

Expedition 3.0: Travel and hospitality gone digital

**Innovations, challenges and way forward
to win the Indian consumer**



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Forewords

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India's Travel sector has expanded in the recent years, driven by the increase in domestic spend, internet penetration and availability of smartphones. Technology today plays a ubiquitous role in shaping the travel industry.

Key advancements in the travel space revolve around five themes, namely Artificial Intelligence (AI), Big Data, mobile applications, social media and Virtual/Augmented Reality (VR/AR). These advancements could enrich travel experiences through direct and flexible interactions with customers. Budding popularity of such applications backed by user generated content and sharing-economy services, has opened the door for many new travel start-ups, offering choices to tech-friendly travellers.

This trend is led predominantly by millennials, who account for nearly half of the working age population. Incumbents are adapting swiftly to the emerging bouquet of travel start-ups. To differentiate themselves, existing players are honing the ways to personalise customer experience, build loyalty, automate operations and gain deeper insights on the customers. This deep customer focus is also blurring the lines between business and leisure travel.

This paper attempts to portray an immersive view on the trends, challenges and consequences of digital travel, thereby painting a broad-brush picture of digital travel revolution unfolding.

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Travel and Hospitality is one of the key sectors for the Indian economy. Not only is it one of the highest foreign exchange earners, but also one of the largest employment generators. The future looks bright for travel and tourism, with more demand for supply growth in inbound as well as domestic tourism. The sector is also getting a significant boost from several government initiatives. The rampant penetration of internet and mobile has transformed the way of travel consumption by today's tech savvy consumers. Because of which the dynamic and personalised content has become the cornerstone to drive more booking.

Companies that utilise technology to facilitate a dynamic response mechanism across all operators will emerge as the leaders of tomorrow.

This report from KPMG in India and FICCI on the technology landscape for Travel and Hospitality provides a quick look at the current pace of digital disruption, consumer trends and innovation.

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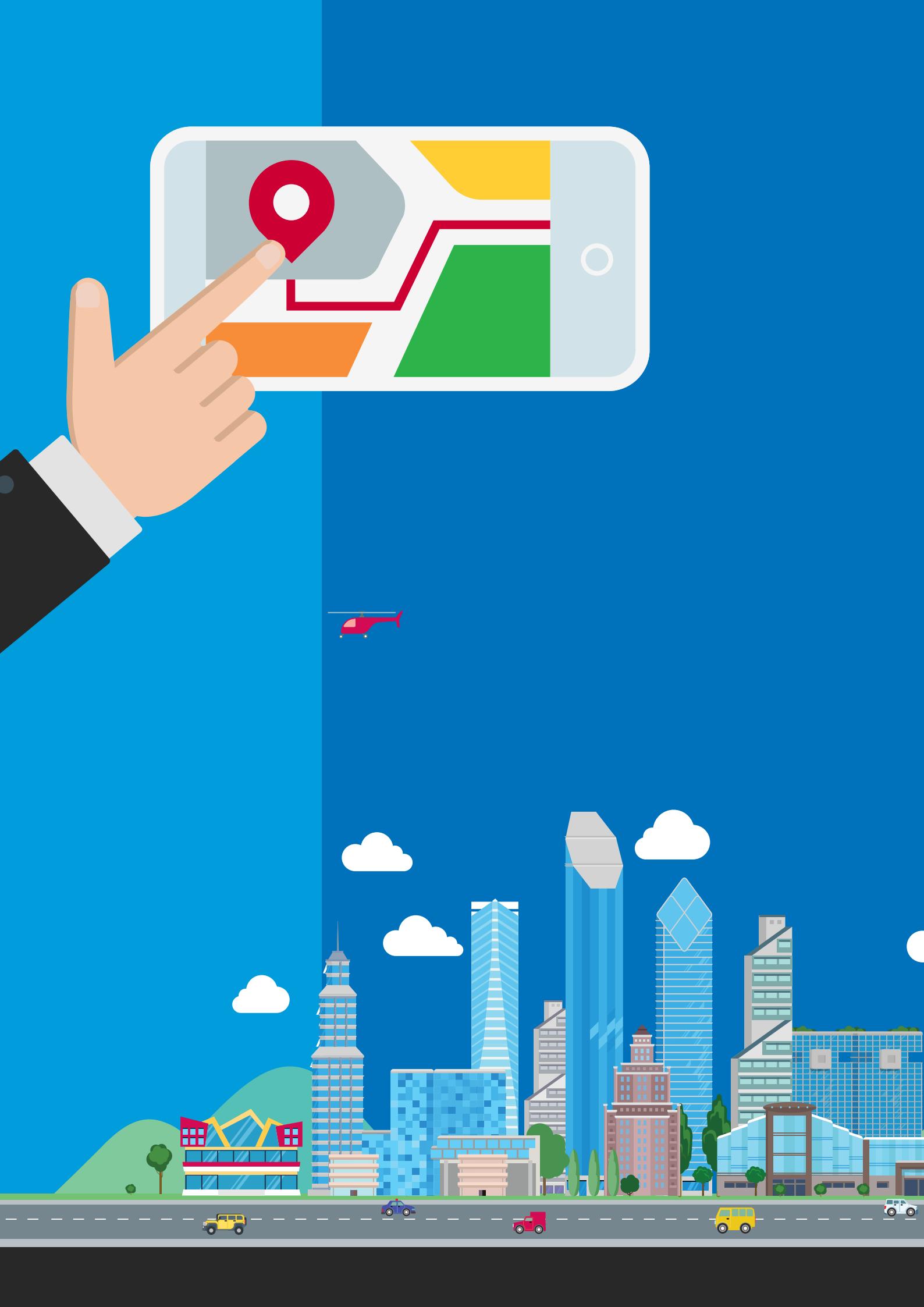


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Executive summary



The Indian travel and hospitality sector continued its steady growth with 15.6 per cent year-on-year (y-o-y) rise in Foreign Tourist Arrivals (FTAs) and 20.8 per cent y-o-y growth in Foreign Exchange Earnings (FEEs) during 2017.⁰¹ Further, in 2017, the travel and tourism sector was estimated to directly contribute to 25.9 million jobs and INR5,141.1 billion (USD75.8 billion)^{02,03} to the country's Gross Domestic Product

(GDP).⁰⁴ Growing disposable incomes and the rise of millennials as the 'chief wage earners', who account for 47 per cent of the working age population, were the key drivers for this rapid growth.⁰⁵ In addition, the proliferation of smartphones, Internet and technology-driven tools and platforms is acting as a catalyst for speedy digitisation of the travel and hospitality sector.

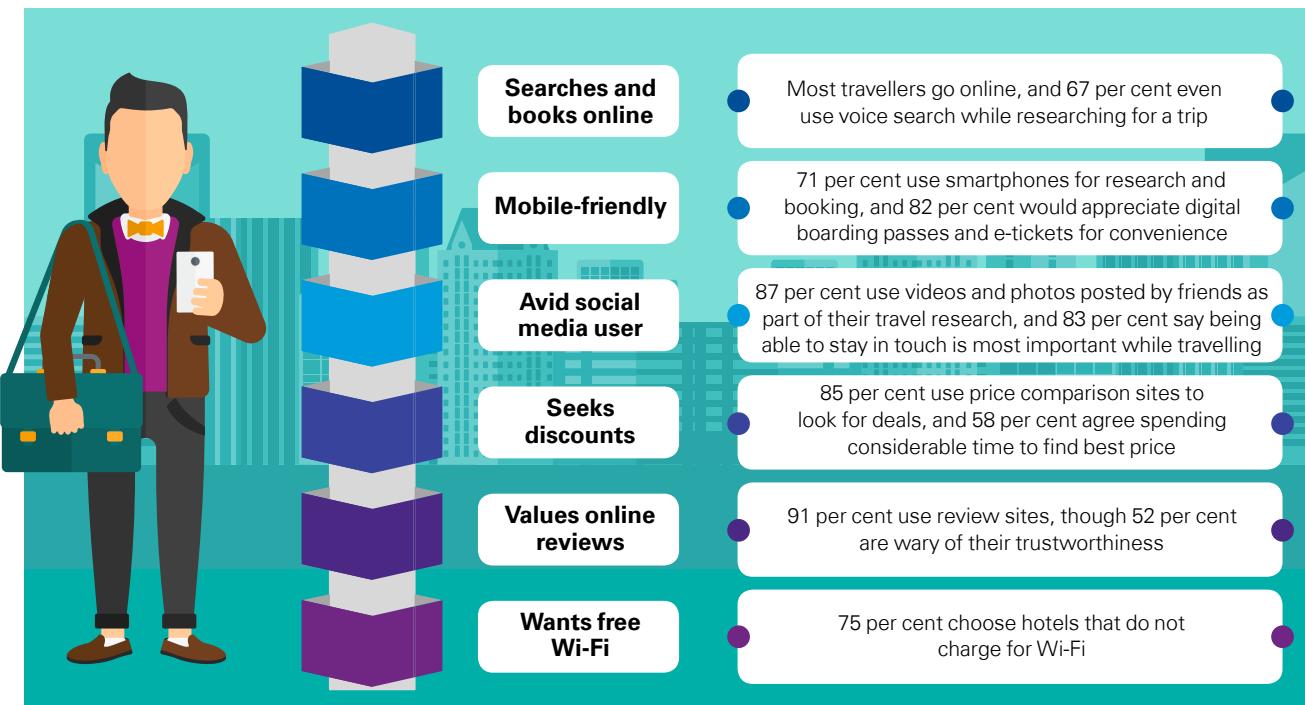
Digital transformation in travel – Rise of the tech-friendly Indian traveller...

The travel and hospitality sector is rapidly evolving with the rising adoption of various tools, technologies and digital platforms — primarily to improve customer experience, build strong loyalties and run businesses efficiently. These include mobile applications, social media, Big Data analytics, artificial intelligence (AI) and machine learning, virtual reality (VR) and augmented reality (AR). In addition,

online sale of travel bookings in India is expected to increase at a healthy rate of 14.8 per cent Compound Annual Growth Rate (CAGR) from INR1,512.7 billion (USD22.3 billion) in 2017 to INR2,625.7 billion (USD38.7 billion) by 2021.^{02, 03, 06}

Evidently, Indian travellers are displaying high affinity towards technology usage in travel; this tech-friendly Indian traveller can be characterised as below.

Key characteristics of the tech-friendly Indian traveller⁰⁷



01. Market Research and Statistics, Ministry of Tourism, accessed on 22 February 2018

02. Currency conversion from INR to USD at USD1=INR67.809

03. Yearly average currency exchange rates, IRS, accessed on 1 March 2018

04. Travel and Tourism Economic Impact 2017 India, World Travel & Tourism Council, March 2017

05. Millennials to redefine India's consumption story: report, Livemint, 20 February 2018

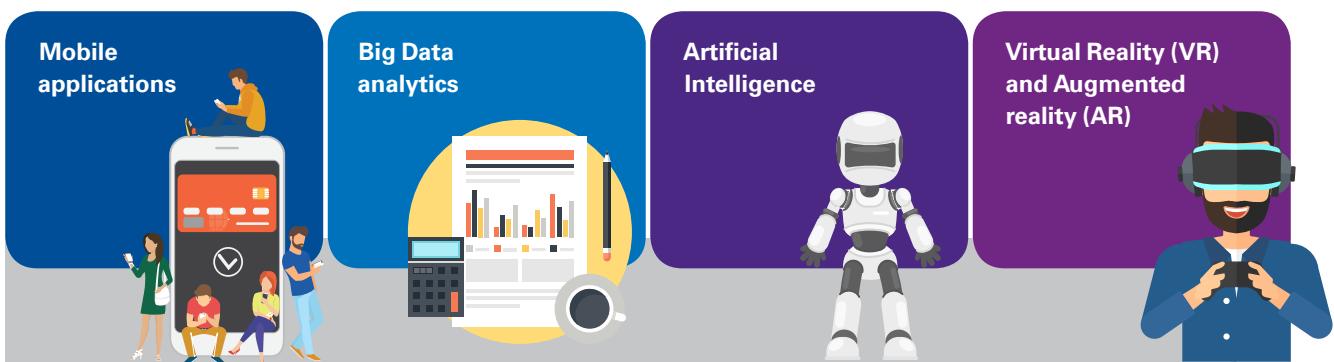
06. eMarketer Forecasts India's Digital Travel Sales Will Top \$22.5 Billion This Year, eMarketer, 2 August 2017

07. The Indian Digital Traveller Research, Travelpoint, November 2017

...and the tools and technologies driving it

The tools, technologies and digital platforms that are finding major applications in the travel sector include mobile applications, social media, Big Data analytics, AI, machine learning, VR, and AR.

Major tools, technologies and platforms driving digital travel



- Mobile applications have emerged as one of the most critical points of interaction with consumers.
- Online Travel Agents (OTAs) are getting majority of their traffic from mobile.

- Big data analytics is the key to informed decision making.
- It can help personalise customer experience, employ dynamic pricing, optimise operations and channelise marketing efforts.

- AI in the form of chatbots, virtual assistants and even robots is increasingly being employed across the travel sector.
- In addition, machine learning makes these tools smarter over time and helps improve customer experience.

- VR and AR could potentially change the way travellers go through the process of travel planning — enabling them to get closer to the reality of the experience they would have when they actually arrive at their destinations.

While the adoption of these tools, technologies and platforms is rising across the travel and hospitality sector, it may not be considered to be directly correlated with innovation, as innovation is also about the minor tweaks in the ways these tools are

utilised to add more value for customers. Further, some players (such as technology-driven OTAs) are typically more deeply invested in this aspect than others.

Winning the customer – The path travel companies are headed towards

Using the various tools, technologies and platforms mentioned, travel and hospitality players are focussing on some key areas to win the tech-friendly Indian traveller.

Key focus areas for winning the tech-friendly Indian traveller

01

Marketing to the modern-day traveller

Search Engine Marketing (SEM) and Search Engine Optimisation (SEO) are among the key focus areas for players; other key marketing strategies include following a mobile-first approach, leveraging social media, providing personalised offers and utilising user generated content (UGC).

02

Personalising services

Big Data analytics, AI and machine learning enable players to cull out insights that can help personalise products and services; personalisation is deemed to be the future of travel, as travellers increasingly seek customised services.

03

Pushing towards direct bookings

Direct bookings enable hotels and airlines to avoid commissions and build a direct connect with customers; this concept is likely to gain more emphasis going forward.

04

Automating operations

Automation enables end to end applications across booking, customer service and even operational aspects of travel and hospitality businesses; however, the hospitality sector is highly human-intensive and would continue to be predominantly driven by manual processes.

05

Leveraging the User Generated Content (UGC)

In contrast with owned media, earned media is now considered to be more effective for marketing. In addition, in the form of customer reviews, UGC can help brands with identifying and resolving issues, while enabling them to build a direct connect with customers.

06

Partnering with the sharing-economy players

In the travel sector, cab transportation and accommodation aggregation are two major areas where sharing-economy has made positive strides; hotels, hotel aggregators and OTAs are partnering with cab aggregators to leverage synergies.

Breweries of travel – Search engines and social media platforms

Google is the custodian of an extremely large number of search and queries around travel, and positions itself as an enabler to travel.⁰⁸ It is not an OTA, but does have several products specific to the travel and hospitality sector, including Google Flights, Google Hotel Ads, Google Trips and Book on Google. These products cater to various aspects, including flight bookings, locating hotels and itinerary planning.

Facebook, on the other hand, has the ability to sway consumer perceptions and thus, travel-related decision making. The content produced by users

on its platforms acts as a significant source of encouragement for people to travel. For businesses, it works on creating relevant interactions with users and offers various marketing opportunities to large and small businesses alike. Similarly, other social media platforms, such as Twitter and Snapchat, also have their distinctive features and opportunities for travel businesses to reach out to their audience.

Essentially, these platforms act as breweries of travel, encouraging people to explore, plan, book and share their experiences.

Veterans and start-ups – Evolving together amidst blurring lines

The Indian travel and hospitality sector is witnessing several changes, as innovative tools and technologies continue to surface quite rapidly, in addition to the shift in consumer behaviour led by millennials. While on one hand branded hotel chains have turned around to become digital over the past few years, on the other, OTAs and metasearch engines are encroaching each other's lines. Essentially, OTAs, metasearch engines and even travel management companies (TMCs) are turning into 'travel experience platforms' that would cater to multiple aspects of a traveller's journey.

The sector is also increasingly getting consolidated with mergers and acquisitions. Increase in the number of M&As over the past few years has been driven by:

- Fragmented nature of the sector
- Need for achieving economies of scale in a volume-based Indian market
- Focus on diversification to provide a comprehensive travel experience
- High level of competition, and
- Requirement of different offerings for dissimilar consumers.

India is also witnessing a growth in technology-driven start-ups in the travel space. These start-ups are influencing the industry with their niche offerings — complementing the traditional players in some ways and disrupting them in others. These players operate across various segments including online travel communities, travel planning, activities and experiences, travel guide services (emphasising on localised and authentic experiences), food delivery (during travel), niche/customised travel packages, digital communication platforms (e.g., for travellers and locals) and online accommodation booking.

