these travellers demand flexibility and the right to be spontaneous.

To identify and engage these customers, Mr. Cameron has assembled a team that employs search engine optimization (SEO) to purchase the right internet advertising in markets like Singapore, Malaysia, and Indonesia, where rising economic growth is creating an expanding population of affluent travellers seeking more specialised travel experiences.

His team also closely analyses its purchases of paid internet advertising and tries out different approaches to determine which digital strategies yield the best returns.

A conversion tracker allows his ad team to understand where contacts and sales are coming from. “We can track our spending and conversion rate over an entire financial year, and that helps make our ad spending more effective,” he says. Today some 80% of the company’s marketing budget is directed toward targeted ad words on Google search; by employing specific ad words in specific countries, The Road Trip has succeeded at narrowing its promotional spending and can focus on markets where the pitch will be most effective. The company also invests in content like blogs that can boost its organic search rankings.

“As consumers in Singapore and Indonesia are becoming more digitally savvy, it gets easier to reach them,” Mr. Cameron said. “As that luxury market is growing, we find more interest from those travellers.”

While many tourists from Europe or the United States are seeking hearty, outdoor experiences that might include fishing, hiking, or overnight camping, most of his Asian guest prefer to hire a driver who can show them the most picturesque spots or book the most interesting restaurants. The service has also created a do-it-yourself guide service, where the tourist group follows a
pre-determined itinerary that is loaded into an auto’s GPS, and they can find their way by themselves.

The Road Trip follows upon on its targeted mass-media marketing with a more personal series of emails to conduct the actual planning of a customised trip. “We start with a template,” Mr. Cameron says, seeking to determine how long visitors want to spend in the country, what level of accommodations they seek, what they hope to experience, and whether they want a private guide or to drive themselves.

“There’s lots of dialogue before the trip starts,” he says. “Sometimes we get it on the first go. Sometimes we have five or six conversations.” But every trip is custom tailored.

The company is also promoting New Zealand as an attractive ski destination in wintertime, when the Northern Hemisphere is enjoying summer, in addition to its scenic glory. Given the wealth of photogenic locales, Mr. Cameron thinks the Instagram generation will continue to be attracted to his country. “We are definitely a social media paradise,” he says.
YANOLJA

Foreign travellers to the Republic of Korea are likely to use a global Online Travel Agent (OTA) that books them rooms at major hotels managed or operated by global chains. But Yanolja, a South Korean start-up travel platform, has found its own niche by catering to young Koreans who seek a different class of lodgings: short-stay, lower-priced accommodations, many of them family-owned. These might include motels and even establishments known as “love hotels” that once offered customers privacy by the hour.

Yanolja is the first platform to make all types of hotel accommodations available for booking online, says Jeff Jongyoon Kim, the firm’s chief business officer. The company, founded in 2005, at first offered only hotel listings, not bookings, a legacy that enables the current strategy. “We have three to five times more booking partners compared to other platforms,” says Mr. Kim, citing a list of some 20,000 motels, lodges, and love hotels across the country that cater mostly to local Korean tourists.

Yanolja, Korean for “Hey, let’s play,” markets its brand to young Koreans who generally are short of free-time in a high-stress society and want to be more spontaneous in their travel planning. “Millennials are almost completely skipping the planning cycle -- when they have a few days off, when they can find a few days of free time, they just go,” says Angie Sewon Cho, chief marketing officer for the company.

These consumers are in the market for something other than a grand tour. “They want unique experiences they can share on Instagram or Facebook,” she says. “For our audience, travel doesn’t need to be a once-in-a-lifetime or once-in-a-year experience -- the best travel for them is the kind of experience you can have when you just need some fresh air or to get away from home to escape from daily stress.”

Yanolja has persuaded many owners of short-stay accommodations to ditch their old reputation for low cost, low quality service, in favour of stylish interiors and high-tech features that can appeal to business travellers, families, and domestic Korean tourists. In addition to helping these motel operators redesign and upgrade their interiors, Yanolja also helps local owners, who often are retirees lacking technological sophistication, to put their properties online. The company’s sales team also had to convince motel owners to accept credit cards, since traditionally most preferred using cash to avoid tax liabilities.

Tapping into a less-served market and rapidly increasing the supply of available rooms has driven strong growth for Yanolja since its booking platform went live in 2015. Today the company says its revenue exceeds 200 billion Korean won, from a mere 20 billion in 2014, representing a compound annual growth rate of over 80% in the past five years. It now employs 450 people, up from 100 five years ago, and estimates it has more than 9 million monthly active users. It has also committed to including user reviews and generating buzz on social media; Ms. Cho says that Yanolja has 2 million followers and more than 550K reaches on its Facebook and Instagram every day.

Mr. Kim says that Yanolja has been able to incorporate modular data collection technologies, that aligns user information into specific categories, so its data scientists can incorporate artificial intelligence tools to better segment and rate hotels. This could better inform guests as to whether a motel is more suited to a low-budget family tour or a couple seeking some time alone. “Our use of AI allows us to use customer reviews to make better suggestions about where clients should stay,” Mr. Kim said.

