E-commerce in Turkey
Market definition and sizing 2013

June 2014, Istanbul
Deloitte Consulting
<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Role</th>
</tr>
</thead>
</table>
| **Project Consultant** | • Defining E-commerce Market  
                        | • Developing E-commerce market sizing model by analyzing  
                        |     website traffic analysis data, basket sizes and conversion  
                        |     rates  
                        | • Sizing the market  
                        | • Adjusting the model with stakeholder inputs  
                        | • Documentation of analysis |
| **Project Partner**  | • Validating data and the model with industry know-how and expertise |
| **Project Contributor** | • Providing web site traffic data |
## E-commerce = Online Orders

### How e-commerce is defined globally?

<table>
<thead>
<tr>
<th>Country</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>An Internet transaction is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organizations, conducted over the Internet. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line. Orders received or placed by telephone, facsimile or conventional e-mail are excluded.</td>
</tr>
<tr>
<td>EU</td>
<td>E-commerce can be defined generally as the sale or purchase of goods or services, whether between businesses, households, individuals or private organizations, through electronic transactions conducted via the internet or other computer-mediated (online communication) networks. The term covers the ordering of goods and services which are sent over computer networks, but the payment and the ultimate delivery of the goods or service may be conducted either on- or off-line.</td>
</tr>
<tr>
<td>WTO</td>
<td>An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organizations. Included in these electronic transactions are orders made over the web, extranet or electronic data interchange. The type of transaction made is defined by the method of placing the order. Normally excluded are orders made by telephone calls, fax or manually typed e-mails.</td>
</tr>
<tr>
<td>US</td>
<td>The value of any monetary transaction completed over a computer mediated network that involves the transfer of ownership or rights to use goods and services; includes internet, Intranet, Extranet, and EDI transactions.</td>
</tr>
<tr>
<td>UK</td>
<td>The sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online.</td>
</tr>
<tr>
<td>Canada</td>
<td>An e-commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.</td>
</tr>
</tbody>
</table>

### Product / service to be ordered online.
Orders via phone, fax, call center, e-mail and similar sources are excluded.

### Service / product delivery could be online or offline.

### Payment may be conducted online or offline.
Before sizing e-commerce volume, it is important to define e-commerce activities; i.e., which transactions should be included and which ones should be excluded. Since definition differs across approaches of various research firms and institutions, there could be variations among announced figures. In this study, common features of various countries and organizations have been taken into consideration.

Types of transactions included in the scope (E.g. B2C, C2C ve B2B)

In this study, mainly B2C transactions are covered since majority of the market is composed of B2C transactions and there are difficulties to monitor and size B2B and C2C transactions. On the other hand, some B2B and C2C transactions are partially covered since they cannot be separated from B2C transactions. (E.g. Companies supplying products from B2C websites to use for their business activities, small business owner's purchasing some type of equipment from gittigidiyor.com / via sahibinden.com to use for their own business' or individual sales made from similar sites, etc.). The volume of such transactions cannot be measured and separated from B2C transactions fully.
Virtual POS Transactions ≠ E-commerce

- Orders placed via Call-centers
- Virtual POS transactions during face-to-face interaction
- Transactions between franchises/subsidiaries/branches via virtual POS

Online orders paid via virtual POS

Operations included in e-commerce

- Virtual POS Transactions
- Online orders where payments are offline

Despite the virtual POS transactions that are not included in B2C e-commerce operations
Virtual POS Transactions ≠ E-commerce

E-commerce sector size does not equal to the total volume of virtual POS transactions

There are various virtual POS transactions that should be excluded while calculating the size of the e-commerce market; for instance, mail-orders, call center orders are generally paid via virtual POS. Travel agencies are another example where sales is performed face-to-face but payment is generally made through virtual POS. Some franchisors are also transferring goods to its franchisees where payment is performed via virtual POS. Accordingly, virtual POS transactions could be a useful indicator for the overall e-commerce market, but do not fully reflect the volume of e-commerce sector.

Differences when the volume of the sector is determined by virtual POS transactions

- **Credit card expenses charged from direct "mail order" or "mail order via call centers" transactions**
  - E.g. For operations made through call center, travel agents charge vacation package or airline ticket fees from customer’s credit card via virtual POS and this process is defined as 'e-commerce expenditure'.

- **Virtual POS transactions in a variety of B2B transactions**
  - E.g. Retailers can pay to wholesalers or major distributors via virtual POS, which should not be considered as an e-commerce transaction.

- **Member businesses (online stores) type should be defined correctly in the system (would have an indirect effect to sector size, would have a direct effect on the share of the category)**
  - E.g. An on-line store selling 'electronic' products could have registered its virtual POS as in 'home decoration' or in a category different than electronics; entire turnover of this store is registered in a category other than "electronics"
  - This situation impedes proper reporting on a category basis.