The changing dynamics of the Indian travel and hospitality sector are significantly driven by millennials, who typically seek much more than a glimpse of the renowned tourist spots during travel excursions. This demographic demands true and authentic experiences, and looks to 'live like locals' wherever they go. The travel and hospitality players are in a race to appease this traveller segment. The large organisations within OTAs, metasearch engines and hotels are watching millennials closely and adapting to their needs and preferences rapidly. On the other hand, start-ups are finding niche white spaces to cater as they find targeting a single type of consumer to be a better business proposition.⁰⁹

08. Industry discussions conducted by KPMG in India, 2018

09. What is driving the sudden boom in travel start-ups in India?, YourStory, 27 February 2015

Innovation in travel – Roadblocks to overcome

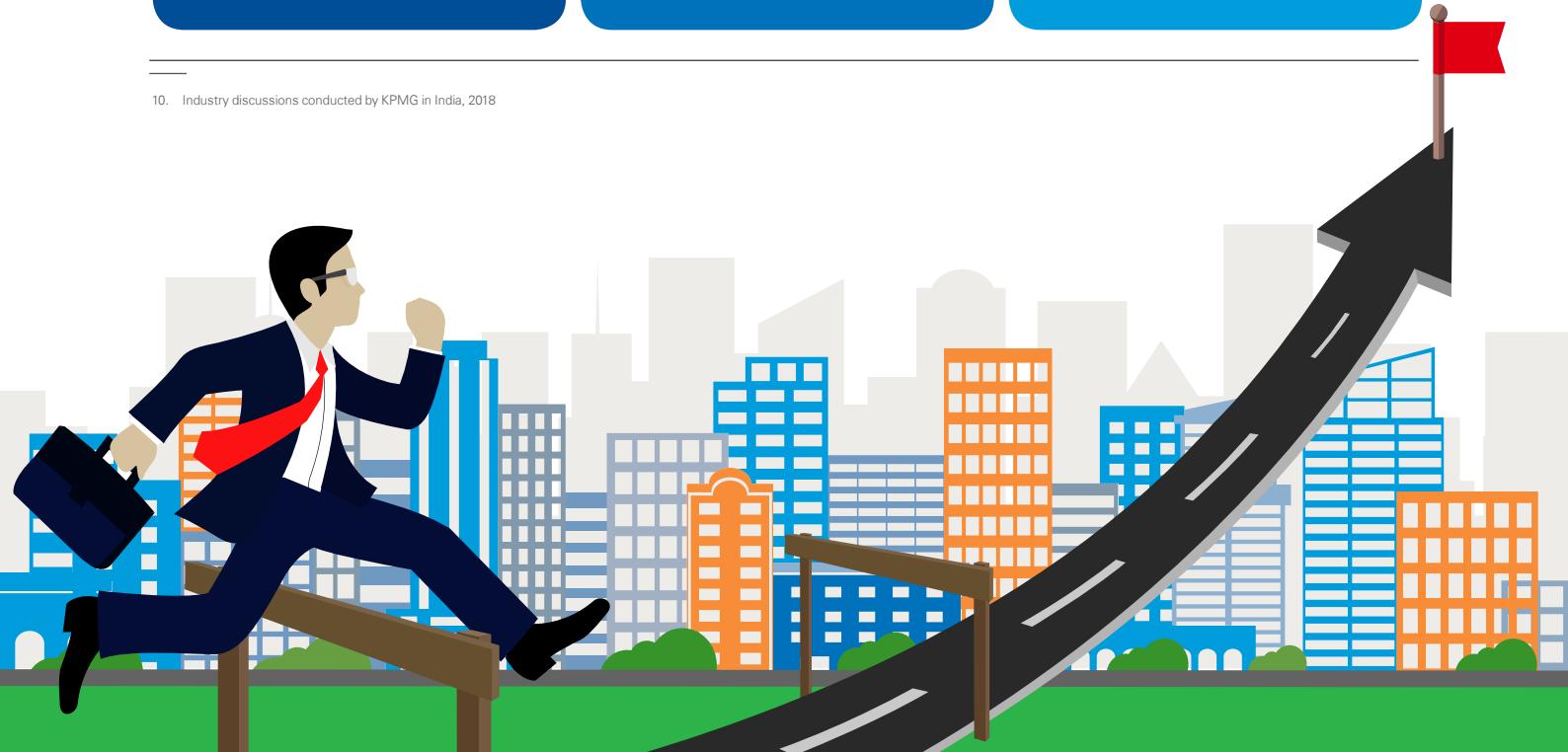
While players are innovating in various aspects using the previously discussed tools, technologies and digital platforms, innovation is not limited to that; it is also about how a business does the small things, yet significant, with widely applied processes

and practices. However, the fundamentals remain the same — enhancing customer experience and building loyalty. Going about it, players face certain challenges that can inhibit their ability to successfully go through with an initiative, which include:

Key inhibitors to innovation in travel¹⁰



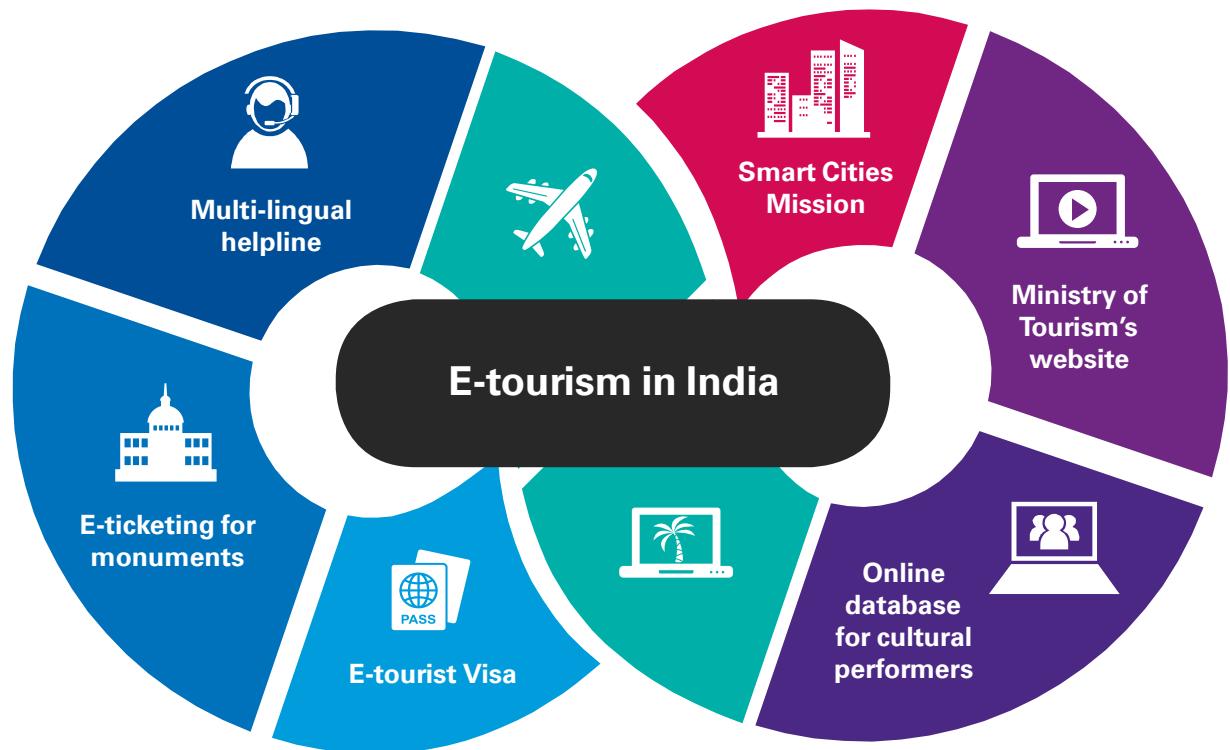
10. Industry discussions conducted by KPMG in India, 2018



Digitisation of travel – Government's initiatives and learnings from leading countries

Indian government has a crucial role to play in digitisation of travel, and has taken several initiatives at a broader level, which would enable digital travel in India.

Government initiatives towards digitisation of travel¹¹



Such digital initiatives undertaken by the government can help enhance the travel experience for both domestic and international travellers. Further, driving digital transition is not a one-off exercise and would

need sustained effort. As digital adoption spreads across the country, India would increasingly become appealing to tech-friendly travellers.

11. Digital India to transform tourism, Daily Pioneer, accessed on 10 February 2018

What is the way forward

With increased adoption of technology, the Indian travel and hospitality sector is expected to see more of innovative solutions and services such as AR city tours, smart tourism, robots for security and housekeeping, smart luggage, radio frequency identification (RFID)/facial recognition technology to

open hotel doors, driverless/self-parking cars and air taxis over the foreseeable future.¹²

With such developments at the fore, the government and players in the sector are expected to take certain actions going forward, which include:

For government ¹³	For businesses
Encouraging service adoption by stimulating demand for digital services by ensuring that public services can be performed online.	Branded hotel chains in India are expected to continue investing in digital technologies and platforms, while also keeping their brick and mortar approach strong. Enhancing pre-booking as well as post-booking experiences would be of paramount importance.
Easier identification through Aadhaar, improved access to banking infrastructure and point-of-sale (POS) machines, and availability of internet connectivity and telecommunication networks are some key steps for enabling a seamless experience for travellers.	Loyalty would take precedence for hotels, airlines as well as OTAs. Discounting could be phased out to favour profitability. However, India would continue to remain a price sensitive market.
Improving IT literacy is necessary for the digital services to catch up amongst the masses. Steps must be taken to introduce skills required to thrive in a digital economy at early levels, specifically at schools. Digital training needs to be readily available for the current workforce.	Activities (things to do at a destination) would be a key area of focus for online travel companies, especially metasearch engines, as they are venturing into it as merchants — allowing them to earn higher margins.
Digital medium is considered prone to phishing attacks in commercial and financial transactions and this needs to be addressed through advanced fin-tech technologies. To counter this, the Government of India can look at implementing its own General Data Protection Regulation (GDPR), following the recent development in the U.K.	Direct bookings would be emphasised more by hotels and airlines, as ruling the traveller's experience becomes the ultimate goal for travel players.

12. Industry discussions conducted by KPMG in India, 2018

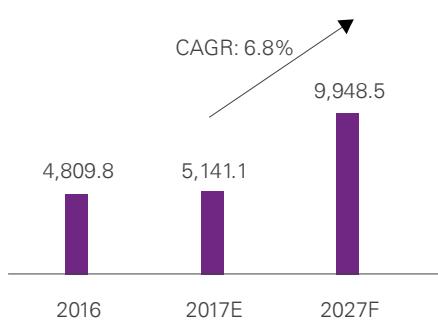
13. Regulatory Framework for digital economy, GSMA report 2016,

Growth of India's travel and tourism sector



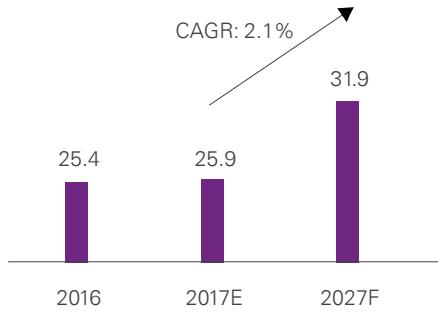
The Indian travel and tourism sector continues to grow steadily amidst ups and downs in the economy, and policy changes such as the introduction of the Goods and Services Tax (GST). During 2017, the sector also comfortably managed the challenges from demonetisation — the ban on high value currency notes introduced by the Indian government in November 2016. The FTAs in India grew 15.6 per cent y-o-y to 10.18 million in 2017, while FEEs in 2017 grew 20.8 per cent y-o-y to USD27.7 billion.⁰¹ Further, the government's 'e-Tourist Visa' facility continued to witness an increase in applications, with nearly 1.08 million tourists arriving through it in 2016 — a significant 142.5 per cent y-o-y growth⁰¹. The Indian travel and tourism sector also contributes significantly to the country's GDP and employment.

Direct contribution of travel and tourism to GDP (INR billion)



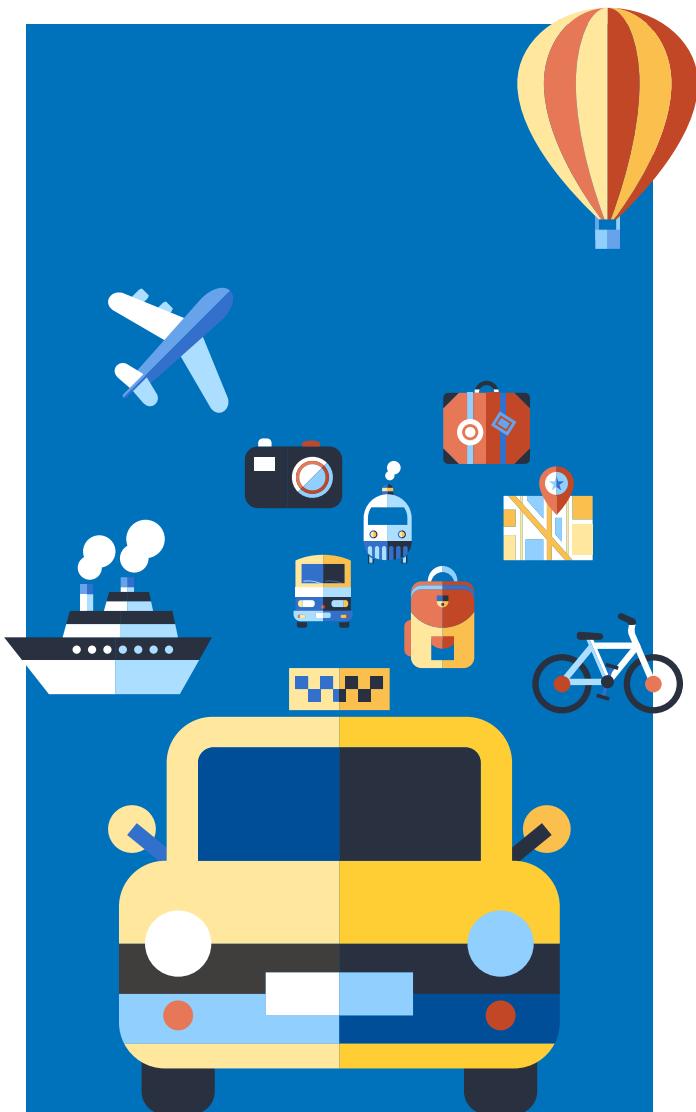
Source: Travel and Tourism Economic Impact 2017 India, World Travel & Tourism Council, March 2017

Direct contribution of travel and tourism to employment (INR billion)



Source: Travel and Tourism Economic Impact 2017 India, World Travel & Tourism Council, March 2017

The direct contribution of travel and tourism sector — which reflects the net value of output generated by hotels, airlines, travel agents, other passenger transportation services (excluding commuter services), and restaurants and leisure industries directly supported by tourists — was expected to rise 6.9 per cent y-o-y in 2017.⁰² This accounts for 3.3 per cent of the country's GDP, and is expected to form 3.5 per cent of it by 2027.⁰² In accordance with its GDP contribution, the sector contributes significantly to job creation. The sector directly accounts for 5.8 per cent of the total employment in India.⁰² Further, the Indian travel and tourism sector is expected to have attracted capital investment of INR2,387.7 billion (USD35.2 billion)^{03, 04} in 2017 — accounting for 5.7 per cent of the total national investment.⁰²



01. Market Research and Statistics, Ministry of Tourism, accessed on 22 February 2018

02. Travel and Tourism Economic Impact 2017 India, World Travel & Tourism Council, March 2017

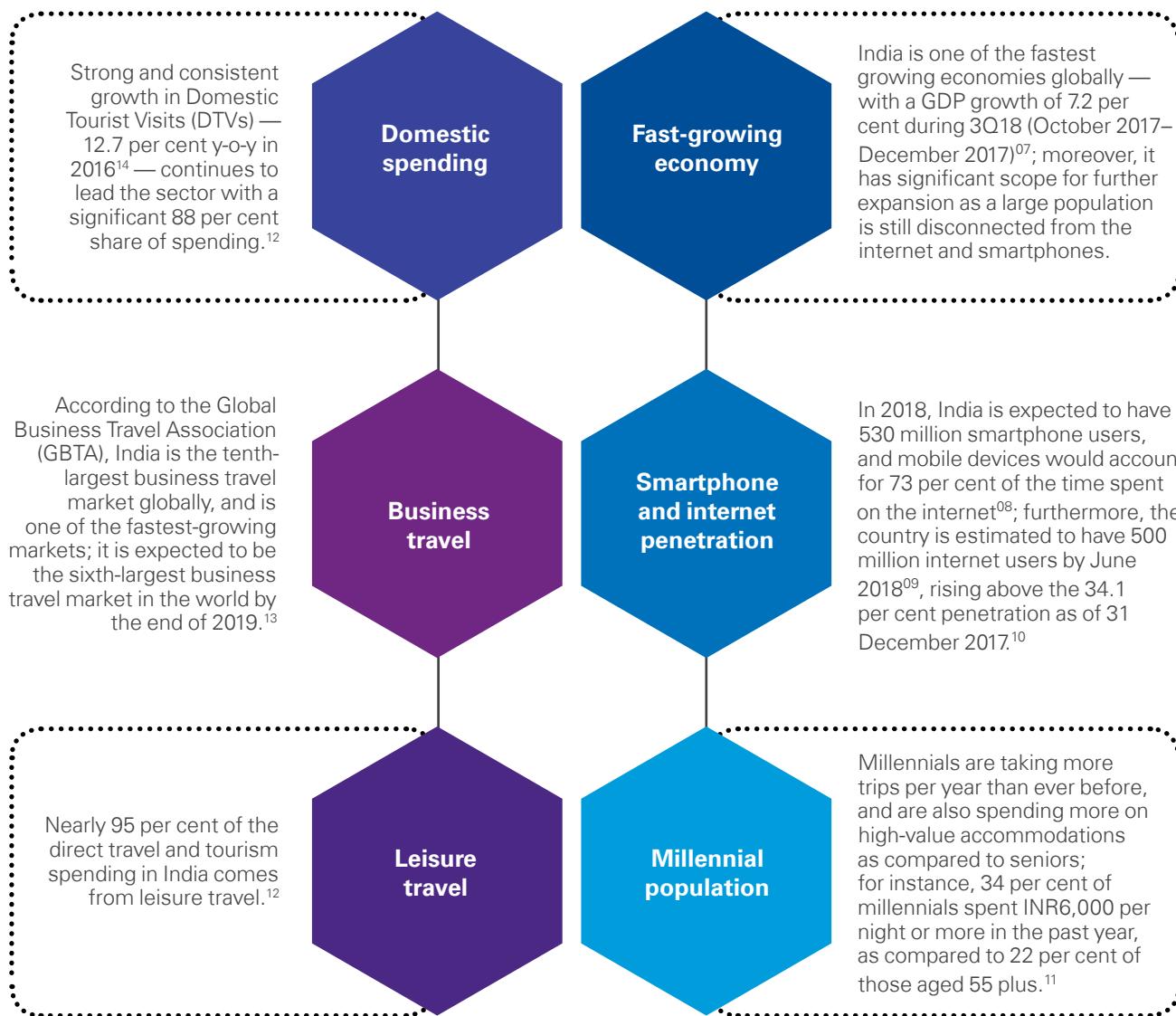
03. Currency conversion from INR to USD at USD1=INR67.809