Technology has helped Yanolja differentiate itself from other, global OTAs, Mr. Kim says. That includes an aggressive effort to install sensors in a variety of small motels so that Internet of
Things technology can be employed to help boost the efficiency of motel operators and increase occupancy.

Among the IT solutions Yanolja offers motel clients:

- **Keyless entry.** Yanolja is deploying a system that allows customers who have booked a room to bypass any front desk clerk and get access to their room through the mobile device.
- **Room service via platform.** Millennials are prone to experience phone-phobia, trying to avoid making phone calls as much as possible. Yanolja has solved the issue by adding room service functions on its platform. If a user has checked into a motel that’s using Yanolja’s PMS (property management system), Smart Front, she can ask for frequently used services like additional towels or drinks, with a few clicks.
- **Automatic check-out detection.** By installing motion detection devices in motel rooms, Yanolja technology can inform the hotel staff when a room is no longer occupied, so it can be cleaned and prepared for the next guest.

Together these features help owners reduce inventory of unoccupied rooms, increase the efficiency of the motel staff, and lower the number of front-desk staff required to service guests.

Yanolja is moving to partner with other online services to offer food and delivery services to Yanolja customers. For example, a customer who are staying at a Yanolja’s affiliated hotel can use Uber Eats to order room service from nearby gourmet restaurants at special discount price. “By creating these alliances,” Ms. Cho says, “we can create near-hotel experiences for motel or budget hotel users.” And the company is expanding its reach to cater to Chinese tourists coming to the Republic of Korea in search of simple, affordable rooms; it also has begun working with Rakuten LIFULL Stay, Inc. to introduce quality accommodation options to the customers.

“More than 80% of outbound travellers are heading to nearby countries such as Japan, China and South Asia,” he explained. Likewise, more than 80% of inbound travellers to the Republic of Korea are from those Asian countries. To capture those growth opportunities in the South East Asian market, Yanolja recently bought Zen Rooms, a digital booking platform for budget hotels in the region.
APPENDIX 2: DESTINATION SUMMARIES

The following pages provide an overview of the travel market for each of the 12 focus destinations, along with the digital platform and the potential opportunity for growth in GDP and employment over the baseline projection.

- Australia
- China
- Chinese Taipei
- Hong Kong SAR
- India
- Indonesia
- Japan
- Republic of Korea
- New Zealand
- Philippines
- Thailand
- Vietnam
AUSTRALIA SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN AUSTRALIA

Tourism activity in Australia supports 1.5 million jobs, equivalent to roughly 1 in every 8 jobs in the economy, according to research by WTTC & Oxford Economics78. The sector is a greater engine of economic development in Australia than in the wider region.

Domestic travel demand is important in Australia, generating around 75% of the economic benefit. However, inbound travel is important, with high average spending per visitor.

Australia attracts over 9 million overnight visitors per year, a number which has increased by around 50% over the past 5 years. The USA and the UK are important long-haul source markets, involving high average length of stay and spending per visit.

DIGITAL TRAVEL IS LESS WIDESPREAD IN AUSTRALIA THAN ACROSS THE REGION

An estimated 67% of all travel within Australia is reliant on online research. This is lower than the estimated 77% of travel organised online across the wider region.

The importance of domestic travel lowers the overall average, despite high internet penetration. Australian research for domestic travel is lower than in some other countries, potentially due to well-known destinations. There is clear potential to better engage with all travellers using digital platforms.

Digital travel footprint: Asia Pacific
% tourism researched or booked online

Online, 77%

Source: Tourism Economics

Digital travel footprint: Australia
% tourism researched or booked online

Online, 67%

Source: Tourism Economics

78 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN AUSTRALIA WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 7.4% Australian GDP and 8.2% of all employment; while the Travel & Tourism sector as a whole supports 11.0% GDP and 12.3% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in geographic network coverage may help to deliver expansion. Costs are low while access speeds are high where internet is available.

Expansion in the use of platforms is the greatest estimated source of potential tourism sector growth over the next five years in Australia. However, further growth can be realised by leveraging data from online interactions. Skills and the policy environment are apparently supportive of data-driven innovation.

There is potential for tourism sector GDP to grow by an additional 6.1%, raising whole economy GDP by 0.7%. This would create around 100,000 new jobs across the Australian economy.

**Tourism economic impact & digital contribution**

<table>
<thead>
<tr>
<th>% whole economy GDP &amp; employment</th>
<th>Total impact</th>
<th>Direct impact</th>
<th>Online footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia GDP</td>
<td>11.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia Employment</td>
<td>12.3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1,523</td>
<td>Aruba</td>
<td>52%</td>
<td>China</td>
<td>814</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>1,398</td>
<td>Nepal</td>
<td>37%</td>
<td>United States</td>
<td>339</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>840</td>
<td>Puerto Rico</td>
<td>33%</td>
<td>New Zealand</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>783</td>
<td>Senegal</td>
<td>26%</td>
<td>India</td>
<td>159</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>462</td>
<td>Comoros</td>
<td>25%</td>
<td>Malaysia</td>
<td>144</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
CHINA SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN CHINA

China is home to 82 million of the 175 million jobs supported by tourism activity in the Asia Pacific region. This is equivalent to roughly 1 in every 9 jobs in the economy, according to research by WTTC & Oxford Economics\(^\text{79}\). The sector is a greater engine of economic development in China than in the wider region.

