Propelling India towards global leadership in e-commerce

Executive Summary

October 2018

NASSCOM®

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www.pwc.in
1. The Indian e-commerce market will exceed 100 billion USD by 2022, with online financial services set to grow the fastest.

2. Growth is expected from the next 100 million users with starkly different demographical backgrounds and preferences vis-à-vis existing users.

3. To cater to their needs, e-commerce players need to innovate across the value chain through initiatives such as custom assortments, targeted marketing, local language content and online-over-offline (OOO) infrastructure.

Source: Secondary research, industry discussions, PwC analysis
The future of Indian e-commerce
India represents a highly aspirational consumer market, with a wealth of opportunities to offer the world. With an ‘emerging middle class’ population of more than 500 million and approximately 65% of the population aged 35 or below, India could potentially overtake the US and become the world’s second largest economy (in PPP terms) by 2050.\(^3\)

India has the second largest Internet base, with the number of Internet users exceeding 450 million today. Of these, approximately 70 million people are estimated to have more than three to four years of online experience currently, which makes them comfortable with engaging in e-commerce. As more people join the Internet economy (Internet penetration is expected to almost double to 60% by 2022)\(^4\) and continue to get accustomed to their new online lives, the e-commerce industry is expected to grow into a 100 billion USD market by 2022.\(^1\)

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**E-commerce market – India**

FY2012-22E, billion USD

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2017</th>
<th>2022E</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.11</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>16</td>
<td>36</td>
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<tr>
<td></td>
<td>3</td>
<td>34</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>105</td>
</tr>
</tbody>
</table>

- **Forecast**
- **CAGR 12-17**
  - E-travel: 27%
  - E-tail: NA
  - Online FS: NA
  - Online consumer services: NA
  - Digital content: NA
- **CAGR 17-22E**
  - E-travel: 36%
  - E-tail: 33%
  - Online FS: 59%
  - Online consumer services: 30%
  - Digital content: 14%

**Note:**

1. Estimates for the e-commerce market are based on gross merchandise value (GMV) in e-tail and e-travel, transaction margins in the case of online financial services, commission and advertisement revenues for online consumer services, and subscription plus advertisement revenues for the digital content segment.

2. These numbers are different from those in ‘Strategic Review 2018: Amplify Digital’ due to CY/FY changes and different definitions of sectors.

Source: Secondary research, PwC analysis

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1. PwC Analysis
2. World Bank Data, PwC Analysis
3. The World in 2050 (PwC)
4. TRAI, Industry Estimates, PwC Analysis
While this explosive growth will pervade each of the segments in the industry, the overall market growth is expected to be around 25% per annum till 2022, similar to that witnessed over the past three to four years. The total number of e-commerce consumers will soon hit 175–200 million. On the other hand, the ability to serve these customers may also be constrained due to limited assortment, low ease of ordering and payment, longer delivery times and trust issues.

To overcome these challenges and double the growth to create a market of 150 billion USD, the industry must innovate. These innovations can target how customers order (e.g. voice-enabled orders in local languages), pay (e.g. UPI on delivery), interact (through online over offline interfaces) and receive (e.g. two-hour delivery) in order to catapult the number of users beyond 200 million and achieve a higher spend per customer in each category.

### Number of people that have crossed various digital phases

<table>
<thead>
<tr>
<th>2012</th>
<th>2017</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digital champions</strong></td>
<td><img src="image" alt="Digital champions" /></td>
<td>5–10 mn</td>
</tr>
<tr>
<td><strong>Digital live</strong></td>
<td><img src="image" alt="Digital live" /></td>
<td>5–10 mn</td>
</tr>
<tr>
<td><strong>Digital explorers</strong></td>
<td><img src="image" alt="Digital explorers" /></td>
<td>10–15 mn</td>
</tr>
<tr>
<td><strong>Digital beginners</strong></td>
<td><img src="image" alt="Digital beginners" /></td>
<td>50 mn+</td>
</tr>
</tbody>
</table>

Source: Secondary research, PwC analysis

These next 100 million users are also expected to be quite different from the first 50 million. We may see the average age of shoppers go up from under 30 to over 30, with a higher number of shoppers outside metros, more female shoppers coming on board and more people who prefer content in local languages.