04. Yearly average currency exchange rates, IRS, accessed on 1 March 2018

What is fuelling this growth

Owing to the positivity of the economic and demographic forces — including growing disposable incomes⁰⁵ and rise of millennials as the 'chief wage earners', who account for 47 per cent of the working

age population⁰⁶ — the Indian travel and leisure space is witnessing the rub-off of hyper consumption. Some of the major developments fuelling growth in the travel and hospitality sector are:



05. Consumer priorities changing thanks to growing disposable income, technology, Livemint, 9 January 2018

06. Millennials to redefine India's consumption story: report, Livemint, 20 February 2018

07. India reclaims 'world's fastest growing economy' tag from China, Livemint, 1 March 2018

08. India set to have 530 million smartphone users in 2018: Study, Indian Express, 16 October 2017

09. Internet Users in India Likely to Cross 500 Million by June 2018: IAMAI, News18, 21 February 2018

10. Top 20 Countries With The Highest Number Of Internet Users, Internet World Stats, accessed on 28 February 2018

11. Millennials spending more on travel than seniors: Study, Zee Business, 6 January 2018

12. Travel and Tourism Economic Impact 2017 India, World Travel & Tourism Council, March 2017

13. India is World's Fastest Growing Major Business Travel Market in 2016 Despite Demonetization Fears, GBTA, 1 February 2017

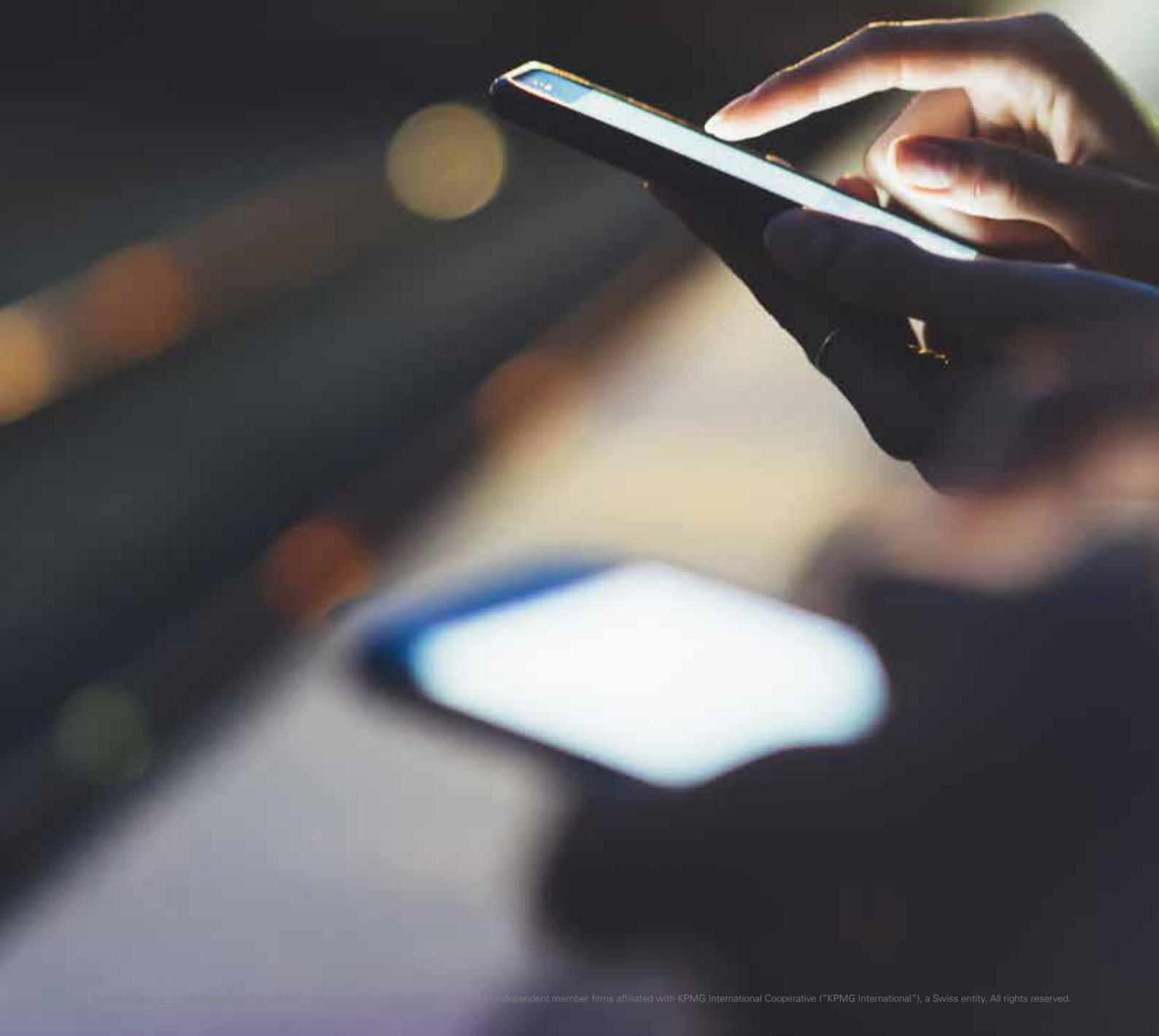
14. Market Research and Statistics, Ministry of Tourism, accessed on 16 January 2018

Complementing the market forces, Government of India is also aggressively pushing for the development of tourism infrastructure at major tourist destinations across the country. It has identified several tourist circuits to promote multiple locations together in homogenous sets, based on genres such as religion, history, adventure and lifestyle. It is also working on improving the tourist facilities at such locations. Furthermore, government schemes such as the National Heritage City Development and Augmentation Yojana (HRIDAY) and Pilgrimage Rejuvenation and Spirituality Augmentation Drive (PRASAD) are focussed at

development and rejuvenation of culturally/religiously significant cities and the tourist spots within those cities, respectively. Moreover, the government is trying to improve transport connectivity to several major tourist spots with investments in last-mile road connectivity and regional air connectivity via the 'Ude Desh ka Aam Nagrik' (UDAN) scheme. Thus, the government's positive stance towards tourism, coupled with a self-thriving ecosystem run by tech-friendly travellers and innovative companies, is expected to continue driving the sector at a rapid pace in the foreseeable future.



Digital transformation in travel



Rise of the tech-friendly traveller

The global travel and hospitality sector is centred on various digital trends and technologies focussed at improving customer experience and convenience and allowing businesses to operate in a more efficient manner. The travel and hospitality players are continuously innovating and adopting tools and technologies that are progressively defining the future of travel around the world.

Digitisation of travel is a transformative change. The past couple of decades have witnessed a significant increase in the share of online travel. Furthermore, travel and hospitality companies have been building upon the evolutions brought forth by innovations such as smartphones, social media, Big Data analytics, AI and machine learning, VR and AR.

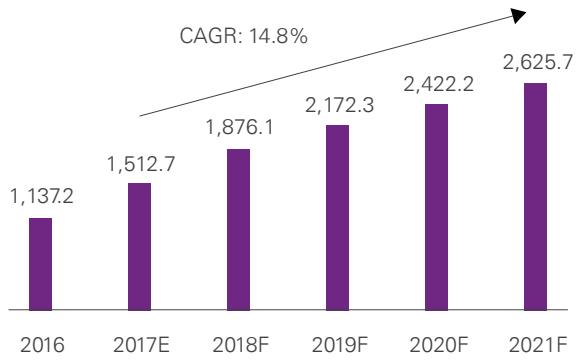
India perspective

The Indian travel and tourism sector has significantly evolved from the early days of digitisation, when the Internet penetration was low and Global Distribution Systems (GDS) had just enabled the creation of an integrated network of travel and hospitality service providers. During the following decade, the sector was further revolutionised by the emergence of OTAs and low-cost airlines, when the focus shifted towards making travel convenient.

However, with the advent of the ongoing decade, the pace of evolution significantly improved with easy access to high-speed internet, proliferation of smartphones, and several other technological developments. Following the global scenario, the Indian players are also leveraging various tools, technologies and digital platforms — primarily to improve customer experience, build strong loyalties and run businesses efficiently.

In fact, online sale of travel bookings — including airlines, hotels, car rentals, cruises, accommodation aggregators and other transportation modes — is expected to have grown 33 per cent in 2017.⁰¹

Digital travel sales in India (INR billion)⁰²



Source: eMarketer Forecasts India's Digital Travel Sales Will Top \$22.5 Billion This Year, eMarketer, 2 August 2017

Majority of growth in India's digital travel is increasingly being led by tier-II and tier-III cities,⁰³ as digital transactions in these areas rise on the back of increasing penetration of smartphones and the Internet. The Indian government's move to remove high currency notes out of circulation in November 2016 is expected to have further catalysed the growth of digital travel sales in the country during 2017. In 2017, India was projected to have accounted for 3.7 per cent of the global digital travel sales — making it the third-largest market by value in the Asia-Pacific (APAC) region.⁰³ The online sales of travel booking is likely to increase at a CAGR of 14.8 per cent during 2017–21.⁰¹ This uprising of digital travel in India can be attributed to the increasingly digitally-savvy Indian travellers.

01. eMarketer Forecasts India's Digital Travel Sales Will Top \$22.5 Billion This Year, eMarketer, 2 August 2017

02. Includes leisure and unmanaged business travel bookings made via internet, converted at an exchange rate of USD1 = INR67.17

03. Worldwide Digital Travel Sales: eMarketer's Estimates for 2016–2021, eMarketer, July 2017

Captivated by technology

Technology has gradually become an integral part of a traveller's DNA — be it for personal or business purposes. It plays an important role throughout the journey, from research/planning to booking, payment, visa, currency exchange, travel, and even submission of claims and reimbursements (for business travellers).

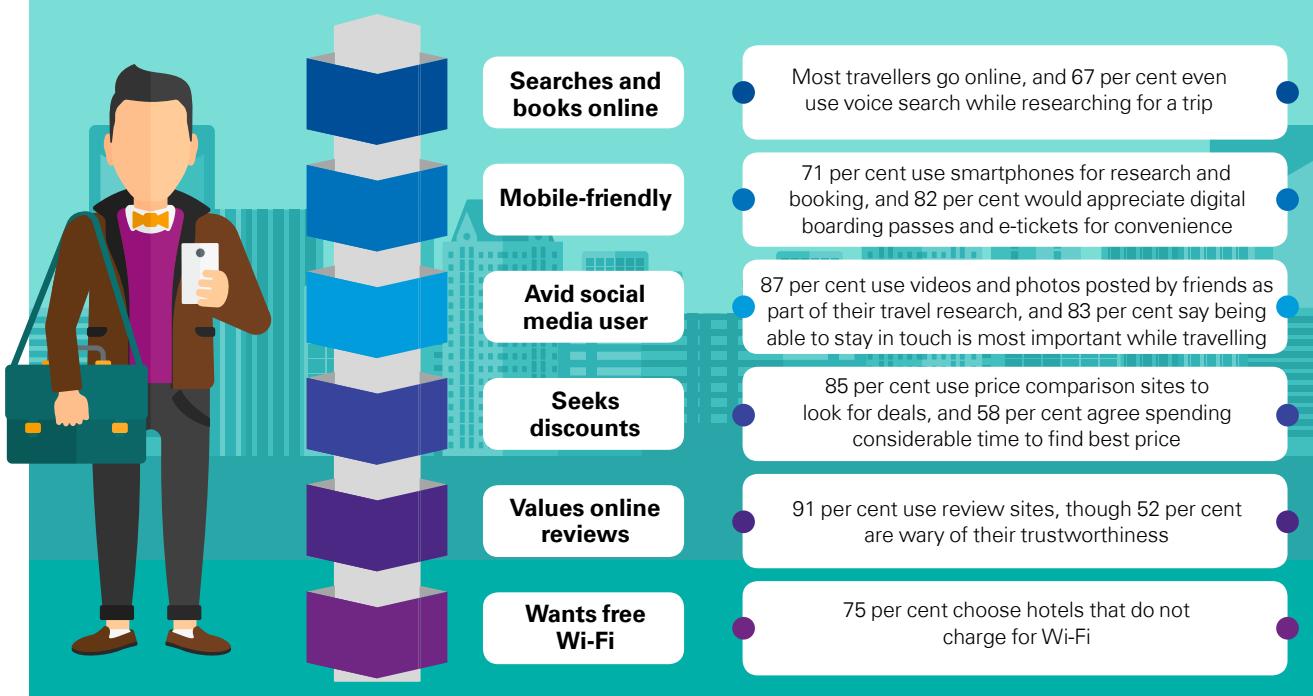
The most significant reform in travel has been brought by mobile applications, which have enabled the whole user experience to be available on-the-go. These include usage of mobile tickets/boarding pass, mobile check-in for hotel rooms, cab hailing applications, and even cloud passports in some countries — in addition to the basic features such as search, booking, payment, invoicing and customer support.

Furthermore, as facilities such as in-flight and in-hotel Wi-Fi, VR-based experiential booking support (e.g., for hotel rooms) and RFID-based luggage tracking for air travel are increasingly made available, the modern-day traveller is expected to become more digitally-connected than ever.

According to a global online survey conducted in August 2017 by a travel commerce platform (among 11,000 respondents across 19 countries, who had taken at least one return flight in the year before), Indians have been termed the most digitally-savvy travellers worldwide.⁰⁴

The survey reveals a few major characteristics of the modern Indian travellers, which essentially indicate that they are highly influenced by technology when it comes to travelling, as depicted below:

Key characteristics of the tech-friendly Indian traveller⁰⁴



Evidently, Indian travellers are highly cognisant of technology usage in travel, and are only likely to get better at it as the availability of tech-enabled features

rises in the sector. It is essentially up to the industry players to leverage these characteristics to build a strong connect with the country's travellers.

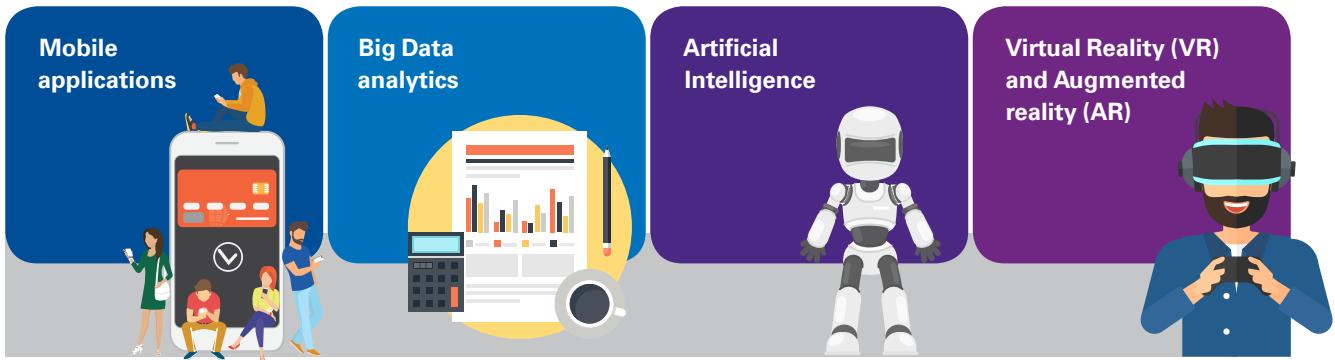
04. The Indian Digital Traveller Research, Travelport, November 2017

Tools and technologies driving digital travel

The rapid digitisation of the travel sector has been driven by the adoption of multiple tools and technologies by industry players over the past few years. These players include hotels, OTAs, hotel aggregators, metasearch engines and TMCs. The

tools, technologies and digital platforms that are finding major applications in the travel sector include mobile applications, social media, Big Data analytics, AI and machine learning, and VR and AR.

Major tools, technologies and platforms driving digital travel



Mobile applications

As smartphones have progressively become ubiquitous, mobile applications have emerged as the most critical point of interaction with consumers for any travel business. OTAs are now getting a large majority of their business from mobile. In 2015, these players accounted for a major share of 89 per cent of the mobile travel bookings made in India⁰⁵; further, some of the leading players continue to witness strong growth in their mobile traffic. For instance, during 3Q18, Yatra received 77 per cent of its traffic from mobile.⁰⁶

Further, metasearch players, hotel chains and airlines are also betting big on mobile. Several hotel chains and airlines are focussing on generating direct hotel bookings through their own websites and mobile applications — to avoid intermediary commissions and increase revenue through ancillary services.

However, OTAs and metasearch players continue to lead the mobile play, through application-only offers and their inherent business features such as comparisons across suppliers. Nonetheless, mobile applications are expected to play a huge role for hotels in improving customer experience as well; some hotels globally are utilising apps to provide guests with more control, allowing mobile check-in, ordering of food and beverages, customisation of the mini-bar and booking of other services such as airport pick-ups/drops. The players are also focussing on enhancing the mobile experience for customers through minimisation of number of clicks and queries generated from search to booking, to provide a seamless and uncluttered experience.

Big Data analytics

Big Data as a concept has been around with regard to multiple industries. However, within the global travel, tourism and hospitality industry, it is primarily the large OTAs, metasearch players and branded hotel chains that have, of late, started using data to cull-out insights that can help improve customer satisfaction and optimise operations.

Broad types of data analytics

Reactive

Based on study of historical data to identify issues, preferences and patterns.

Predictive

Based on historical, current and forecast data to predict outcomes and set future expectations.

Proactive

Forward-looking like predictive analytics, but based more on qualitative than quantitative data.

There are three primary buckets for data analytics — reactive, predictive and proactive.⁰⁷ An organisation ought to formulate its goals and expectations from data prior to venturing into the myriad applications its analysis can serve.



A traveller creates immense amount of data throughout the journey from search and booking, to travel, check-in and check-out, and arrival at origin. This data is crucial to players — especially hotels, TMCs, OTAs, airlines and metasearch engines — that are looking to improve and personalise customer experience, employ dynamic pricing for value maximisation, predict future demand and prepare accordingly, optimise operations through better visibility into internal data, and channelise marketing efforts to achieve targeted responses. Essentially, it is the key to making informed decisions.

Technology-driven players such as OTAs, metasearch engines and online hotel aggregators are typically more invested in Big Data analytics than hotels or airlines. However, over the past few years, many large hotel chains have started using Big Data. For example, global hotel company Marriott International utilises data obtained from various internal systems and surveys, third-party research organisations and public sources to make analytics-driven business decisions.⁰⁸

07. A look at Marriott's approach to data science, Hotel News Now, 12 July 2017

08. Customer Experience: Marriott's Digital Hospitality, Oracle, September 2014

Marriott International's analytics-driven services and pricing^{09,10,11}

Over the past decade, Marriott International has made significant strides with data, starting small with simpler datasets and moving on to complex analytics. The company employs dynamic pricing to enhance revenue management; it collects and uses unstructured and semi-structured data on parameters such as weather conditions and events scheduled in an area to forecast demand and determine the appropriate price for each room, as well as for restaurants, catering and meeting spaces. Further, to personalise services, Marriott monitors every touch point of customer interaction with the hotel — including their official mobile application and website, social media and personal interactions — and makes informed decisions towards the services to offer and facilities to provide.