Domestic travel demand is important in China, generating around 85% of the economic benefit. Continued economic development, including the rising middle class in China will continue to be key to future growth.

China still attracts over 60 million overnight visitors per year, a number which has increased by 13% over the past 5 years, and includes travel from both short- and long-haul source markets. Following conventions in reporting by statistical agencies and UNWTO, this includes travel from Hong Kong and Macao. The USA is a particularly important long-haul source market.

DIGITAL TRAVEL IS LESS WIDESPREAD IN CHINA THAN ACROSS THE REGION

An estimated 70% of all travel within China is reliant on online research. This is lower than the estimated 77% of travel organised online across the wider region and there is clear scope for greater online engagement.

Domestic travel is less reliant on digital research, which lowers the overall average. Domestic Chinese travellers are still relatively well connected considering that just 56% of the population have internet access, but further network development would help to realise the growth opportunity.

\(^{79}\) Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN CHINA WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 7.7% Chinese GDP and 7.4% of all employment; while the Travel & Tourism sector as a whole supports 10.9% GDP and 10.6% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in digital networks and skills would be required. Around two-thirds of the estimated growth opportunity for the next five years can be realised by leveraging digital platforms. However, there is also a significant opportunity for further growth by leveraging data generated by these digital interactions.

There is potential for tourism sector GDP contribution to grow by an additional 5.4%, raising whole economy GDP by 0.6%. This would create around 5.3 million new jobs across the Chinese economy. This is the largest opportunity in the region in absolute terms and the third largest in percentage terms.

Tourism economic impact & digital contribution

% whole economy GDP & employment

![Graph showing GDP and employment contributions](chart.png)

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Largest source markets</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source markets</strong></td>
<td><strong>Source</strong></td>
<td><strong>% growth</strong> (CAGR 2013-18)</td>
</tr>
<tr>
<td>Arrivals (mn, 2018)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>Myanmar</td>
<td>64%</td>
</tr>
<tr>
<td>27,478</td>
<td>Lao PDR</td>
<td>40%</td>
</tr>
<tr>
<td>Macao</td>
<td>Belarus</td>
<td>20%</td>
</tr>
<tr>
<td>7,884</td>
<td>Congo, Rep.</td>
<td>17%</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Swaziland</td>
<td>16%</td>
</tr>
<tr>
<td>5,319</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,609</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,607</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
CHINESE TAIPEI SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN CHINESE TAIPEI

Tourism activity in Chinese Taipei supports 640,000 jobs, equivalent to roughly 1 in every 18 jobs in the economy, according to research by WTTC & Oxford Economics. This ratio has improved moderately in recent years.

Domestic travel demand generates around half of the economic benefit while international demand is increasing in importance.

Chinese Taipei currently attracts almost 11 million overnight visitors per year, a number which has grown by almost 40% over the past 5 years. China is the largest source market, while the USA is the most important long-haul source market. Travel from some other long-haul source markets, such as Canada and Spain, has grown strongly in recent years.

DIGITAL TRAVEL IS MORE WIDESPREAD IN CHINESE TAIPEI THAN ACROSS THE REGION

An estimated 88% of all travel within Chinese Taipei is reliant on online research. This is a high proportion of travel, and is significantly larger than the estimated 77% of travel organised online across the wider region.

This is helped by high internet penetration and usage for travel research among both domestic and international travellers. However, there remains some scope to increase online interactions with international visitors and drive future growth by leveraging platforms and data.

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80 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN CHINESE TAIPEI WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 4.0% GDP and 4.9% of all employment in Chinese Taipei; while the Travel & Tourism sector as a whole supports 6.8% GDP and 6.6% employment in the economy, including indirect and induced impacts.

A large proportion of businesses are already using digital platforms to interact with travellers throughout the travel process but there is scope for further expansion, especially among international travellers, using correct platforms.

By leveraging the data generated by online interactions there is a significant growth opportunity for the travel sector in Chinese Taipei. This represents the bulk of the growth opportunity.

There is potential for tourism sector GDP to grow by an additional 3.0%, but raising whole economy GDP by just 0.1%. This would create around 22,000 new jobs across the economy.