Beyond the challenges posed by these dynamic customer segments, each e-commerce business segment needs to overcome its own unique challenges. The industry, as a whole, is stricken with inhibitors like discomfort with new banking instruments, poor infrastructure and high marketing costs associated with overcoming consumer adoption inertia.

Initiatives towards providing adequate access by improving digital literacy and Internet availability, making people comfortable with technology (especially digital payments) and improving trust may boost the number of Indian e-commerce users in future. Ease of capital and market access can enable e-commerce firms to fulfill the resulting demand. A supporting payment and logistics infrastructure along with such initiatives and innovative practices has the potential to propel the Indian e-commerce industry towards global leadership.
Propelling India towards global leadership in e-commerce
Current policy landscape and shortcomings
E-commerce is governed by multiple regulatory bodies and several horizontal regulations. One of the first movers was the RBI, which released guidelines for Internet banking in 2001, followed by many more in subsequent years. The Ministry of Electronics, Information and Technology (MeitY) also acknowledged e-commerce under the IT Act, introducing intermediary guidelines in 2011. This was followed by a landmark recognition of the operational models of e-commerce companies in the FDI Policy Press Note 3 of 2016 which became a game changer for the sector. Multiple sectoral regulators have also started amending the respective laws to bring e-commerce under their purview. Some of these are FSSAI, IRDA, Motor Vehicles Act, Waste Management Rules, consumer protection, GST provisions and most recently, the data protection bill. Some laws are administered centrally, while there are several which are implemented at the state level.

While these are being amended, it is critical that there is harmony in interpretation and alignment in the implementation of the laws both at the Centre and across the different states. A harmonised policy framework for e-commerce should be able to, at the same time, adapt to the fast-changing technology and consumer preferences.

The envisaged approach will help in the development of an ecosystem that will support the industry, boost investments as well as protect consumer interest. The framework should also provide for an e-commerce facilitation unit in all relevant government ministries and sectoral departments which serve as a point of interface for handling issues unique to the e-commerce sector.

A holistic e-commerce framework should encompass the following:
- A robust physical and digital infrastructure
- Enhancing the logistics infrastructure
- Unlocking the value of digital payments
- Enabling network infrastructure and access
- A robust data protection framework
- Thrust to ‘Make in India’
- A level playing field between offline and online players in indirect taxation
- A conducive environment for cross-border e-commerce
- Enabling ecosystem for domestic start-ups

While developing regulations, the ultimate objective should be to balance a thriving e-commerce economy with public interest. The approach should be to avoid overwhelming the sector with additional regulations and, rather, focus on building an enabling mechanism that encourages innovation and allows new-age disruptive business models to enter and thrive in the existing regulatory framework.

A prescriptive regulatory framework based on understanding the current business models can hamper the evolution of more innovative models. It is important since India is at the cusp of a boom in this sector, with more and more corporates and start-ups joining the bandwagon.

The amendment and evolution of various upcoming regulations to incorporate the e-commerce way of doing business have created an interesting space to watch in the near future.
Context and methodology

- This report assesses the current state of the e-commerce industry in India and discusses market opportunities, challenges and recommendations that can drive industry growth.

- It covers an analysis of the following segments:
  - E-travel
  - E-tail
  - Online financial services
  - Online consumer services
  - Digital content

- Estimation of market sizes:
  - PwC India estimated the potential number of consumers specific to the segments under consideration, their spend per transaction and how often they transact via e-commerce. These estimates were further validated based on the revenues/GMV of key companies, primary interviews with key industry players and secondary sources.
  - For the analysis of underlying trends, PwC India relied on secondary research and interviews with industry experts, along with an analysis of this underlying data.

- For the analysis of industry challenges, PwC India relied on secondary research and interviews with industry experts.

- Estimation of employment generation, e-logistics, MSME engagement of e-commerce and tax contribution:
  - PwC India estimated each of these aspects based on market growth estimates. These estimates were corroborated with industry publications and were validated through primary interviews with industry experts.