In addition to pricing and personalisation of services, hotels may also use data to scout for possible business opportunities. For example, a U.S.-based hotel chain used data on flight cancellations and weather conditions to target people stranded at airports.

American hotel chain employed predictive analytics to identify market opportunity⁰⁹

During the winter of 2013-14, flight cancellations in the U.S. rose to about 3 per cent — leaving 90,000 passengers stranded on airports each day. Using publicly-available data available on flight cancellation and weather conditions, the U.S.-based hotel chain devised a targeted marketing campaign focussed at mobile devices, and pushed it in the geographies most likely to be impacted. As a result, the company realised a strong 10 per cent growth in the business of hotels located nearby major airports, where this strategy was deployed.

In India too OTAs and metasearch players are amongst the leading adopters of Big Data in the industry. As an instance, a major Indian OTA not only employs Big Data analytics, but is also looking at machine learning and AI.

A major Indian OTA employs analytics to create a 360-degree view of the customer¹²

It collects data from a user's personal account, past search and transactions, and the click streams to create user profiles, build cohorts of customers and essentially create a wholesome view of each user — to be able to push targeted discount offers and provide personalised recommendations for flights, hotels, etc. It also monitors all user activity by location, device and other such attributes, and marries it with previously collected data to understand a user's intent of visit — consequently preparing a customised user interface, sending relevant notifications and offers to convert 'lookers' into buyers. Going forward, the company sees machine learning and AI (e.g., chatbots) as the next steps in generating greater value out of data.

Over the past few years, airlines have also started using the myriad kinds of data they collect on a regular basis, around search and booking history, checked-in luggage, departure and arrival timings of customers, in-flight purchases and food preferences, ancillary services purchased and frequent flyer information.¹³ This data helps them provide personalised offers, design targeted marketing campaigns and predict demand to maximise revenues through dynamic pricing. Data collected during flight operations through pilot reports, incident reports, etc., can also be used to improve flight safety.¹³

Globally, TMCs are also increasingly adopting Big Data analytics — primarily driven by the need to improve customer experience, build competitive advantages, to acquire new customers, cross-sell services and to build loyalty.¹⁴ Using analytics, TMCs can also help their corporate clients automate the travel and expense (T&E) management process, which, in turn, would help enhance visibility into expense data, reduce expense report processing costs and improve compliance to corporate travel policies.¹⁵

09. How Big Data And Analytics Are Changing Hotels And The Hospitality Industry, Forbes, 26 January 2016

10. Customer Experience: Marriott's Digital Hospitality, Oracle, September 2014

11. Major global study reveals how big data will transform the hospitality industry, Amadeus, July 2013

12. Piyush Kumar of MakeMyTrip explains Big Data Operations, UpGrad, 17 January 2018

13. How Airlines Are Using Big Data, Digital Doughnut, 9 March 2017

14. The State of Data in Travel Report 2017, EyeForTravel, 2017

15. 2017 Expense Management Trends: Annual T&E Outlook and Benchmarks, Certify, 9 February 2017

Artificial intelligence (AI)

Chatbots, virtual assistants and robots are primarily being employed by industry players to enhance customer experience.¹⁶ AI allows for 24x7 customer interaction and the tools based on it are capable of learning and adapting to different situations (machine learning) to provide personalised, relevant recommendations.

Chatbots — computer programmes that use natural language processing technology to understand the context and communicate verbally or in written — are amongst the most prominent applications of AI in travel.¹⁶ There are several companies, including start-ups, which are engaged in building such chatbots for the travel industry; for instance, home-grown player GoHero.ai builds chatbots that can be integrated with 13 major messaging platforms and does not require downloading any extra mobile application.¹⁷ Thus, industry players are either building their own customised chatbots, or using interfaces powered by established messaging applications.

For example, an Indian metasearch engine launched an AI-based chatbot, which can answer queries related to travel planning and booking, including what to do in a city.¹⁸ The company also plans to introduce a voice assistant, which is expected to help customers plan their travel and make bookings; it would be capable of asking customers their plans and preferences, and making suggestions accordingly. The company uses data from e-mails with complaints, call transcripts, chat histories, etc., to ultimately personalise the results and offerings for customers.¹⁹ The OTAs are also joining the AI bandwagon; for example, a major Indian OTA is planning to launch an application-based tool which would allow customers to perform travel search and booking — while talking in their native languages.²⁰

While traditionally slow to adapt to technological developments, of late, hotels have also been working on leveraging AI to improve customer experience. Some early movers in the hotel industry are even going beyond chatbots and virtual assistants to utilising robots for customer support. For example, Hilton Worldwide has a robot concierge named 'Connie', which can converse and inform guests about hotel's features and amenities, local tourist attractions, and dining recommendations.

Hilton's Connie — AI-based robot concierge²¹

Based on Watson, a cognitive computing technology platform by IBM, Connie is a robot concierge used by Hilton Worldwide; it was piloted at the Hilton McLean in Virginia, U.S., in March 2016. It obtains domain knowledge from Watson and WayBlazer, an AI-driven travel recommendation engine, and uses it to converse with guests. Connie can greet visitors, and assists with visitor requests, provides information to aid travellers in planning their trips, and also helps personalise guest experience. As it interacts with more and more guests, it learns and adapts more to improve recommendations.

During 2017–20, more than half of the airlines globally are planning to invest in major AI programmes or R&D into technologies relying on AI — primarily to improve customer experience, support sales and provide customer support.²² Further, as of 2017, 14 per cent of the airlines globally are using chatbots, but this figure is expected to increase to 68 per cent by 2020.²² Similarly, airports are also planning to significantly increase their use of chatbots for passenger convenience; while only 9 per cent of the global airports were using chatbots in 2017, 42 per cent of them plan to adopt the technology by 2020.²²

VR and AR

VR — the concept of creating computer-generated virtual, three-dimensional (3D) environment through technology (smartphones, VR headsets, VR cameras and camcorders, etc.) — has gained prominence in several applications, especially in gaming and entertainment. However, its adoption is gathering pace in the travel and hospitality space too, as industry players are increasingly looking at leveraging the technology to improve customer experience and marketing.

16. Case study: Machine learning in the hotel industry, GlobalData, July 2017

17. GoHero.ai website, accessed on 31 January 2018

18. Ixigo website, accessed on 31 January 2018

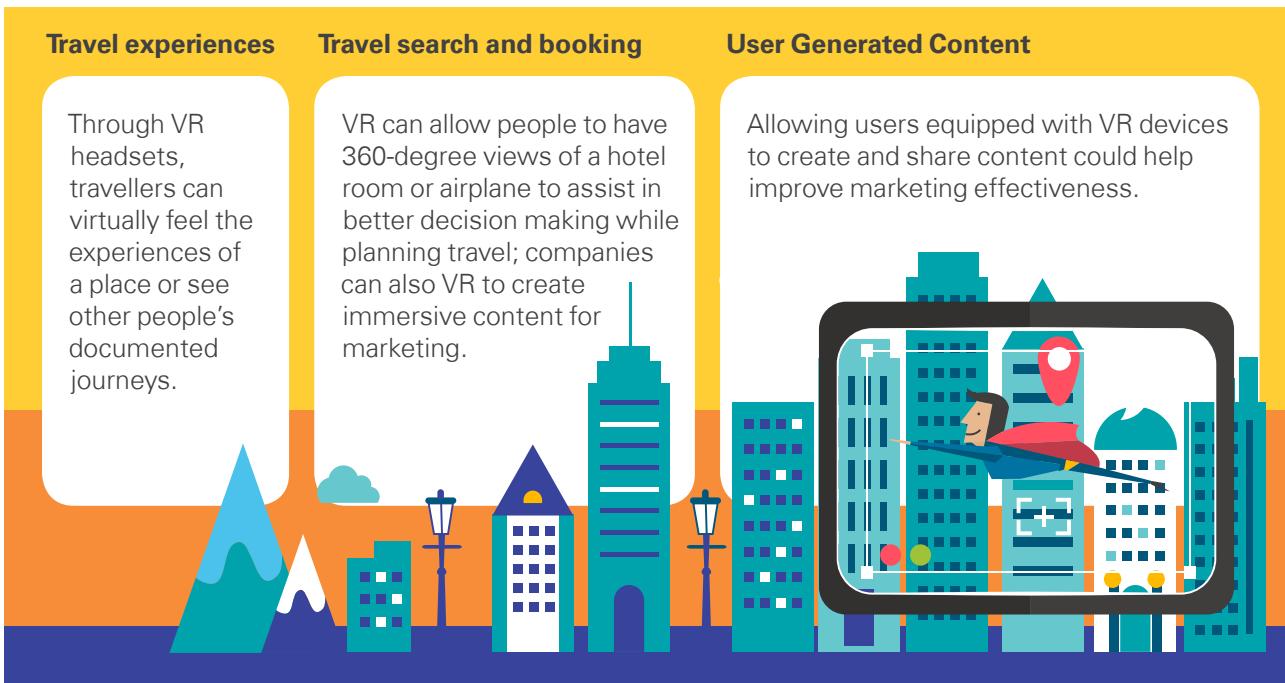
19. Ixigo Looks Beyond Chatbots With 'Tara', Its Voice-Based AI-Powered Assistant, Gadgets 360, 29 November 2017

20. MakeMyTrip to have chatbot enabled booking app ready in a few months' time, Travel World Online, 20 December 2017

21. Hilton and IBM pilot "Connie," the world's first watson-enabled hotel concierge, Hilton, 9 March 2016

22. Airline and airport CIOs embrace artificial intelligence, SITA, 6 September 2017

Key applications of VR in travel and hospitality



Over the past couple of years, several global travel and hospitality players have been experimenting with VR as a tool for the above-mentioned purposes. Another key area of interest for innovative travel companies has been AR, which is essentially an extension of VR. The AR overlays elements of a virtual environment into the user's real environment, enhancing the sight, sound and feel of the virtual environment.²³ For example, Airbnb is working on leveraging VR before a trip and AR during a trip.

Airbnb using VR and AR to enhance travel planning and stay experience for users²³

Airbnb is experimenting with VR and working on ways to incorporate it into users' travel planning experience, wherein they can virtually get inside a house or a city and explore it through 360-degree photos and 3D scans, allowing them to envision the experience that can be expected in real. Moreover, VR could enable travellers to share such experiences — taking travel planning beyond spreadsheets, e-mails and messages.

Similarly, using AR, Airbnb is also looking into ways that can help travellers navigate through daily challenges and make travel more seamless, in addition to making it more immersive. For example, AR could be used to provide users with instant language translations for queries such as how to operate a hotel room's air conditioning or the stories behind things and places one visits.

Are we there yet

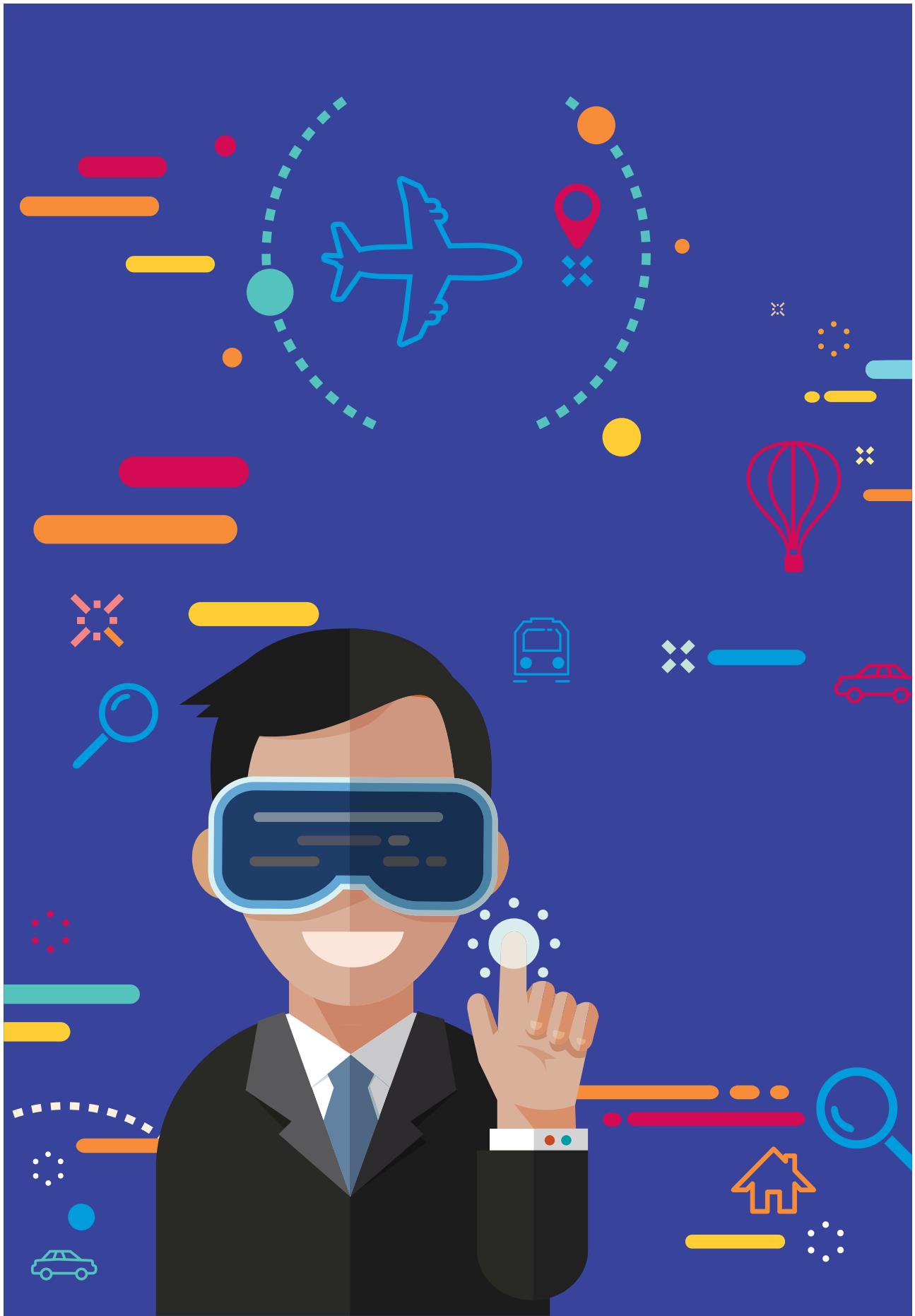
The rate of adoption and application of these technologies by industry players depends entirely on whether it adds any value to the business and its customers. For instance, tech-driven players such as OTAs and metasearch engines typically have higher adoption rates for AI and machine learning to help suggest personalised, relevant options to a customer, which is likely to result in an increased conversion rate. Hotels are also trying out VR/AR, in addition to AI and business intelligence tools, to enhance the overall experience of customers. The TMCs, on the other hand, are going relatively slow on adoption of such technologies, as majority of their corporate clientele may not need high level analytics; in their case, online booking tools (OBTs) would probably be the most likely technology intervention to emerge in the near future.

While we have established that the adoption of these tools, technologies and digital platforms is increasing across the spectrum of travel and hospitality, there is much more to innovation than that. It is essentially about the minute ways in which travel organisations can enhance and add value to customer experience. All players in the sector are aiming to have total control over the experience of a traveller. Thus, minor variations in the ways these tools, technologies and platforms are utilised could differentiate one player from another.

Thus, VR and AR could potentially change the way travellers go through the process of travel planning — enabling them to get closer to the reality of the experience they would have when they actually arrive at their destinations. Currently, people typically pay first and then get to assess the value of their money spent; however, with VR and AR, the scenario would reverse — becoming closer to that of offline shopping.²⁴

23. Developing the Next Realities for Travel, Airbnb Newsroom, 11 December 2017

24. Industry discussions conducted by KPMG in India, 2018



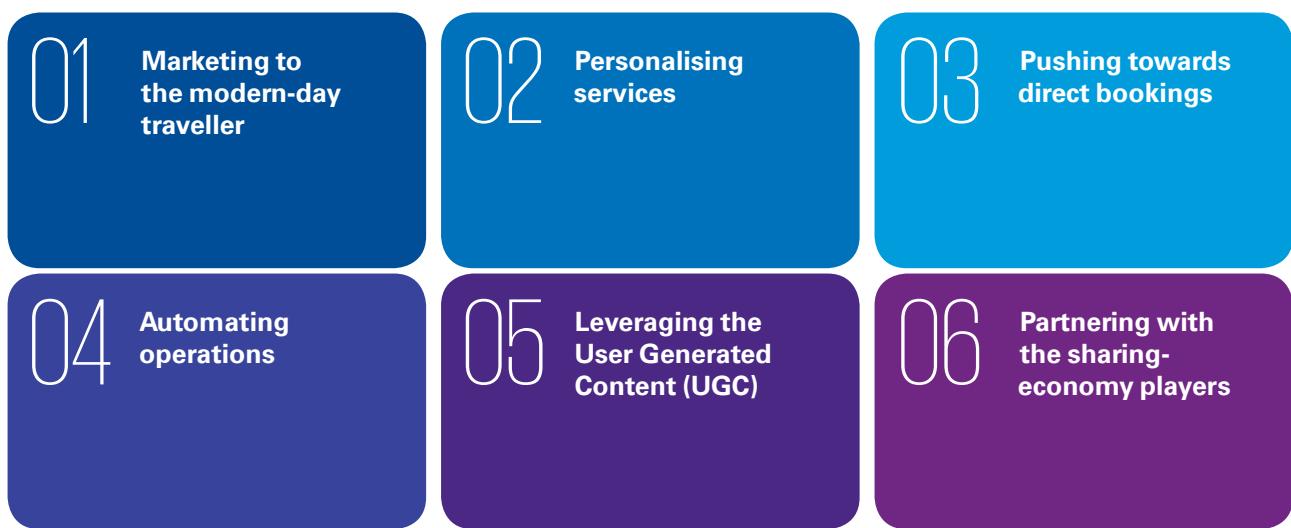
To win the customer – The path travel companies are heading towards



With the tech-friendly travellers at the forefront of all strategic decision making, travel and hospitality companies, globally, are gradually changing the way they conduct business. While some players are leading these changes, others are following to

stay relevant in the market. Essentially, the players are looking to personalise customer experience, promote direct bookings and build loyalty, automate operations, gain a 360-degree view of the customer and approach them in a targeted, effective manner.