**Tourism economic impact & digital contribution**

% whole economy GDP & employment

- **Chinese Taipei GDP**
  - Direct impact: 4.0%
  - Online footprint: 2.8%
  - Total impact: 6.8%

- **Chinese Taipei Employment**
  - Direct impact: 4.9%
  - Online footprint: 1.9%
  - Total impact: 6.6%

Source: Oxford Economics, WTTC

**Largest and fastest growing international source markets**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>3,561</td>
<td>Republic of Korea</td>
<td>20%</td>
<td>China</td>
<td>592</td>
</tr>
<tr>
<td>Japan</td>
<td>2,080</td>
<td>Philippines</td>
<td>20%</td>
<td>Japan</td>
<td>590</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>1,676</td>
<td>Thailand</td>
<td>17%</td>
<td>Republic of Korea</td>
<td>548</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>911</td>
<td>Canada</td>
<td>13%</td>
<td>Hong Kong SAR</td>
<td>447</td>
</tr>
<tr>
<td>United States</td>
<td>659</td>
<td>Spain</td>
<td>11%</td>
<td>United States</td>
<td>244</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
**HONG KONG SAR SUMMARY**

**TOURISM IS AN IMPORTANT GROWTH SECTOR IN HONG KONG SAR**

Tourism activity in Hong Kong SAR supports 560,000 jobs, equivalent to roughly 1 in every 7 jobs in the economy, according to research by WTTC & Oxford Economics\(^8\).

Domestic travel generates a low proportion of this economic benefit, with travel from Mainland China (and Macao) quantified as international demand in official data used as inputs here.

Hong Kong SAR currently attracts 28 million overnight visitors per year, with almost two-thirds of these visits coming from Mainland China. The overall volume of inbound travel has remained relatively stable in recent years as Chinese travellers have explored further afield. The USA is a particularly important long-haul source market.

**DIGITAL TRAVEL IN HONG KONG SAR IS CONSISTENT WITH THE REGIONAL AVERAGE**

An estimated 77\% of all travel within Hong Kong SAR is reliant on online research. This is broadly consistent with the estimated 77\% of travel organised online across the wider Asia Pacific region.

Hong Kong SAR has the fifth largest digital travel footprint out of the 12 focus destinations in this report. However, there remains scope to further leverage both data and digital platforms. To drive additional growth.

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\(^8\) Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN HONG KONG SAR WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 12.7% Hong Kong SAR GDP and 11.2% of all employment; while the Travel & Tourism sector as a whole supports 16.7% GDP and 14.6% employment, including indirect and induced impacts.

A large proportion of businesses are already using digital platforms to interact with travellers throughout the travel process but there is scope for further expansion to catch up with destinations such as Japan. The correct platforms should be leveraged, including those most widely used by the important Chinese travel market.

Hong Kong SAR has particularly high digital skills and is well equipped to further leverage data, especially among SMEs, to better compete with global players, develop new products and drive additional travel volumes. This is evident in the example of Klook.

There is potential for tourism sector GDP to grow by an additional 4.3%, raising whole economy GDP by 0.7%. This would create around 24,000 new jobs across the Hong Kong SAR economy. Around half of this growth can be realised by leveraging data.

Tourism economic impact & digital contribution

There is potential to generate 24,000 new jobs in Hong Kong SAR.
INDIA SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN INDIA

India is home to 43 million of the 175 million jobs supported by tourism activity in the Asia Pacific region, second only to China in terms of size. This is equivalent to roughly 1 in every 12 jobs in the economy, according to research by WTTC & Oxford Economics, although this ratio has improved in recent years.

Domestic travel demand is important in India, generating around 85% of the economic benefit. Continued economic development, including the rapid economic growth as reforms continues and an increasing middle class household formation in India will continue to be key to future growth.

India attracts around 19 million overnight visitors per year, a number which has increased dramatically, over the past 5 years, by almost 60%. Several long-haul markets are particularly important for India, including the USA, the UK and Canada.

DIGITAL TRAVEL IS LESS WIDESPREAD IN INDIA THAN ACROSS THE REGION

An estimated 73% of all travel within India is reliant on online research. This is a high proportion of travel, but is lower than the estimated 77% of travel organised online across the wider region.

The importance of domestic travel lowers the overall average, while international travellers tend to use online platforms more frequently. However, domestic Indian travel involves a high relative use of online platforms considering that internet penetration is very low at just 22%.

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73% of all travel in India is organised online.

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1 in 12 jobs in India are supported by the fast-growing tourism sector.

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Data & Digital Platforms: Driving Tourism Growth in Asia Pacific 72
GROWTH IN INDIA WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 6.8% Indian GDP and 5.9% of all employment; while the Travel & Tourism sector as a whole supports 9.4% GDP and 8.1% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in digital networks and skills would be required. India has low internet coverage relative to other destinations in the region and low adoption of new technology. Digital skills are also among the lowest in the region according to WEF indices. There is an opportunity for further growth by leveraging data generated by digital interactions.

There is potential for tourism sector GDP to grow by an additional 4.4%, raising whole economy GDP by 0.4%. This would create around 2 million new jobs across the Indian economy. This is the second largest opportunity in the region in absolute terms and the fourth largest in percentage terms.

Tourism economic impact & digital contribution

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>United States</td>
<td>2,051</td>
<td>Bangladesh</td>
<td>27%</td>
<td>Bangladesh</td>
<td>1,238</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1,763</td>
<td>Bulgaria</td>
<td>21%</td>
<td>United States</td>
<td>966</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,349</td>
<td>Grenada</td>
<td>21%</td>
<td>United Kingdom</td>
<td>539</td>
</tr>
<tr>
<td>Canada</td>
<td>500</td>
<td>Cayman Islands</td>
<td>20%</td>
<td>Canada</td>
<td>245</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>470</td>
<td>Portugal</td>
<td>20%</td>
<td>Malaysia</td>
<td>217</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
INDONESIA SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN INDONESIA

Tourism activity in Indonesia supports 12 million jobs, a significant proportion of the 175 million jobs supported by the sector in the Asia Pacific region. This is equivalent to roughly 1 in every 10 jobs in the economy, according to research by WTTC & Oxford Economics\(^{83}\), including significant improvement this ratio in recent years.