- The recommendations made in this study are representative of the views of the industry and were collected through extensive interviews with key players across all segments of the Indian e-commerce industry.

- Other notes:
  - All the numbers in this report are rounded off.
  - In cases where the industry/segment was too nascent or did not exist, the historical CAGR has been mentioned as ‘NA’.
  - All years in this report are calendar years (CY).
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**Yashish Dahiya**  
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NASSCOM finalised the list of participants and arranged the interviews.
Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
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<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>CAGR</td>
<td>Compound annual growth rate</td>
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<tr>
<td>PPP</td>
<td>Purchasing power parity</td>
</tr>
<tr>
<td>Bn</td>
<td>Billion</td>
</tr>
<tr>
<td>Mn</td>
<td>Million</td>
</tr>
<tr>
<td>K</td>
<td>Thousand</td>
</tr>
<tr>
<td>(E)/Est.</td>
<td>Estimated</td>
</tr>
<tr>
<td>AI</td>
<td>Artificial intelligence</td>
</tr>
<tr>
<td>PIN</td>
<td>Personal identification number</td>
</tr>
<tr>
<td>TRAI</td>
<td>Telecom Regulatory Authority of India</td>
</tr>
<tr>
<td>RBI</td>
<td>Reserve Bank of India</td>
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<tr>
<td>UPI</td>
<td>United Payments Interface</td>
</tr>
<tr>
<td>PoS</td>
<td>Point of Sale</td>
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<tr>
<td>CPA</td>
<td>Consumer Protection Act, 1986</td>
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<tr>
<td>CCI</td>
<td>Competition Commission of India</td>
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<tr>
<td>DPA</td>
<td>Data Protection Authority</td>
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<tr>
<td>M2M</td>
<td>Machine to Machine</td>
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<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
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<tr>
<td>MRTP</td>
<td>Monopolies and Restrictive Trade Practice</td>
</tr>
<tr>
<td>IRDA</td>
<td>Insurance Regulatory and Development Authority</td>
</tr>
<tr>
<td>B2B</td>
<td>Business to business</td>
</tr>
<tr>
<td>B2C</td>
<td>Business to consumer</td>
</tr>
<tr>
<td>GMV</td>
<td>Gross merchandise value</td>
</tr>
<tr>
<td>ARPU</td>
<td>Average revenue per user</td>
</tr>
<tr>
<td>MSME</td>
<td>Micro, small and medium enterprises</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign direct investment</td>
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<tr>
<td>IP</td>
<td>Intellectual property</td>
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<tr>
<td>CoD</td>
<td>Cash on delivery</td>
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<tr>
<td>VR</td>
<td>Virtual reality</td>
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<tr>
<td>TCS</td>
<td>Tax Collected at Source</td>
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<td>GST</td>
<td>Goods and Services Tax</td>
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<td>MDR</td>
<td>Merchant Discounted Rate</td>
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<td>AePS</td>
<td>Aadhaar Enabled Payment System</td>
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<td>FSSAI</td>
<td>Food Safety and Standards Authority of India</td>
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<td>FBOs</td>
<td>Food Business Operators</td>
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<tr>
<td>AAEC</td>
<td>Appreciable adverse effect on competition</td>
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<td>IoT</td>
<td>Internet of Things</td>
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<td>Public Data Office Aggregators</td>
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<td>Export Declaration Form</td>
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<tr>
<td>OPGSP</td>
<td>Online Payment Gateway Service Provider</td>
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About NASSCOM

NASSCOM is the industry association for the IT-BPM sector in India. A not-for-profit organization funded by the industry, its objective is to build a growth led and sustainable technology and business services sector in the country. Established in 1988, NASSCOM’s membership has grown over the years and currently stands at over 2,500. These companies represent 95 percent of industry revenues and have enabled the association to spearhead initiatives and programs to build the sector in the country and globally. NASSCOM members are active participants in the new global economy and are admired for their innovative business practices, social initiatives, and thrust on emerging opportunities.

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