Key focus areas for winning the tech-friendly Indian traveller



Marketing to the modern-day traveller

Digital technologies have penetrated deep into the personal spaces of travellers; it is therefore extremely crucial for businesses to be where their customers are now. As most of the travel planning happens online, the marketing investment by travel companies, especially by online players, such as OTAs and metasearch engines, are majorly made towards SEO and SEM, essentially to stay within the consideration set of travellers and re-targeting them with ads with the aim of increasing conversions.⁰¹

Further, owing to the proliferation of Internet and smartphones, travellers (especially millennials) are frequently online and seeking facilities on-the-go. Mobile is the way to go, and travel and hospitality

companies are stressing hard to reach out to their customers through this medium. Moreover, customer reviews have gained a stronghold over the travel search and booking process, which has unfolded an entirely different gamut of marketing — by leveraging UGC. This has, in turn, catapulted the use of actual customers having a loyal follower base as brand ambassadors, a concept called influencer marketing. Social media also plays a critical role in travel marketing, as it provides the ability to build a large base of followers and reach out to them directly and at once, in addition to encouraging people to travel.

01. Industry discussions conducted by KPMG in India, 2018

Major digital marketing strategies^{02, 03}

Invest in SEO and SEM

Search engines continue to bring the majority of traffic, especially for OTAs and metasearch players

Follow a mobile-first approach

With majority of traffic coming from mobile, absence of smartphone applications and mobile-responsive websites can prove to be a serious deterrent for travellers

Leverage social media

While enabling businesses to directly communicate with a defined base of followers, social media serves as a platform that encourages people to travel

Provide personalised content and offers

Big Data analytics is used to gain a 360-degree view of the customer and provide relevant search results and targeted offers to maximise conversion rates

Utilise UGC and influencers

Businesses ought to use UGC as a way to identify issues and build brand value; moreover, having influential users with significant social media following as brand ambassadors can be more effective for the bottomline than a sponsored campaign

To achieve the most out of digital marketing, a focussed approach may be required for reshaping the overall marketing mix. One way to achieve this could be to have a separate digital marketing team that reports directly to the head of revenue generation. Moreover, engaging the digitally-connected travellers requires an omni-channel presence across mobile, social, web as well as in-person. Therefore, traditional marketing still holds its significance in the Indian market.

Influencer marketing

Influencer marketing is another potentially powerful tool available for travel and hospitality brands. With the rise of YouTube and various social media

platforms, coupled with rapid growth in Internet connectivity and smartphones, many common consumers have emerged as 'influencers' in the past few years. These people have a significant base of followers, who seek their opinions on various kinds of products, services and experiences. These opinions are largely perceived to be more objective and true than other marketing tools employed by brands. Thus, organisations are increasingly latching on to the trend by having influencers review their products objectively or share their experiences with the company's products and services. This kind of marketing is considered highly influential in purchase-related decision making process, as 82 per cent of consumers are most likely to follow an influencer's recommendation.⁰⁴

02. 5 Digital Marketing Trends Transforming the Travel Industry, Social Beat, 26 May 2017
 03. KPMG in India's analysis, 2018

04. Special Report – Is 2018 the year of UGC?, The Social Partners, 12 February 2018

Several Indian travel and hospitality players are utilising influencer marketing for promoting hotels / resorts and destinations. For instance, in 2017, Kerala Tourism invited influencers to visit Palakkad and Wayanad, and speak about their experiences on their social media pages and blogs.⁰⁵ Similarly, travel review portal, HolidayIQ and Madhya Pradesh Tourism offered a free trip to 10 influencers as part of their campaign #ChaloMPwithHolidayIQ to promote tourism in the state.⁰⁶ Global hotel chain Marriott International also used this concept, as described below:

Marriott International used influencer marketing to attract millennials^{07, 08}

In 2016, about 28 per cent of the people who booked at Marriott.com comprised millennials. Knowing the potential of this demographic, Marriott launched an influencer marketing campaign using Snapchat in March 2017. It brought onboard four social influencers to create content around its 'Rewards' loyalty programme — documenting their one week stays at four different Marriott properties globally. These influencers created content using Snap's video-capturing 'Spectacles', aimed at providing a first person point-of-view to their millions of followers.



05. 7 influencer marketing campaigns from 2017, Social Samosa, 26 October 2017
 06. 5 brilliant Influencer Marketing Case Studies, Social Samosa, 18 August 2017
 07. 3 Travel & Hospitality Brands who Excel at Influencer Marketing, Spredfast, 16 May 2017
 08. Marriott Rewards Is Giving 4 Influencers Spectacles to Make Buzzy Snapchat Stories, Adweek, 30 March 2017

Personalising services

The concept of personalisation of products and services has always been around, however, with the advent of advanced technology including Big Data analytics and AI, it has become feasible to unravel information that was previously not readily available. Moreover, the travel and tourism sector, globally as well as in India, is converging towards a 'one-stop-shop' construct — with travel search and planning companies launching booking features, and search engines acquiring travel booking players.⁰⁹ This has led to a significant rise in competition, with players looking to differentiate themselves and secure loyalties through better customer service. In case of hotels, the quality of customer service is considered paramount to success, and therefore, personalisation plays all the more a critical role. Hotels are also increasingly using data to send customised offers to customers, in addition to providing a personalised experience at the hotel itself.

The key to achieve personalisation is Big Data analytics; companies are using customer data accumulated through search and booking history, along with other publicly available information to identify patterns and predict customer behaviour. This essentially helps companies make relevant recommendations to customers during the search and planning process, and design customised products/services for them. Further, data can help companies curate specific offers for each customer, and provide support during the trip as well; for example, using a customer's real-time location, an OTA can suggest a customer what to do in the few hours they have before getting on a flight. However, another critical factor influencing the success of personalisation efforts is the response timing; an offer or recommendation made at a time when the customer is actually looking for it is likely to be more effective. Industry players are going about it in multiple ways, as described below:

Personalisation at an OTA, a metasearch engine and a hotel chain¹⁰

OTA	Metasearch engine	Hotel chain
<ul style="list-style-type: none"> • A major Indian OTA uses AI and machine learning to provide the most relevant results for any query, using customer data collected since the company's existence • It also utilises data to employ dynamic discounting basis customer past user behaviour, seasonality, history of search, etc. 	<ul style="list-style-type: none"> • A global metasearch engine applies AI and data to provide the most relevant search results to ensure maximum conversions for partner organisations • The results are also sorted in a personalised way depending on user's budget, time, companions, etc. 	<ul style="list-style-type: none"> • A major Indian hotel chain sends customised offers to their guests based on a criteria set — for example, those who have not visited its properties in a while • From using a single e-mail blast for multiple customers, it now uses data and analytics for hyper segmentation by creating different offers for multiple subsets of customer segments

Thus, personalisation permeates through the various segments of travel and hospitality sector, and is deemed to be the future of customer experience.

09. 2017 Phocus Forward: The Year Ahead in Digital Travel, Phocuswright, 2017

10. Industry discussions conducted by KPMG in India, 2018

Pushing towards direct bookings

Hotel chains in India, as well as globally, are increasingly encouraging travellers to book directly at company-owned platforms including web and mobile applications, primarily to build loyalty with customers and avoid commissions charged by intermediaries such as OTAs. These players are even competing with OTAs on prices and offering better/complimentary services to customers booking directly with the company.¹¹ Furthermore, hotels are aggressively employing SEO, re-targeting ads and social media to attract traffic at their own digital platforms. As a result, for the large hotel chains in India, the share of direct bookings has increased from 50 per cent to 60–65 per cent over the past couple of years.¹¹

Similarly, airlines are also aiming to increase direct bookings, which could potentially help raise their ancillary revenues by up to three times, as compared to that through OTAs.¹² However, OTAs still have a stronghold in the flight booking space, and majority of their gross bookings continue to be typically driven by flights.¹³ Further, the commissions charged by OTAs to airlines for flight bookings are generally lower than that to hotels for accommodation bookings — allowing airlines to continue to let OTAs play their part in the industry.¹³ Nonetheless, going forward, airlines are likely to sharply target direct bookings in India, as is the case in some other countries, including China.¹⁴

Booking directly at Radisson Hotel Group¹²

The Radisson Hotel Group (formerly Carlson Rezidor) is aggressively promoting direct bookings at its own platforms in order to ensure that customers get more value by booking at their own platforms as compared to those of the intermediaries. It provides a 'lowest rate guarantee' and keeps track of various touch points to ensure that it does match the rates offered through any other partners. In addition, the company also invests significantly in SEO and SEM for increased visibility, and creates engaging content around travel planning to keep travellers interested at its platforms. Also, like most hotel chains, loyalty benefits are provided to a user for bookings made through its own platform.



11. Hotels enhance online presence to boost direct bookings, The Economic Times, 11 May 2017
 12. Industry discussions conducted by KPMG in India, 2018

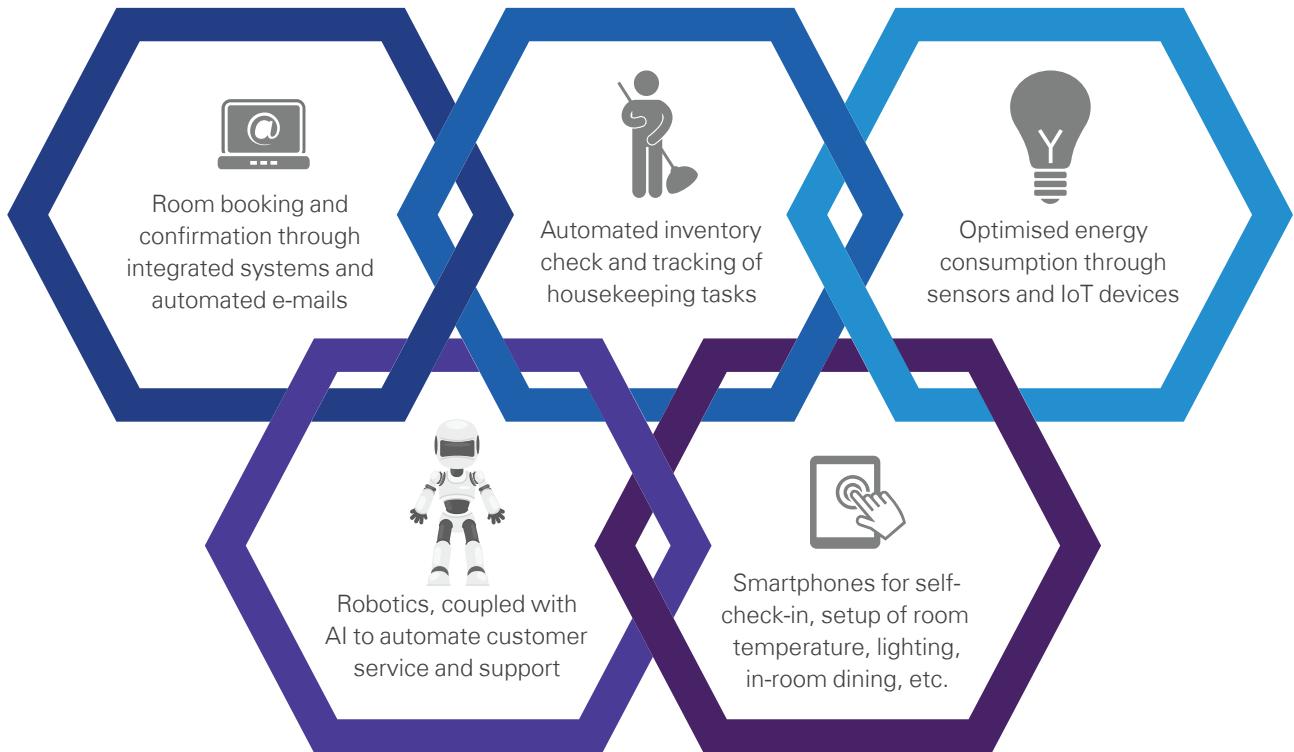
13. KPMG in India's analysis, 2018
 14. Chinese Airlines Get Serious About Direct Bookings, Phocuswright, March 2017

Automating operations

Automation is a broad term, and can have multiple applications across the travel ecosystem — ranging from automatic e-mail confirmation of bookings to having robots for marketing and customer support.

The industry players — in their drive to improve customer service and operational efficiency, and stay ahead of competition through technology — are engaging with several ideas.

Some applications of automation in travel and hospitality



While automation may have several benefits in the travel and hospitality sector, it has its limitations owing to the fact that it is essentially a human-intensive marketplace where customers seek the support and understanding of human beings,

especially in hotels. Moreover, technology is liable to errors; for example, a room's sensors incorrectly assuming that the guest is out of it to shut the lights may just disappoint a customer instead of providing a better experience or long-term savings.

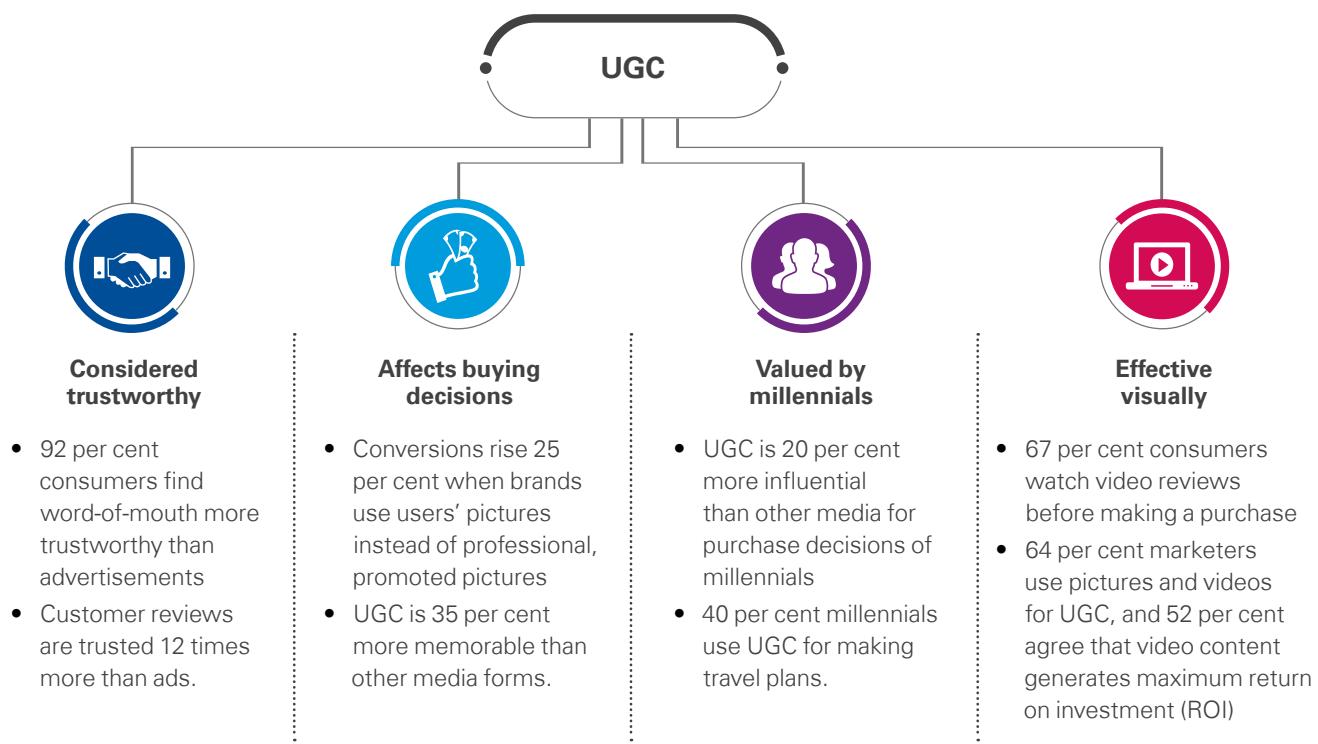
Leveraging User Generated Content (UGC)

In contrast with the owned media, which includes company websites, blogs, social media pages and promotional content over traditional channels, the content generated by consumers is 'earned' media — one that is not controlled (even if partially) by businesses.¹⁵ This peer-generated content is considered highly valuable by consumers while making travel-related decisions, as it typically provides an objective view about a company's products, services and other aspects such as

its customer service quality. In addition, it can essentially act as a continuous reality check for brands, helping identify issues and concerns faced by consumers. This content may be created over social media platforms, or even company-owned/ third-party platforms that allow consumers to write reviews and post pictures/videos of their experience.

The UGC is a major influencer for travel decisions as indicated ahead:

UGC valued by consumers and marketers alike^{16, 17}



To capitalise on UGC, marketers need to carefully evaluate the benefits and risks involved, prior to utilising available channels or building new ones. A well-drafted strategy, considering the legal aspects of using UGC for marketing, could help an organisation attain a stable head start. It has a broad scope in terms of marketing as well as revenue generation; hence, it can be used in multiple ways depending on the travel company type using it. For example, social media platforms can be used

by hotels, airlines and OTAs to build customer engagement, identify and resolve customer complaints, and market products and services to a follower base in a cost-effective manner. In addition, these players can use their websites and mobile applications to provide relevant content to users while allowing them to contribute to it. Contrarily, metasearch players are the primary carriers of UGC, helping customers make informed decisions.