Domestic travel demand is relatively important in Indonesia, generating around 55% of the economic benefit. Continued economic development will drive future growth, but developments in other source markets will also be crucial.

Indonesia attracts almost 15 million overnight visitors per year, a number which has increased dramatically, over the past 5 years, by over 70%. Asia Pacific source markets are the most important, by volume and growth.

DIGITAL TRAVEL IS LESS WIDESPREAD IN INDONESIA THAN ACROSS THE REGION

An estimated 74% of all travel within Indonesia is reliant on online research. This is a high proportion of travel, but is lower than the estimated 77% of travel organised online across the wider region.

Internet penetration is very low in Indonesia, at 22%. Domestic travellers tend to use online platforms more frequently than the wider population. There has been significant growth in technology adoption across the economy but further investment in networks would benefit the travel sector.

83 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN INDONESIA WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 4.2% Indonesian GDP and 7.1% of all employment; while the Travel & Tourism sector as a whole supports 5.7% GDP and 9.7% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in digital networks (including lower costs) and skills would be required. Indonesia has low internet coverage relative to other destinations in the region and relatively low adoption of new technology. However digital skills within the economy are in line with the regional average which will help to realise the growth opportunity growth by leveraging data generated by digital interactions.

There is potential for tourism sector GDP contribution to grow by an additional 4.3%, raising whole economy GDP by 0.3%. This would create around 620,000 new jobs across the Indonesia economy.

Tourism economic impact & digital contribution
% whole economy GDP & employment

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Largest source markets</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source markets</td>
<td>Source markets</td>
<td>% growth (CAGR 2013-18)</td>
</tr>
<tr>
<td>Source markets</td>
<td>Arrivals (mn, 2018)</td>
<td>Source markets</td>
</tr>
<tr>
<td>Source markets</td>
<td>Arrivals (mn, 2018)</td>
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<td>Arrivals (mn, 2018)</td>
<td>Source markets</td>
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<tr>
<td>Source markets</td>
<td>Arrivals (mn, 2018)</td>
<td>Source markets</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
JAPAN SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN JAPAN

Tourism activity in Japan supports 4 million jobs, a significant proportion of the 175 million jobs supported by the sector in the Asia Pacific region. This is equivalent to roughly 1 in every 15 jobs in the economy, according to research by WTTC & Oxford Economics.84

Domestic travel demand has traditionally been very important in Japan, and it still currently generates around 80% of the economic benefit. However, international demand has increased dramatically in recent years, and notably from China, helped by the affordability benefits of the weaker Yen.

Japan currently attracts over 30 million overnight visitors per year, a number which has tripled over the past 5 years. China is now the largest source market, although the Republic of Korea is still an important market. The USA is an important long-haul source market.

DIGITAL TRAVEL IS MORE WIDESPREAD IN JAPAN THAN ACROSS THE REGION

An estimated 92% of all travel within Japan is reliant on online research. This is the highest proportion of travel organised online among the 12 key destinations in this study, and is significantly above than the estimated 77% of travel organised online across the wider region. This is helped by very high internet penetration in Japan as domestic travellers widely reference online sources. However, there remains scope to increase online interactions with international travellers and drive future growth by leveraging platforms and data.

84 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN JAPAN WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 6.3% Japanese GDP and 6.1% of all employment; while the Travel & Tourism sector as a whole supports 6.8% GDP and 6.6% employment in the economy, including indirect and induced impacts.

A large proportion of businesses are already using digital platforms to interact with travellers throughout the travel process and there is limited scope for further expansion, although businesses must ensure they continue to leverage the most appropriate platforms.

By leveraging the data generated by online interactions there is a significant growth opportunity for the travel sector in Japan. Online use is widespread within Japan, including widespread adoption of new technology while the government provides a supportive policy environment to help realise the growth potential.

There is potential for tourism sector GDP to grow by an additional 2.6%, raising whole economy GDP by 0.2%. This would create around 115,000 new jobs across the Japanese economy.

Tourism economic impact & digital contribution
% whole economy GDP & employment

![Graph showing GDP and employment growth](image)

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Largest source markets</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source markets</td>
<td>China</td>
<td>China</td>
</tr>
<tr>
<td>Source markets</td>
<td>Republic of Korea</td>
<td>Philippines</td>
</tr>
<tr>
<td>Source markets</td>
<td>Chinese Taipei</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Source markets</td>
<td>Hong Kong SAR</td>
<td>Cambodia</td>
</tr>
<tr>
<td>Source markets</td>
<td>United States</td>
<td>Macao</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
REPUBLIC OF KOREA SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN THE REPUBLIC OF KOREA

Tourism activity in the Republic of Korea supports 1.5 million jobs, equivalent to roughly 1 in every 19 jobs in the economy, according to research by WTTC & Oxford Economics\textsuperscript{85}. This ratio is lower in the 2018 base year used for calculation here than in some previous years as inbound demand has taken a hit from perceptions thanks to geopolitical events.

Domestic travel is relatively important and generates around 70% of the economic benefit. Domestic growth will remain important for future developments, while international demand must not be overlooked.

The Republic of Korea currently attracts almost 15 million overnight visitors per year (having peaked at over 17 million in 2016). The largest source markets tend to be within the Asia Pacific region, although there are over 1 million visits from the USA per year.

DIGITAL TRAVEL IS MORE WIDESPREAD IN THE REPUBLIC OF KOREA THAN ACROSS THE REGION

An estimated 87% of all travel within the Republic of Korea is reliant on online research. This is a high proportion of travel, and is significantly larger than the estimated 77% of travel organised online across the wider region.

This is helped by very high internet penetration in the Republic of Korea and domestic travellers widely reference online sources. However, there remains scope to increase online interactions with international travellers and drive future growth by leveraging platforms and data.

87% of all travel in the Republic of Korea is organised online.

\textsuperscript{85} Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 4.1% GDP and 4.7% of all employment in the Republic of Korea; while the Travel & Tourism sector as a whole supports 4.7% GDP and 5.4% employment in the economy, including indirect and induced impacts.

A large proportion of businesses are already using digital platforms to interact with travellers throughout the travel process but there is scope for further expansion, especially among international travellers, using correct platforms.

By leveraging the data generated by online interactions there is a significant growth opportunity for the Republic of Korea travel sector. Digital skills are relatively high within the Republic of Korea while the government provides a supportive policy environment to realise the growth potential.

There is potential for tourism sector GDP to grow by an additional 3.1%, raising whole economy GDP by 0.2%. This would create over 50,000 new jobs across the Republic of Korea.

Tourism economic impact & digital contribution
% whole economy GDP & employment

![Graph showing GDP and Employment](image)

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
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<td>Source markets</td>
</tr>
<tr>
<td>Arrivals (mn, 2018)</td>
<td></td>
<td>Arrivals increase (mn, 2013-18)</td>
</tr>
<tr>
<td>China</td>
<td>4,550</td>
<td>Chinese Taipei</td>
</tr>
<tr>
<td>Japan</td>
<td>2,457</td>
<td>United States</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>1,023</td>
<td>Vietnam</td>
</tr>
<tr>
<td>United States</td>
<td>1,005</td>
<td>Hong Kong SAR</td>
</tr>
<tr>
<td>Hong Kong SAR</td>
<td>662</td>
<td>China</td>
</tr>
<tr>
<td>Madagascar</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>49%</td>
<td></td>
</tr>
<tr>
<td>Antigua And Barbuda</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>Vietnam</td>
<td>27%</td>
<td></td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
NEW ZEALAND SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN NEW ZEALAND

Tourism activity in New Zealand supports 200,000 jobs, equivalent to roughly 1 in every 5 jobs in the economy, according to research by WTTC & Oxford Economics. The sector is a greater engine of economic development in New Zealand than in the wider region.

Domestic travel demand is relatively important in New Zealand, generating around 60% of the economic benefit. However, inbound travel is important, with high average spending per visitor, especially from some notable long-haul markets.

New Zealand attracts almost 4 million overnight visitors per year, a number which has increased by around 40% over the past 5 years. The USA and the UK are important long-haul source markets, involving high average length of stay and spending per visit.

DIGITAL TRAVEL IS LESS WIDESPREAD IN NEW ZEALAND THAN ACROSS THE REGION

An estimated 76% of all travel within New Zealand is reliant on online research. This is roughly the same as the estimated 77% of travel organised online across the wider region.

There remains scope to further leverage both data and digital platforms to drive additional tourism sector growth in New Zealand.

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1 in 5 jobs in New Zealand are supported by the fast-growing tourism sector.

76% of all travel in New Zealand is organised online.

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86 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN NEW ZEALAND WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports a high proportion of New Zealand GDP, at 13.1% and 15.9% of all employment; while the Travel & Tourism sector as a whole supports 17.9% GDP and 21.8% employment in the economy, including indirect and induced impacts.

A large proportion of businesses are already using digital platforms to interact with travellers throughout the travel process but there is scope for further expansion to catch up with other destinations. The correct platforms should be leveraged, including those most widely used by the important, and growing, Chinese travel market.

New Zealand has particularly high digital skills and is well equipped to further leverage data, especially among SMEs, to better compete with global players, develop new products and drive additional travel volumes.

There is potential for tourism sector GDP to grow by an additional 3.7%, raising whole economy GDP by 0.7%. This would create around 23,000 new jobs across the New Zealand economy. Around half of this growth can be realised by leveraging data.