15. How to Leverage User-Generated Content in Your Marketing Strategy, HubSpot, 24 May 2017

16. Millennials Trust User-Generated Content 50% More Than Other Media, Mashable India, 9 April 2014

17. User Generated Content: Everything You Need to Know for Ecommerce, Goodvideo, 23 April 2016

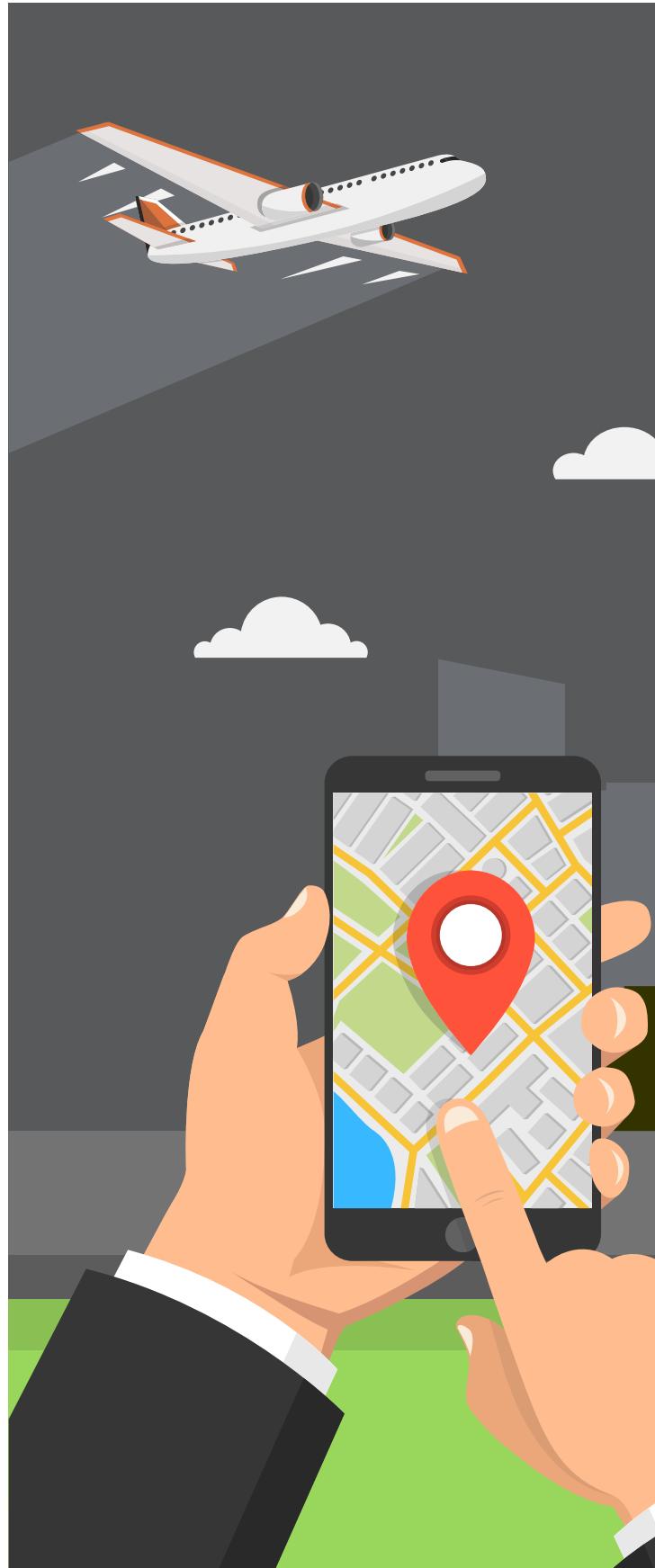
Partnering with the sharing-economy players

Sharing-economy, the peer-to-peer activity of sharing goods and services, has brought about a significant change in the way people access goods and services. It impacts various sectors including education, apparel, financial services and sale/renting of used products. However, in the travel sector, cab transportation and accommodation aggregation are the two major areas where sharing-economy has made the most strides. Some of the major factors driving the sharing-economy are¹⁸:

- Scalability of sharing of goods and services amongst multiple consumers, which makes it economical to use
- It boosts job creation and individual entrepreneurship, which in turn creates more supply to cater to the dormant demand
- Widespread availability of smartphones and gradual improvements in internet connectivity
- Millennials are increasingly trading off ownership for need-based access to goods and services.

Uber, Airbnb, OYO Rooms and other such players have rapidly transformed the way people travel in India, with their technology-driven mobile platforms and convenience of use. While cab aggregators enable last mile connectivity, accommodation aggregators have resulted in the organisation of the largely unorganised hotel industry in India.

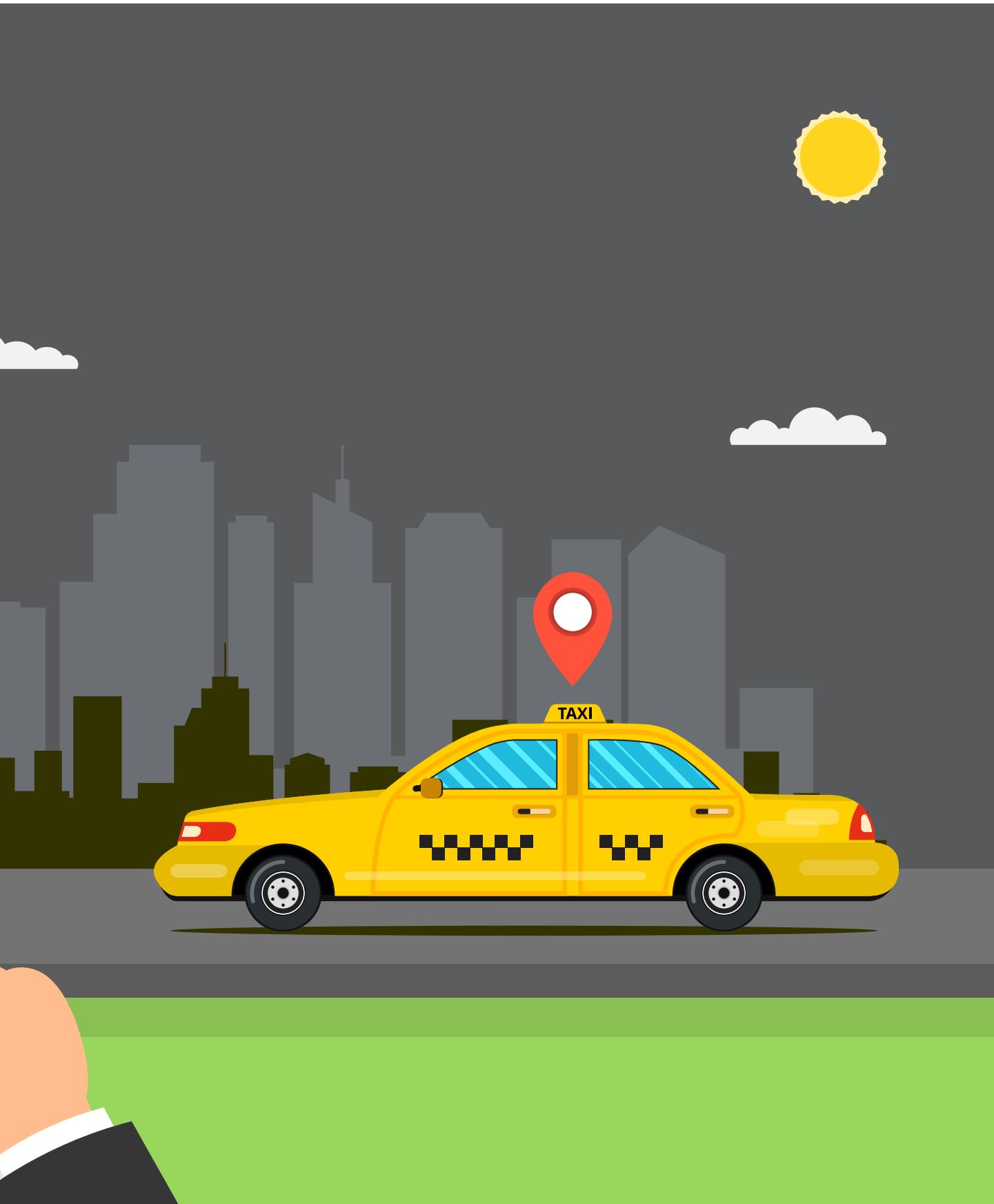
Many travel companies and sharing-economy players have entered into strategic partnerships that enable users to book cabs, hotel rooms, flights, etc. — one along with the other on a single platform. These partnerships are aimed at creating and leveraging synergies across businesses, and increasing loyalty. For instance, in March 2017, Uber India entered into a partnership with an Indian international airline that would allow users booking a flight at the airline's mobile application/website to pre-book an Uber cab at their destination.¹⁹ Similarly, Yatra has also partnered with Uber to integrate its cab booking platform with Yatra's to enable users to book a cab without leaving its mobile application.²⁰ Evidently, the sharing-economy has a substantial role to play in the travel and hospitality sector.



18. The Digi-Smart Indian Business Traveller, KPMG-FCM Travel Solutions, January 2018

19. JET AIRWAYS + UBER = TRAVEL SIMPLIFIED, Uber Blog, 15 March 2017

20. KPMG in India's analysis, 2018



Breweries of travel – Search engines and social media platforms



Google is the largest search engine globally; in 2017, it commanded a market share of 81.7 per cent across searches made on desktop/laptop, mobile and tablets.⁰¹ Considering that, it can be assumed that majority of travel planning and research would take place at Google. Consequently, Google also earns a significant proportion of its ad revenue from the travel sector — estimated at USD14 billion in 2017, and growing at 20 per cent annually.⁰² Further, majority of this revenue comes from the large global online travel agents.⁰²

Apart from the massive earnings generated through advertisements, Google also has multiple travel-specific offerings. Since the launch of Google Flights in 2011, the company has come a long way in reshaping its travel proposition. Its travel-related offerings include Google Flights, Google Hotel Ads, Book on Google (for select hotels and airlines) and Google Trips, in addition to other generic products including Search, Google Maps and Google My Business.

Major travel-related offerings from Google⁰³

Google Flights

Google Flights allows people to search for flights across airline websites as well as OTAs; however, bookings can only be completed on partners' websites.

Google Hotel Ads

Through Hotel Ads, Google showcases partner hotels on Google.com and Google Maps across multiple devices, on a pay per click or confirmed booking basis.

Google Trips

Google Trips helps travellers plan and organise their itinerary, by providing suggestions for places to explore.

Book on Google

Google enables users to directly book a hotel on its platform, including payment; the booking is then processed and facilitated by the partner hotel or OTA.

With a vast and growing range of travel-related offerings for both consumers and businesses, Google maintains a lot of control over the global travel ecosystem. According to Google, the company's core competency is not that of managing travel for people, but that of a data and digital media company — acting as an enabler to travel.⁰⁴

Facebook, on the other hand, holds a significant influence over people's travel decisions. Recommendations from friends, family and acquaintances have always held major value while deciding on travel plans, but Facebook enables this in real time, and at a large scale. The content produced on its platforms plays a strong role in encouraging

people to travel, which is one of the major passion points on social media. Acknowledging its role in the travel space, the company has introduced relevant products and services for travel businesses. Facebook presents a significant opportunity for travel companies to market their products and services using its ability to enable two-way communication with customers.

Similarly, other social media platforms including Twitter, Instagram and Snapchat are also progressively gathering clout in the digital marketing space — with each one having unique features to explore.

01. Search Engine Market Share, NET MARKETSHARE, accessed on 26 February 2018
 02. Google Travel Is Worth \$100 Billion — Even More Than Priceline, Skift, 18 September 2017

03. Google website, accessed on 15 February 2018
 04. Industry discussions conducted by KPMG in India, 2018

Four-way battle — Facebook vs Instagram vs Snapchat vs Twitter

Facebook	Instagram	Snapchat	Twitter
<ul style="list-style-type: none"> It allows people and organisations to share and access immersive content in the form of text, images, videos and animations through Facebook pages, profiles and 'Messenger' Facebook's popularity in the U.S. is declining among 12–17 and 18–24 age groups, while it is rising for older people; Indian scenario could also be similar in the near future⁰⁵ Nonetheless, Facebook has the maximum total users among the four social networks 	<ul style="list-style-type: none"> Instagram allows business profiles to create and post photo ads or 'Stories' with videos for their followers on the platform It also acts as a marketplace for small businesses Instagram is nearly as popular as Snapchat among teens and young adults in the U.S.; in India, it is more popular (among teens) than Facebook, but less than Snapchat 53 per cent of Instagram users fall under the 18–29 age group⁰⁶ 	<ul style="list-style-type: none"> Snapchat offers features such as real-time 'snaps' (pictures or short videos) that self-destruct in 24 hours, 'filters' and 'lenses' to add special effects to posts, and scores that are given to accounts based on their activity on the platform In the U.S., Snapchat has more users than Facebook in the 13–24 age group⁰⁵; in India as well, it is the most popular social network among 13–17 year-olds⁰⁷ 	<ul style="list-style-type: none"> Microblogging site Twitter is primarily about sharing impactful text-based content within 280 characters Businesses mainly use Twitter to promote their accounts, tweets and trends (e.g., campaigns) through 'hashtags', in addition to GIFs, images and live videos along with tweets 35 per cent of Twitter's active users fall in the 18–29 age group⁰⁶; it is also quite popular among the older demographics

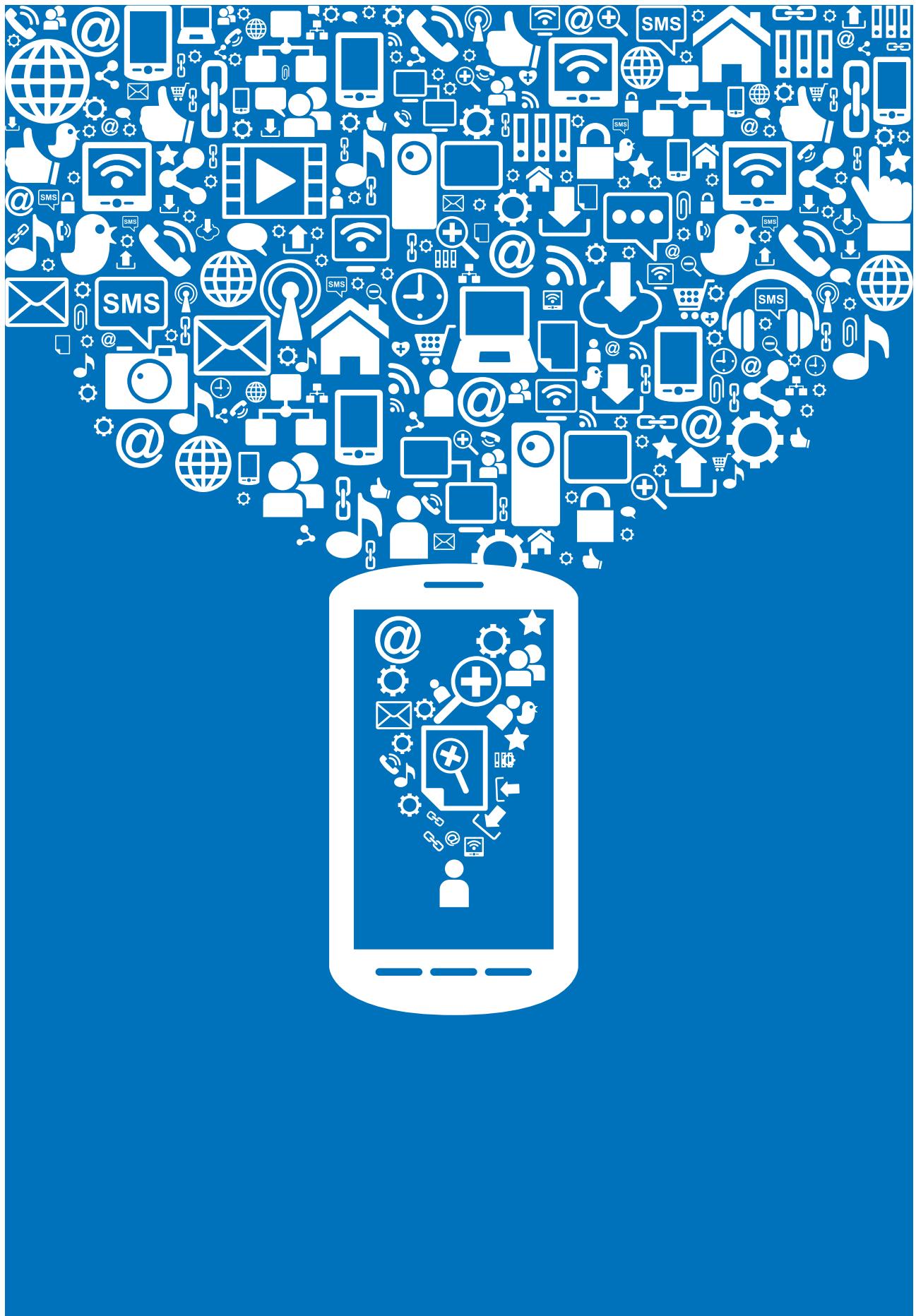
Evidently, these social media platforms capture the interests and time of a wide range of age groups; while some appeal more to the younger generations, others have a stronghold over the older generations. Collectively, however, these platforms can enable travel companies to target a large pool of travel enthusiasts. Moreover, as Google, Facebook

(including Instagram), Snapchat and Twitter encourage people to explore, plan, book and share their experiences, they could be considered as the breweries of travel globally. These players are well-invested in this space, and are likely to continue playing a significant role in shaping the future of travel.

05. Is Facebook becoming a site for older people? Under-25s are ditching the social network in favour of Snapchat while over-55s sign up, *Dailymail*, 12 February 2018

06. Twitter Vs. Facebook Vs. Instagram: Who Is the Target Audience?, *Investopedia*, 2015

07. Facebook vs Instagram, Snapchat vs Whatsapp: why do they need to face off?, *YourStory*, 23 November 2017



Veterans and start-ups – Evolving together amidst blurring lines



The Indian travel and hospitality sector is witnessing several changes, as innovative tools and technologies continue to surface quite rapidly, in addition to the shift in consumer behaviour led by millennials. At one hand, the branded hotel chains have turned around and gone digital over the past few years, and at the other, OTAs and metasearch engines are encroaching each other's lines.

India is also seeing an increase in technology-driven start-ups in the travel space. These start-ups are shaking the industry with their niche offerings — complementing the traditional players in some ways and disrupting them in others.

What are the veterans on to?

As discussed previously, travel and hospitality players are busy experimenting with various tools, technologies and platforms to enhance customer experience, target potential customers effectively and stay relevant in the market. The ultimate goal, for all players, is to have maximum control over the experience of a traveller.⁰¹ And to achieve that, players are looking at being present at as many touch points as possible; for example, OTAs and metasearch engines are increasingly adding new products such as activities (things to do at a destination) and providing more information on travel planning through blogs/articles. Similarly, hotels are also assisting with pre-booking research through their websites and mobile applications.