Tourism economic impact & digital contribution

% whole economy GDP & employment

![Graph](source: Oxford Economics, WTTC)

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Source markets</th>
<th>Arrivals (mn, 2018)</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source markets</td>
<td>% growth (CAGR 2013-18)</td>
<td>Source markets</td>
<td>Arrivals increase (mn, 2013-18)</td>
</tr>
<tr>
<td>Australia</td>
<td>1,475</td>
<td>Macao 38%</td>
<td>Australia 257</td>
</tr>
<tr>
<td>China</td>
<td>454</td>
<td>Argentina 38%</td>
<td>China 225</td>
</tr>
<tr>
<td>United States</td>
<td>340</td>
<td>Nepal 29%</td>
<td>United States 139</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>251</td>
<td>Vietnam 23%</td>
<td>United Kingdom 60</td>
</tr>
<tr>
<td>Japan</td>
<td>108</td>
<td>Peru 21%</td>
<td>Republic of Korea 48</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
PHILIPPINES SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN THE PHILIPPINES

Tourism activity in the Philippines supports 8 million jobs, a significant proportion of the 175 million jobs supported by the sector in the Asia Pacific region. This is equivalent to roughly 1 in every 5 jobs in the economy, according to research by WTTC & Oxford Economics\(^7\). The sector is a greater engine of economic development in the Philippines than in the wider region.

Domestic travel demand is important in the Philippines, generating around 85% of the economic benefit. Continued economic development will be key to future growth, but developments in other source should not be overlooked.

The Philippines attracts almost 7 million overnight visitors per year, a number which has increased by over 40% over the past 5 years. Asia Pacific source markets are the most important, by volume and growth, although the USA is an important long-haul source market.

DIGITAL TRAVEL IS MORE WIDESPREAD IN THE PHILIPPINES THAN ACROSS THE REGION

An estimated 91% of all travel within the Philippines is reliant on online research. This is a very high proportion of travel, and is larger than the estimated 77% of travel organised online across the wider region.

Internet penetration is roughly consistent with the regional average in the Philippines, at 47%, although costs are relatively high. As a greater proportion of the domestic population are able to afford travel lower costs would facilitate continued growth.

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87 Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN THE PHILIPPINES WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports a very large proportion of activity at 17.6% the Philippines GDP and 16.1% of all employment; while the Travel & Tourism sector as a whole supports 21.2% GDP and 19.5% employment in the economy, including indirect and induced impacts.

A large proportion of businesses are seemingly already using digital platforms to interact with travellers throughout the travel process with limited apparent scope for further expansion. The most appropriate platforms should continue to be leveraged while new businesses should be encouraged to follow best practice in online use.

By leveraging the data generated by online interactions there is a significant growth opportunity for the travel sector in the Philippines. Government policy is supportive of digital growth, however WEF indices suggest that digital skills are low within the destination. Investment in skills, and the digital network (including lower costs), would help to realise the growth opportunity.

There is potential for tourism sector GDP contribution to grow by an additional 2.8%, raising whole economy GDP by 0.6%. This would create almost 270,000 new jobs across the Philippine economy.

Largest and fastest growing international source markets

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
THAILAND SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN THAILAND

Tourism activity in Thailand supports 6.5 million jobs, equivalent to roughly 1 in every 6 jobs in the economy, according to research by WTTC & Oxford Economics. The sector is a greater engine of economic development in Thailand than in the wider region.

Domestic travel demand is modest in Thailand, only generating around 20% of the economic benefit. Continued economic development will be key to future growth, but developments in other source should not be overlooked.

Thailand attracts almost 40 million overnight visitors per year, a number which has increased by over 50% over the past 5 years. Asia Pacific source markets are the most important, with notable growth from China in recent years. Long-haul source markets are smaller, but account for around 40% of the inbound spending and associated GDP contribution.

DIGITAL TRAVEL IS LESS WIDESPREAD IN THAILAND THAN ACROSS THE REGION

An estimated 74% of all travel within Thailand is reliant on online research. This is a high proportion of travel, but is lower than the estimated 77% of travel organised online across the wider region.

Internet penetration is lower than the regional average in Thailand, at 42%, although domestic travellers tend to be more connected. There remains scope to increase online interactions with international visitors and drive future growth by leveraging platforms and data.

Digital travel footprint: Asia Pacific
% tourism researched or booked online

Digital travel footprint: Thailand
% tourism researched or booked online

Source: Tourism Economics

Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN THAILAND WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports a large proportion of activity at 16.3% Thailand GDP and 12.9% of all employment; while the Travel & Tourism sector as a whole supports 22.1% GDP and 17.4% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in digital networks and skills would be required. Around half of the estimated growth opportunity for the next five years in Thailand can be realised by leveraging digital platforms. There is also a significant opportunity for further growth by leveraging data generated by these digital interactions, although digital skills are relatively low across the economy.

There is potential for tourism sector GDP to grow by an additional 4.3%, raising whole economy GDP by 1.0%. This is the largest estimated whole economy growth opportunity among the 12 destinations in this study, due to the large contribution from the sector. This would create over 320,000 new jobs across the Thailand economy.

Tourism economic impact & digital contribution

<table>
<thead>
<tr>
<th>% whole economy GDP &amp; employment</th>
<th>Total impact</th>
<th>Direct impact</th>
<th>Online footprint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand GDP</td>
<td>22.1</td>
<td>16.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Thailand Employment</td>
<td>17.4</td>
<td>12.9</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Source markets</th>
<th>Arrivals (mn, 2018)</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source markets</td>
<td>% growth (CAGR 2013-18)</td>
<td>Source markets</td>
<td>Source markets</td>
</tr>
<tr>
<td>Source markets</td>
<td>Source markets</td>
<td>Source markets</td>
<td>Source markets</td>
</tr>
<tr>
<td>China</td>
<td>11,437</td>
<td>Argentina</td>
<td>China</td>
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<tr>
<td></td>
<td></td>
<td>Argentinia</td>
<td>China</td>
</tr>
<tr>
<td>Malaysia</td>
<td>3,557</td>
<td>China</td>
<td>Lao PDR</td>
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<tr>
<td></td>
<td></td>
<td>China</td>
<td>Lao PDR</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>1,854</td>
<td>Myanmar</td>
<td>Republic of Korea</td>
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<tr>
<td></td>
<td></td>
<td>Myanmar</td>
<td>Cambodia</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>1,846</td>
<td>Brazil</td>
<td>Cambodia</td>
</tr>
<tr>
<td>Japan</td>
<td>1,649</td>
<td>Cambodia</td>
<td>Malaysia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cambodia</td>
<td>Malaysia</td>
</tr>
</tbody>
</table>

Source: UNWTO & Tourism Economics (2018 estimates from GTS model)
VIETNAM SUMMARY

TOURISM IS AN IMPORTANT GROWTH SECTOR IN VIETNAM

Tourism activity in Vietnam supports over 4 million jobs, equivalent to roughly 1 in every 13 jobs in the economy, according to research by WTTC & Oxford Economics\(^89\).

Domestic travel demand is relatively modest in Vietnam but still generates around half of the economic benefit. The importance of domestic demand has increased in recent years, but is expected to stabilise, with more rapid growth in inbound demand.

Vietnam attracts almost 9 million overnight visitors per year, a number which has increased by almost 70% over the past 5 years. Asia Pacific source markets are the most important, in terms of volumes and recent growth. The US is a large long-haul source market.

DIGITAL TRAVEL IS LESS WIDESPREAD IN VIETNAM THAN ACROSS THE REGION

An estimated 62% of all travel within Vietnam is reliant on online research. This is a high proportion of travel, but is lower than the estimated 77% of travel organised online across the wider region.

Internet penetration in Vietnam is broadly consistent with the regional average. However, there is potential for more widespread use of digital sources among both domestic and inbound travellers to Vietnam. The estimated share of travel organised online is lower in Vietnam than for any of the other destinations considered in this study.

\(^89\) Tourism impacts are measured as the direct impacts for all tourism-facing businesses, plus wider impacts arising along the supply chain and due to spending of wages. Direct impacts include those for traditional tourism businesses as well as for new innovative tourism businesses, such as Airbnb and other new accommodation providers, plus ride-sharing providers.
GROWTH IN VIETNAM WILL BE AIDED BY INCREASED DIGITAL TOURISM

Online tourism currently supports 5.8% Vietnamese GDP and 4.8% of all employment; while the Travel & Tourism sector as a whole supports 9.4% GDP and 7.8% employment in the economy, including indirect and induced impacts.

There is significant scope to expand the use of digital platforms to interact with travellers throughout the planning process. Greater investment in digital networks and skills would be required to realise the opportunities. According to WEF indices, digital skills are lower in Vietnam than in any of the other destinations in this study. Restrictive data localisation policies may be deterring some private investment in digital networks and platforms.

There is potential for tourism sector GDP to grow by an additional 8.0%, raising whole economy GDP by 0.7%. This would create around 370,000 new jobs across the Vietnamese economy. This is the largest growth opportunity in percentage growth terms out of the 12 destinations in this study.

Tourism economic impact & digital contribution
% whole economy GDP & employment

Source: Oxford Economics, WTTC

Largest and fastest growing international source markets

<table>
<thead>
<tr>
<th>Largest source markets</th>
<th>Top source markets by % growth</th>
<th>Top source markets by absolute volume growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source markets</td>
<td>Source markets</td>
<td>% growth (CAGR 2013-18)</td>
</tr>
<tr>
<td>Source markets</td>
<td>Source markets</td>
<td>Source markets</td>
</tr>
<tr>
<td>Arrivals (mn, 2018)</td>
<td>Source markets</td>
<td>Republic of Korea</td>
</tr>
<tr>
<td>China</td>
<td>Myanmar</td>
<td>74%</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>Hong Kong SAR</td>
<td>35%</td>
</tr>
<tr>
<td>United States</td>
<td>Spain</td>
<td>21%</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>Germany</td>
<td>19%</td>
</tr>
<tr>
<td>Japan</td>
<td>Republic of Korea</td>
<td>19%</td>
</tr>
</tbody>
</table>
| Source: UNWTO & Tourism Economics (2018 estimates from GTS model)