Essentially, these players are likely to turn into 'travel experience companies' that would cater to multiple aspects of a traveller's journey.⁰¹ Thus, with lines blurring between the so-called travel segments, the sector is likely to consolidate further.

Consolidation in the Indian travel and hospitality sector

Over the past few years, the travel and hospitality sector — global as well as domestic — has witnessed significant consolidation, with players acquiring businesses in both same and complementary lines of businesses. Moreover, several foreign players have acquired companies (or stakes in them) in India, and vice versa. This increase in mergers and acquisitions (M&As) in the travel and hospitality sector is driven by:

Fragmented nature of the sector

The Indian travel and hospitality space is still fairly fragmented with several players operating in each segment, especially in hotels and OTAs — thus leaving a significant scope for consolidation.⁰²

Economies of scale

Being price sensitive, the Indian market is a volumes game, which is why players are strongly focussing on inorganic growth — especially in the OTA space.⁰²

Diversification

OTAs and metasearch engines are increasingly invading each other's boundaries — essentially moving up and down the 'funnel' to come out of being present just across the 'buying' phase or 'planning' phase (respectively) of travel and provide a comprehensive travel experience.⁰³

High level of competition

With several players operating in each segment, the players are trying to weed out competition through M&As; moreover, it can prove to be a quicker method for attaining growth and profitability.⁰⁴

Varied consumer preferences

Consumer preferences vary significantly amongst different segments of travellers, and to appeal to those different segments, players tend to acquire a host of brands that meet the purpose.⁰⁴

01. Industry discussions conducted by KPMG in India, 2018

02. Compulsive Consolidation:Time for Industry to consolidate or perish!, TravelBizMonitor, 11 October 2017

03. Online travel's next journey, Business Line, 18 April 2017

04. Merger Mania in the Travel Industry and How it Will Impact You, HuffPost, 6 December 2017

Thus, inorganic growth has been a key focus area for players operating in the highly competitive travel and hospitality sector. Some of the major deals that took place in the past few years include:

Key recent M&As in the Indian travel and hospitality sector

Target	Acquirer	Description
Air Travel Bureau (ATB)	Yatra	In July 2017, Yatra acquired corporate travel services provider ATB to strengthen its position in the growing business travel space. ⁰⁵
Sarovar Hotels	Louvre Hotels	In January 2017, France-based Louvre Hotels reportedly acquired a majority stake in Sarovar Hotels to gain size and scale in the Indian market. ⁰⁶
Travel Tours Group (TTG)	FCM Travel Solutions (FCM)	In October 2016, FCM announced the acquisition of TTG for enhancing its scale of operations across the areas of MICE, inbound, visa, foreign exchange, and leisure and corporate travel. ⁰⁷
Starwood Hotels & Resorts Worldwide	Marriott International	In September 2016, Marriott completed the global acquisition of Starwood's properties to create the world's largest hotel chain by number of rooms. ⁰⁸

While the sector has been consolidating gradually over the past several years, the momentum could continue in to the near future, as it still presents scope for consolidation and tough competition.

Technology start-ups solving travel pain points

Many travel start-ups have been launched in India over the past few years; these players operate across the entire value chain. For example:

- **Tripoto** provides holiday packages and hotel bookings (through partners), in addition to acting as a platform where travellers can connect, ask questions, and also contribute content (blogs, pictures, videos, etc.); it also offers incentives such as all-expense paid trips to major content contributors
- **Thrillophilia** offers activities, tours, accommodation (stays), niche itineraries, events and rentals (car, bike, camera, gear, etc.)
- **TripHobo** is also a trip planning platform that allows users to publish their itineraries for others to see and follow, apart from facilitating hotel booking through partners and providing information on activities and things to do in a place
- **SeekSherpa** is a mobile platform that connects travellers to locals (sherpas) in a place, and allows people to post their experiences and ask questions to sherpas

- **DigiValet** is a hotel logistics software provider that allows guests to order food, chat with each other while also tracking customer preferences
- **Trip38** is a mobile-only platform for assisting travellers with in-destination planning; users simply need to share their hotel and flight bookings with Trip38, which then provides flight status alerts, reminders, weather information and suggestions for restaurants, local events, etc.
- **Byond.Travel** organises and leads 'small-group' journeys for like-minded people; they create niche trips including biking, women-only, adventure and wildlife tours.

The above-mentioned are just a few examples of start-ups that are innovating and in some cases, disrupting the market by creating their own niches; the Indian travel and hospitality sector comprises many more of such players. This development in the emergence of such players is driven, in part, due to considerable investor interest in the travel technology space. In 2017, the Indian online travel start-ups received a total of INR54 billion (USD796 million) in investor funds.⁰⁹

05. Yatra acquires ATB to expand corporate travel business, Livemint, 24 July 2017

06. Louvre Hotels takes majority stake in Sarovar Hotels, Business Line, 12 January 2017

07. FCM Travel Solutions acquires Travel Tours Group, The Economic Times, 6 October 2016

08. Marriott buys Starwood, becoming world's largest hotel chain, CNBC, 23 September 2016

09. Indian Tech Startup Funding Report 2017: \$13.5 Bn, 885 Deals, 1078 Investors, INC42, 29 January 2018

Ultimately, millennials leading the way

In addition to being the most digitally-savvy travellers globally¹⁰, Indians have also witnessed a drastic shift in the ways they travel and the experiences they seek. The millennial generation is forcing this change, by seeking much more from travel than just glimpses of renowned tourist spots. These travellers demand true and authentic experiences, and are looking to live like locals wherever they go. Travel, for millennials, is more of a lifestyle choice rather than a break from monotony. Furthermore, this traveller base is high on digital; they like to share their experiences over social media and other such platforms — in turn encouraging more people to travel.

Thus, the travel and hospitality players are finding themselves in a race to appease this traveller segment. The large organisations amongst OTAs, metasearch players and hotels are watching millennials closely, and adapting to their needs and preferences rapidly, while start-ups are finding niche white spaces to cater as they find targeting a single type of consumer to be a better business proposition.¹¹ The large players are religiously exploring and testing the potential of tools, technologies and digital platforms including social media/UGC, chatbots, virtual assistants and business intelligence tools sitting on top of Big Data. However, the digital travel start-ups scenario in India is yet to mature, with several opportunities to be realised.¹²



10. The Indian Digital Traveller Research, Travelport, November 2017

11. What is driving the sudden boom in travel start-ups in India?, YourStory, 27 February 2015

12. Evolution & Growth of Travel Startups in India, TravelBizmonitor, 22 September 2017

Innovation in travel – Obstacles to overcome



As established previously, the players operating in this sector are innovating in various aspects; for example:

- Hotels are working on enabling contactless check-in and check-out using RFID and facial recognition technologies, in addition to enhancement of in-room features such as mobile video casting on TV; things like having a customer virtually experience a property through their avatar in a three-dimensional environment are also in consideration⁰¹
- OTAs and metasearch engines are also working at enabling 360-degree views for hotel/homestay bookings, and using data, AI and machine learning — to use voice-enabled chatbots that can eliminate the need for typing in queries, provide relevant suggestions and search results, and travel planning tools that allow users to check the projected cost of a hotel room/flight in the future⁰¹
- Globally, the aviation industry is also trying several interesting concepts such as wireless streaming of in-flight entertainment content, fingerprint- and facial recognition-based check-in and unmanned airplanes⁰²
- TMCs are also increasingly pushing for technology-driven tools and services including OBTs, chatbots/travel assistants, sharing-economy, travel analytics, blockchain, VR, wearables and digital wallets.⁰³

While these developments broadly arise as outcomes to usage of various tools and technologies discussed previously, innovation is not limited to that; it is also about how a business does the small things, yet significant, with widely applied processes and practices. For instance, each player would use similar data, AI and machine learning to cull out different insights, results and recommendations, thus differentiating itself from others. In essence, the fundamentals remain the same — enhancing customer experience and building loyalty.

Key challenges to overcome

While implementing the above-mentioned innovative features and processes, the players face certain challenges that can inhibit their ability to successfully go through with an initiative. These challenges could arise from the infrastructural limitations of a country/region, as well as business or industry specific issues.

Key inhibitors to innovation in travel⁰¹



Lack of enabling infrastructure

Digitisation of travel is highly dependent on factors such as high-speed internet connectivity, seamlessness of digital payment solutions and a robust regulatory and policy framework from the governing authorities. While positive strides are being made in each of these aspects, India still considerably lags behind most nations globally.

Internet connectivity

In January 2018 Internet speed testing service Ookla ranked India at 112 out of 125 countries on mobile internet speed (download), and at 67 out of 128 countries on fixed broadband speed (download).⁰⁴ Further, although India has the second-highest number of internet users globally, the overall internet penetration in India currently stands at a lowly 34.1 per cent.⁰⁵ High-speed and reliable internet connectivity is critical to easy facilitation of bookings and payments. Moreover, 53 per cent of visits are abandoned if a mobile site takes longer than three seconds to load⁰⁶, while India averages at just over five seconds in this aspect, as of 4Q2016.⁰⁷

01. Industry discussions conducted by KPMG in India, 2018

02. 6 ways the future of flying will be amazing, Business Insider, 11 October 2017

03. The Digi-Smart Indian Business Traveller, KPMG-FCM Travel Solutions, January 2018

04. Speedtest by Ookla website, accessed on 28 February 2018

05. Top 20 Countries With The Highest Number Of Internet Users, Internet World Stats, accessed on 28 February 2018

06. Largest Newspapers Worldwide Hurt by Slow Loading Time on Mobile Devices, StatusCake, 10 July 2017

07. akamai's [state of the internet], Q4 2016 Report, March 2017

Furthermore, India suffers from a significant digital divide; while metros and major cities are well-connected to internet and telecommunication networks, there are approximately 55,000 villages that are deprived of mobile connectivity.⁰⁸

However, internet speed in India is growing rapidly; during January–March 2017, the average connection speed in India grew 87 per cent y-o-y — second in growth rate only to Vietnam.⁰⁹

Digital payments

The post-demonetisation period highlighted various shortcomings in India's digital infrastructure. The number of POS terminals during November 2016 was 1.5 million, while the country was in need of 3.5 million POS terminals.¹⁰ However, this number doubled to three million in one year — catalysed by shortage of cash.¹¹ Also, as the demonetised cash has been reinfused back in the Indian economy, cashless transactions account for just 5 per cent share in total transactions across the country.¹² Additionally, just 16 per cent of the rural users currently access internet for monetary transactions, in contrast with 44 per cent in urban areas.¹³

Regulatory and policy framework

The Indian government has launched several projects under the umbrella of the 'Digital India' initiative launched in 2015, and is working on enhancing the policy and regulatory framework to help transform India into a digital economy. However, these initiatives — in the three areas of availability of digital infrastructure, governance and services on demand, and digital empowerment of citizens — are only in their nascent stages and much of the progress is yet to be done in this aspect. Some challenges that need to be addressed for its successful implementation include:

- The availability (and quality) of electronic government services is still low as compared to developed nations¹⁴
- In some cases, requests for Proposal (RFPs) floated by the government for digital infrastructure are not picked up by private players due to doubts over their commercial viability¹⁵
- Lack of clarity on policies due to their legacy frameworks also causes altercations between businesses and the government.¹⁶

Thus, infrastructural challenges are the paramount issues that need to be addressed to enable India to become a digital economy, facilitating growth for not just travel but several other sectors.

Disintegrated payments

Several major players in the Indian travel and hospitality sector cite payments as one of the key pressing concerns.¹⁶ The issues concerning payments include lack of integration between the payment systems of banks, mobile wallets and merchants, high cost of digital transactions and lack of facilitation of foreign currency payments. A seamless and transparent payment ecosystem is crucial for increased adoption of digital payments.¹⁶ Furthermore, there are government departments and agencies, especially in rural areas, that are not equipped to receive digital payments — whether online or POS.¹⁷ This inhibits the ability of a business to safely breeze through payments mandated or applied for government services.

While the government is aggressively encouraging digital payments, it needs to complement that with robust policies that help integrate the financial ecosystem. At present, travel and hospitality players have to maintain a large number of individual partnerships for facilitating online payments¹⁶; helping reduce the number of such contracts would be a step towards seamless payments. Businesses are also looking at bypassing the credit / debit card payment systems through the Unified Payments Interface (UPI), which could help avoid merchant commissions.¹⁶ Further, development of contactless payments solutions could also help make travel more convenient.

08. Digital India: 5 Major Problems That Government Needs to Address Quick, News18, 12 January 2017
09. akamai's [state of the internet], Q1 2017 Report, May 2017

10. Demonetisation: India needs to ramp up its fintech infrastructure to realise a digital economy, Firstpost, 22 December 2016

11. PoS terminals double in numbers post demonetisation, Business Line, 31 January 2018

12. A year after note ban, cashless economy is still a distant dream, The Economic Times, 7 November 2017

13. Only 16% of rural users access Internet for digital payments: report, Livemint, 20 February 2018

14. Digital India – An Overview, Morung Express, 8 February 2016

15. Digital India: 5 Major Problems That Government Needs to Address Quick, News18, 12 January 2017

16. Industry discussions conducted by KPMG in India, 2018

17. Last mile issues in digitisation drive, Business Line, 17 April 2017

Threats to data security and privacy

Digitisation inherently brings along the risk to data security and privacy. The travel and hospitality sector deals with large amount of data comprising personal information of travellers, financial transactions and customer behaviour. In order to protect this data, businesses and the government ought to take stringent security measures that can prevent cyber threats including phishing attacks and espionage. The financial data, being more critical in nature, would require a strong security network — especially with the growth of mobile wallets, UPI, internet banking and other such digital initiatives being taken by the government.

Hotels have been targets of cyber-attacks multiple times; for instance, in 2017, a Russian hacking group used hotel Wi-Fi networks to target personal information of travellers across some countries in Europe and the Middle East.¹⁸ Similarly, in 2016, cyber criminals hacked into the network of a New Delhi-based luxury hotel to steal loyalty points.¹⁹ Thus, India needs to further enhance its cyber security infrastructure to facilitate smooth digitisation across the country.



18. Russian hacking group is targeting hospitality sector across the globe; Indian hotels under threat, Firstpost, 11 August 2017

19. Data Security: No Room for Complacency, HospitalityBizIndia, 7 February 2017

Digitisation of travel – Government's initiatives and learnings from leading countries

Digital technology allows regions to offer innovative tools to tourists, and this is made easier if a region has a high-speed broadband telecommunications network. After the development of e-tourism via the web, m-tourism can be used for the convenience of tourists, who now access mobile location-based applications and content via smartphones or tablets.

The new technologies that are used to enhance visitors' experiences at tourist sites include audio guides, virtual and 3D tours, AR tours, mobile phone e-guides, Near Field Communication (NFC) or mobile contactless technology and interactive multimedia kiosks.

Key initiatives taken by the Indian government

Keeping the above-mentioned advancements in consideration, the Indian government has taken a few steps towards enabling digital tourism in India.

Government initiatives towards digitisation of travel⁰¹



01. Digital India to transform tourism, Daily Pioneer, accessed on 10 February 2018

Multilingual helpline

To ease the experience of foreigners in India, the government has launched the 1363 helpline in 12 languages — with English and a mix of other languages prominently spoken by tourists.

E-ticketing

It has been initiated for 116 monuments, eliminating the need to stand in queues; through this, mobile accessible barcodes would be used for entering monuments/museums instead of paper tickets.

Ministry website

It is a single-window delivery platform that collates various kinds of tourist information on India; it aims to be a one-stop shop collection of tourist information, and is an interactive window detailing how to reach hotels, and get details on natural sights such as mountains, deserts and wildlife.

Database for cultural performers

The government has launched a scheme for folk artists and performers to give them a platform to showcase their talents, and plans to create a database, and hold competitions to encourage their talent; this could help boost India's heritage tourism by enabling travellers to seek information on cultural performers/performances easily.

E-tourist visa

E-visas have been witnessing rapid growth, with nearly 1.08 million tourists arriving through it in 2016 — a staggering 142.5 per cent y-o-y growth.⁰²

Smart Cities Mission

The government has announced a list of select 100 cities where technological amenities would be provided in a phased manner.

Such digital initiatives undertaken by the government are expected to enhance the travel experience for both domestic and international travellers. In addition, driving digital transition is not a one-off exercise and would need sustained effort. As digital adoption spreads across the country, India would increasingly become appealing to tech-friendly travellers.

India has great potential in this area and needs to strengthen infrastructure and train resources. Many states in India have welcomed this change, and

small steps are being taken towards integrating technology into state administrations. For instance, in September 2016, the Government of Gujarat and Airbnb have signed a Memorandum of Understanding (MoU) to enable booking of homestays on the international platform.⁰³

Government of Gujarat and Airbnb ink an MoU to promote homestays

In September 2016, Airbnb signed an MoU with the Gujarat government, under which both parties would set up a mutual and close system of cooperation to boost tourism and create positive travel experiences for both domestic and international visitors in Gujarat. In 2015, Airbnb witnessed strong tourism growth in the state and thus, partnered with the government to bring homestays and travel options in Gujarat onto its platform.

To ensure safety and smooth travel experience of users, Airbnb held sensitisation and training sessions on 'hosting standards and best practices' for current or potential hosts of homestay facilities and unique properties in Gujarat and provided information to its users on less-explored but high potential destinations nearby. This collaboration would give international and domestic travellers access to the varied homestay options available across the state.⁰⁴

While the Indian government is working towards creating a digital ecosystem that would promote e-tourism in India, there is much that it could learn from the world's leading tourist destinations such as France.

02. Market Research and Statistics, Ministry of Tourism, accessed on 22 February 2018

03. Airbnb signs MoU with the Government of Gujarat, The Economic Times, 23 September 2016

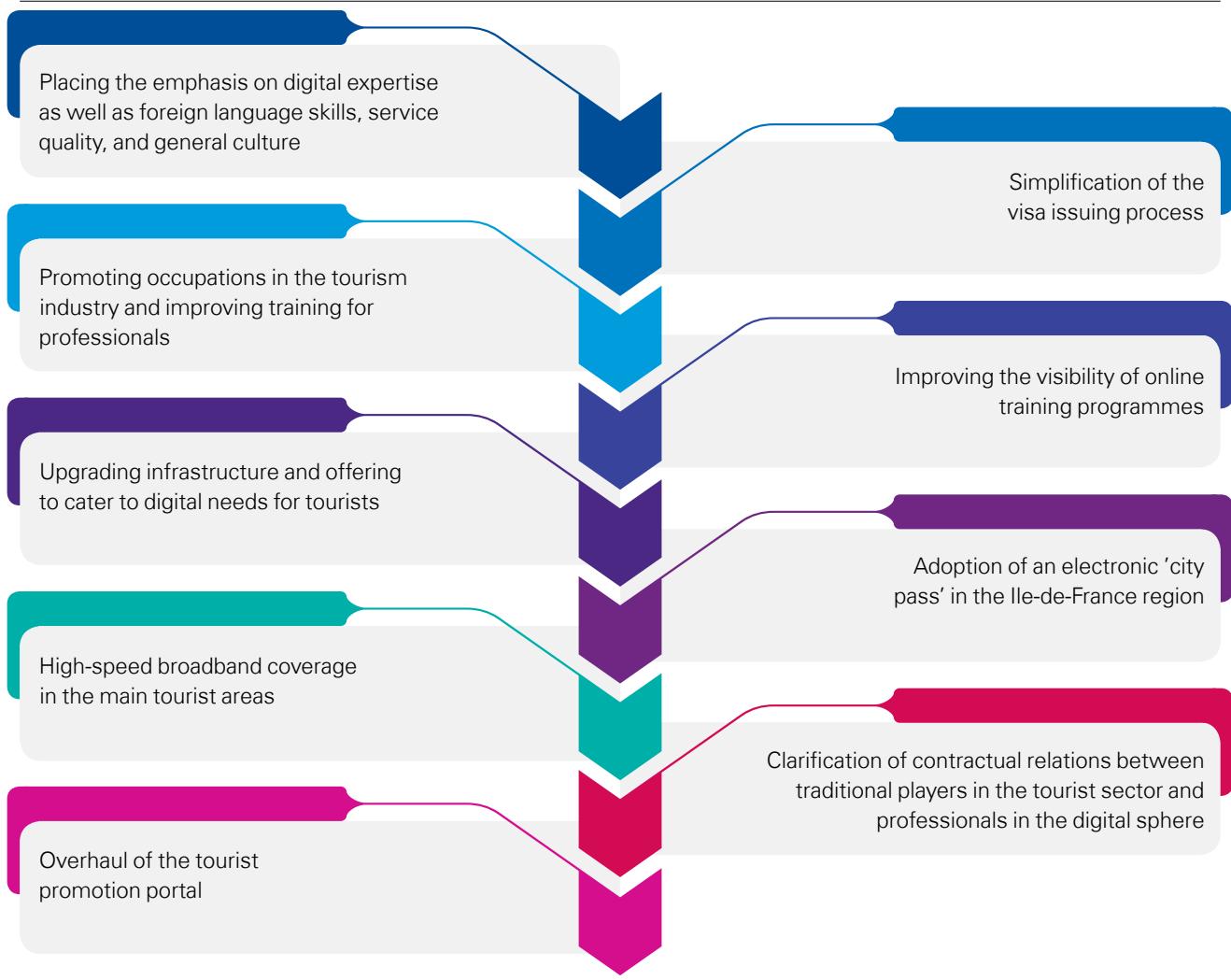
04. Airbnb signs MoU with government of Gujarat, Economic Times, September 2016

France's regulatory framework enabling e-tourism

Accounting for over 2 million jobs and 7 per cent of the country's GDP, tourism is a strategic sector for France.⁰⁵ It is the world's leading tourist destination with 82.6 million people arriving in 2016.⁰⁶ The country aims to reach 100 million tourists by 2020⁰⁵, and the Conseil de Promotion du Tourisme (France's tourism promotion council) is responsible for outlining a strategy for achieving this goal. One of the key fields that the tourism council has worked on is the digital sphere.

Another key focus area for France's tourism promotion council is improving reception facilities. This comprises ensuring good travel preparation such as facilitating the acquisition of visas to France and enriching the French tourist content of the global media. To ensure the same, Government of France has introduced a national tourism promotion strategy which includes the following steps.⁰⁷

France's National Tourism Promotion Strategy



05. A tourism development strategy, Gouvernement.fr, 12 June 2015

06. Direction Generale Des Entreprises and Banque de France, June 2017

07. A tourism development strategy, Government of France, 2015

E-tourism in France is growing fast, with an increase of 8 per cent y-o-y in 2017⁰⁸, resolving challenges for travellers who are increasingly time oriented and more mobile than in the previous years. A stable public telecommunications infrastructure, together with digital tourism projects, has helped regions to offer richer experiences to people visiting their area, such as:⁰⁹

Fibre optic connections for seven ski resorts in the Hautes-Pyrénées

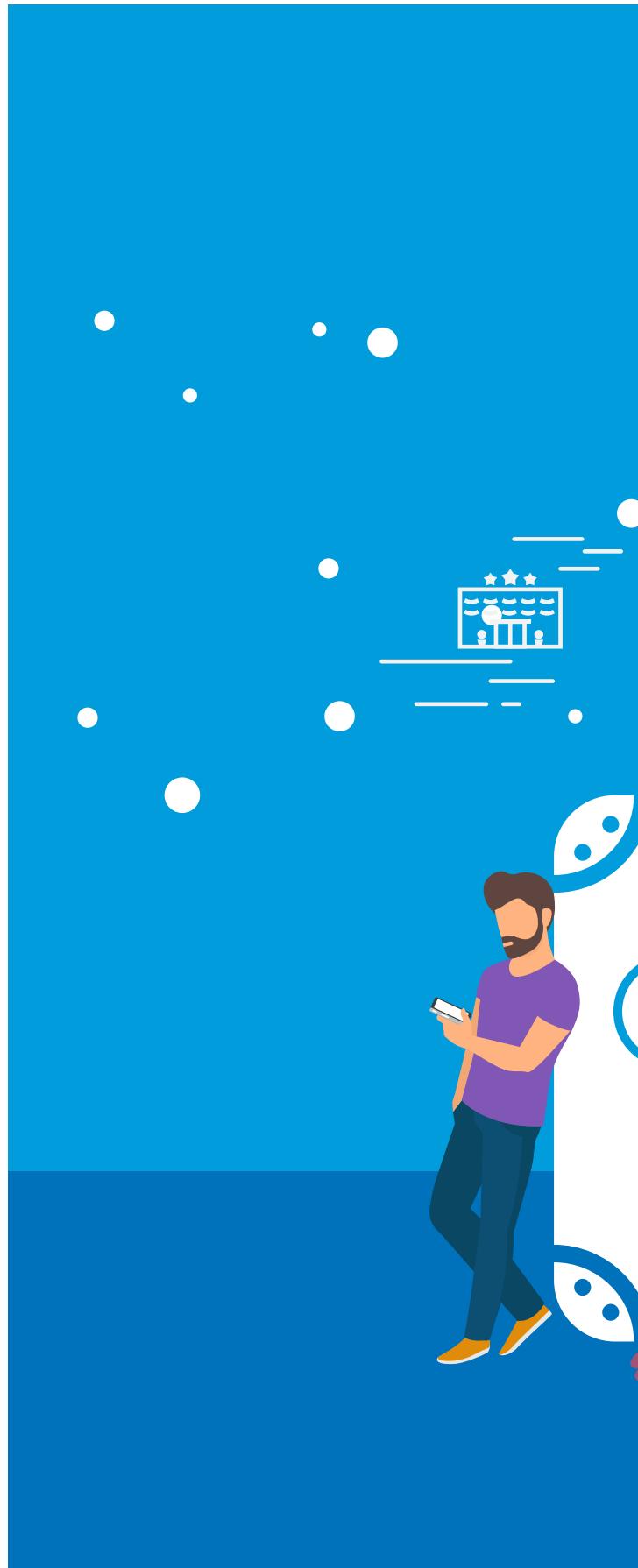
Users at these remote ski resorts can access internet speeds similar to those in urban and well connected areas, with guaranteed service availability and secure connections; to ensure this, additional network infrastructure of almost 100km has been laid to interconnect these resorts using fibre optic or microwave links.

The Canal du Nivernais Kiosks

From Auxerre to Decize, tourists can now benefit from round-the-clock access to a host of useful and location-based information through multimedia kiosks and Wi-Fi spots, superfast broadband network services, a culture-dedicated website (m.canal), and a mobile application which can be accessed via QR codes along the canal.

Superfast broadband for the Isle of Vassivière Axione

The region of Limousin has connected its major tourist spot, the Isle of Vassivière, to internet via Wi-Fi spots and fibre optic links, thereby enabling the tourism industry (including hotels, restaurants, the tourist office, campsites and the harbour) and visitors alike to benefit from internet connectivity.



08. E-TOURISM IN FRANCE STEADILY GROWING, Tourism Review News, 9 January 2017
 09. En Tourisme numérique- Success Story, Axione France, 2015



What is the way forward

Innovations in the travel and hospitality sector have helped increase operational efficiency and create more value for customers. As a result, players operating in the sector have improved the quality of their service and now offer a more customised experience. However, these players have been relatively slower in adopting new technologies as compared to other industries and sectors.⁰¹

Innovation typically takes place either at the frontline where customers can observe the changes, or at the back-end where the changes happening are not readily visible to customers.⁰² For instance, robots greeting guests at the lobby, and guests using their own mobile devices to make plans for dinner or other services are frontline innovations. Contrarily, enhancement of guest experience through innovations in the application of Customer Relationship Management (CRM) and customer intelligence tools are not directly visible to customers.

The tourism industry is expected to see more of innovations such as AR city tours, smart tourism, robots for security and housekeeping, smart luggage tracking, RFID/facial recognition technology to open hotel doors, driverless/self-parking cars, air taxis etc., in the coming years.⁰¹

Way forward for the government

The next leg of digital progression in India is expected to be driven by frugal innovation, open source software, local language computing, and scalable enterprise solutions for smart cities or villages — all of which could potentially lead to a fresh wave of innovative tourism in India.^{03, 04}

To achieve digitisation on a country-wide scale, the government could focus on boosting service adoption by ensuring that public services are available online. Easier identification through Aadhaar, improved access to banking infrastructure

and POS machines, and availability of internet connectivity and telecommunication networks are some key steps for enabling a seamless experience for travellers, especially foreign tourists.⁰⁵

In addition, there is a need for improvement in policies around mobile banking to facilitate faster payment services to achieve the following objectives:

- Enhance the options for customer registration for mobile banking services
- Enable wider access to mobile banking services in multiple languages for non-smartphone users, and
- Encourage innovative mobile-based payment solutions.

Connecting all the banks with mobile banking platforms and exploring the feasibility of using encrypted Short Message Service (SMS) based funds transfer on a mobile application is an ongoing step that would be useful in the future. This could increase the ease of transactions for both local and foreign tourists, likely leading to a better experience.⁰⁵



01. Industry discussions conducted by KPMG in India, 2018

02. Innovation in tourism and hospitality, Journal of tourism and hospitality, August 2015

03. Digital evolution in India, Business Today, August 2017

04. Regulatory Framework for digital economy, GSMA report 2016,

05. Financial inclusion in India-An assessment, Reserve Bank of India documents, accessed on 28 February 2018

Other key focus areas for the government⁰⁶

Public-Private Partnerships



In order to truly foster innovation and share knowledge and resources, technology companies could look at PPPs to create a truly 'digital economy'. These PPP models could aim to encourage better integration of automation, data and new technologies into the economy. Moreover, regulations could be made more conducive to PPP models to enable sustainable development of digital infrastructure.

Improving IT literacy



Educating the general population on the fundamentals of information technology (IT) is extremely necessary to foster innovation and take steps towards digitisation. Introducing skills required to thrive in a digital economy at early levels, specifically at schools, is essential. Digital training could be made readily available for the current workforce. In 2016, the Reserve bank of India (RBI) held an awareness workshop for use of blockchain technology in the banking industry. Such steps need to be taken more frequently and on a larger scale, in order to achieve widespread digital literacy in India.⁰⁷

Data security



Digital medium is considered prone to phishing attacks in commercial and financial transactions and this needs to be addressed through advanced fintech technologies. To counter this, the Indian government could look at implementing its own General Data Protection Regulation (GDPR), following the recent example of the U.K., which outlines 12 key steps to ensure data privacy, compliance and safety of users and companies. These steps include instating data protection officers and putting systems in place to detect, report and investigate data breaches.⁰⁸

Various sectors including tourism, education, healthcare and infrastructure benefit from being associated with a rising digital economy. Therefore, policymakers can invest in digitisation by providing training programmes and education incentives. In addition, they can educate public about the available digital services.

06. Regulatory Framework for digital economy, GMSA report 2016

07. Blockchain technology in India, Assocham India report, April 2017

08. Preparing for GDPR, Information Commissioner's office, United Kingdom, accessed on 16 February 2018

Way forward for businesses

Branded hotel chains are expected to continue investing in digital technologies and platforms to achieve their goals of building loyalty and personalising customer experience. Further, brick and mortar would always need to be strong for hotels, so these players are expected to make inroads into tier-II and tier-III cities to add new destinations. These players would continue to enhance pre-booking, stay and post-booking experience of a customer, and direct bookings and mobile strategies would remain in focus over the foreseeable future.

Loyalty would take precedence against customer acquisition, not just for hotels and airlines, but also OTAs. Heavy discounting at OTAs have caused them major losses in the past, and this practice is expected to die a slow death over the foreseeable future. However, the game in India is still mostly about the pricing, so offers would remain to be a tactic for prompting customers to purchase. For metasearch, activities (selling/booking of things to do at a destination) is touted to be a major area of development. Unlike the case of hotels/homestays and flight bookings, where they only act as redirecting agents to OTAs, they would act as the merchants for activities — fetching higher and direct commissions. Going forward, activities could emerge as significant driver of the travel sector. Essentially, OTAs and metasearch players are likely headed towards becoming more comprehensive 'travel experience companies'.⁰⁹

Airlines are also expected to increase their focus on direct bookings to raise profitability through ancillary revenues. While their product is more of a commodity, application of data analytics / business intelligence tools is likely to help improve personalisation levels, and thus, customer experience and loyalty.

The Indian travel and hospitality sector is also a key focus area for enablers such as Google and Facebook. Google, being the custodian of most of the queries and searches done globally, is playing its role in the form of a knowledge partner, as well as a support system for core business activities.⁰⁹ It helps measure and improve the impact of efforts made around marketing, mobile applications on Android platform, website performance, etc.⁰⁹ Similarly, Facebook is enabling interactions between businesses (small and large alike) and travellers through its platform, while trying to make them personalised and meaningful. These two, and other social media platforms shall continue to improve their roles as enablers to travel.

Essentially, the Indian travel and hospitality sector is likely to witness more of innovation and technology penetration in the coming years. The ecosystem is breeding well, considering the efforts of all the stakeholders including the government as well the private participants. However, what is likely to remain constant, is the change brought forth by players across the value chain — including technology providers as well as its users from the travel and hospitality sector. Thus, India is also ultimately moving towards becoming a digitally-enabled tourist destination.

⁰⁹. Industry discussions conducted by KPMG in India, 2018

About KPMG in India

KPMG in India, a professional services firm, is the Indian member firm of KPMG International and was established in September 1993. Our professionals leverage the global network of firms, providing detailed knowledge of local laws, regulations, markets and competition. KPMG has offices across India in Delhi, Chandigarh, Ahmedabad, Mumbai, Pune, Chennai, Bengaluru, Kochi, Hyderabad and Kolkata. We strive to provide rapid, performance-based, industry-focussed and technology-enabled services, which reflect a shared knowledge of global and local industries and our experience of the Indian business environment.

KPMG International

KPMG is a global network of professional services firms providing Audit, Tax and Advisory services. We operate in 154 countries and territories and have 200,000 people working in member firms around the world. The independent member firms of the KPMG network are affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. Each KPMG firm is a legally distinct and separate entity and describes itself as such.

The KPMG Audit practice endeavours to provide robust and risk-based audit services that address member firms' clients' strategic priorities and business processes.

KPMG's Tax services are designed to reflect the unique needs and objectives of each client, whether firms are dealing with the tax aspects of a cross-border acquisition or developing and helping to implement a global transfer pricing strategy. In practical terms that means, KPMG firms work with their clients to assist them in achieving effective tax compliance and managing tax risks, while helping to control costs.

KPMG Advisory professionals provide advice and assistance to help enable companies, intermediaries and public sector bodies to mitigate risk, improve performance, and create value. KPMG firms provide a wide range of Risk Consulting, Management Consulting and Deal Advisory services that can help their clients respond to immediate needs as well as put in place the strategies for the longer term.

About FICCI

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves

its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 250,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.

Glossary

Abbreviation	Expansion	Abbreviation	Expansion
3D	Three Dimensional	QR	Quick Response
4G	Fourth generation telecom network	R&D	Research and Development
5G	Fifth generation telecom network	RBI	Reserve Bank of India
AI	Artificial Intelligence	RFID	Radio Frequency Identification
APAC	Asia-Pacific	RFP	Request for Proposal
AR	Augmented Reality	SEM	Search Engine Marketing
ATM	Automated Teller Machine	SEO	Search Engine Optimisation
BSNL	Bharat Sanchar Nigam Limited	SIM	Subscriber Identity Module
CAGR	Compound Average Growth Rate	SME	Small and Medium Enterprises
CRM	Customer Relationship Management	SMS	Short Message Service
DTV	Domestic Tourist Visits	TMC	Travel Management Company
FEE	Foreign Exchange Earnings	TV	Television
FTA	Foreign Tourist Arrivals	UGC	User Generated Content
FY	Financial Year	U.K.	United Kingdom
GBTA	Global Business Travel Association	UPI	Unified Payments Interface
GDP	Gross Domestic Product	U.S.	United States of America
GDPR	General Data Protection Regulation	USD	United States Dollar
GDS	Global Distribution System	USSD	Unstructured Supplementary Service Data
GIF	Graphics Interchange Format	VR	Virtual Reality
GSM	Global System for Mobile	WTTC	World Travel & Tourism Council
GST	Goods and Services Tax		
ID	Identification		
INR	Indian Rupee		
IoT	Internet of Things		
MICE	Meetings, Incentives, Conferences and Events		
MoU	Memorandum of Understanding		
OBT	Online Booking Tool		
OTA	Online Travel Agent		
PoS	Point of Sale		
PPP	Public Private Partnership		

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