- **Other payment alternatives (pay at the door, EFTs, micro-payments etc.) are out of scope.**
E-commerce ecosystem

- Clothing & Footwear
- Leisure
- Home & Decoration
- Travel & Transportation
- Electronics
- Other
- Multi-channel

- Multi-Category
- Legal Online Betting
- Vertical
- Pure Online
- Market Place
- Private Shopping
- Travel & Transportation

- Int’l Product / Service Sellers
- Digital Content
- Listing & Ads
- Payment Systems
- Cargo & Delivery
- Government
- Hardware Suppliers
- Software Providers
- Telcos & Operators & ISPs
- Cargo & Delivery
- Payment Systems
- Government
- Hardware Suppliers
- Software Providers
- Telcos & Operators & ISPs
Market scope

**Clothing & Footwear**
Damat, Defacto, Flo, LCW, Penti, etc.

**Electronics**
Bimeks, Gold, Teknosa, Vatan, etc.

**Home & Decoration**
Doğtaş, IKEA, Koçtaş, Tekzen, Tepe, etc.

**Travel & Transportation**
IDO, Kamil Koç, Onurair, Pegasus, THY, etc.

**Leisure**
Biletix, D&R, Joker, Mybilet, etc.

**Other**
Carrefour, Dominos, Migros, Saat & Saat, Tchibo, etc.

**Multi-channel**

**Legal Online Betting**
Bilyoner, Misli, Nesine, Tuttur, etc.

**Vertical**
Evim.net, Kitapyurdu, Lidyana, Vivense, etc.

**Market Place**
Gittigidiyor, N11, sahibinden.com, etc.

**Multi-Category**
Hepsiburada, Kliksa, Webdenal, etc.

**Pure Online**

**Private Shopping**
Limango, Markafoni, Morhipo, Trendyol, etc.

**Travel & Transportation**
Neredekal, Tatilsepeti, Tripsta, etc.

1 Online Ordered
2 B2B Transactions Excluded
3 Free from payment method
4 Total volume Generated

Sample sites are randomly chosen and listed alphabetically.
E-commerce ecosystem and market scope

Notes

E-commerce Ecosystem

5
For categorization purposes, ComScore’s classification and Deloitte sector analysis are utilized. Interviews with industry representatives and associations have been held to finalize categorization.

The difference between the estimated market with total ecosystem

In the total ecosystem, there are some stakeholders that are proportionally affected from the growth of the e-commerce sector. In the sizing study, covered portion only include companies that sells goods / services, which are assessed under different categories, with some exceptions:

• Some retailers (Amazon, Walmart, etc.) which are not physically existent in Turkey, ‘Booking.com’, ‘hotels.com’ and similar foreign sites are excluded.
• Digital content sites are not also taken into consideration due to limitations of measurement.
• Sites with less than 15k / monthly traffic are excluded.

Total number of companies operating in the sector

In Turkey, it is estimated that there are thousands of e-commerce operators. However, considering sizes of these companies, covered c. 1,200 sites are believed to compose a significant portion of the market (95% +) In this study, even after the first 500 sites, contribution of the remaining operators are at marginal level.
Calculation Methodology

1. ComScore’s 3-month average daily visit data is annualized.
2. ComScore data is categorized.
3. Average conversion rates and basket sizes are calculated by categorizing the Europe Top 500 Retailer study.
4. Leveraging Europe Top 500 Retailer Study Category data, an index is built for Turkish e-retailers by using some available benchmarks.
5. E-retail volume is calculated.
6. Travel and Transportation category sizes are calculated.
7. Adjustments and changes are made by using publicly available data and ETID insights.
8. Legal online betting values are added.

E-commerce volume is calculated.

Notes:
- Some retailers (Amazon, Walmart, etc.) included in the Comscore data are eliminated due to their non-physical existence in Turkey.
- For travel & transportation category, ‘Booking.com’, ‘hotels.com’ and similar foreign players are excluded.
- Sites with less than 15k / monthly unique visits are excluded.
- Mobile transactions are reflected to the conversion rates and average basket sizes.
Traffic data, basket size and conversion rates are leveraged to size the market rather than collecting individual sites’ revenues through a bottom-up approach.

Thousands of e-commerce operators are active in the market; collecting their revenue information need a massive effort due to difficulties in (i) reaching them, (ii) getting accurate information. Therefore, using traffic data, basket sizes and conversion rates is a more systematic approach, which offers a convenient and accurate calculation. Additionally, calculated figures are adjusted with certain publicly available data and validated with industry representatives and associations.

Calculation Methodology

Step 1: ComScore provided lists of e-commerce websites with traffic data, which includes sites with 15k+ unique visit per month. Provided 3-month data is annualized.

Step 2: Sites are categorized in accordance with the defined ecosystem.

Step 3: For each category, based on the "Europe Top 500 Retailer list" average conversion rates and basket sized are calculated.

Step 4: Leveraging Europe Top 500 Retailer Study Category data, an index is built for Turkish e-retailers by using available local benchmarks.

Step 5: "e-retail trade volume" is calculated.

Step 6: By using public statements and information from interviews, travel and transportation category size is calculated.

Step 7: With the data disclosed to the public and contribution of ETID, leading e-commerce operators calculation variables and calculated volumes are adjusted and validated.

Step 8: Estimated size of the legal online betting industry has been added.
E-commerce market size

Billion USD (2013)

- **Total Market**: 7.4 Billion USD
  - **Travel & Transportation**: 2.7 Billion USD (234 Online Sites)
  - **Pure Online Retail**: 2.6 Billion USD (620 Sites)
  - **Multi-Channel Retail**: 1.2 Billion USD (403 Sites)
  - **Online Legal Betting**: 0.8 Billion USD (6 Sites)

Numbers may not add up due to rounding. Some sites may specified as a group this may lead to a higher number of total sites than the indicated number of sites. In the travel & transportation category, comments made by executives of relevant companies and known turnovers of relevant companies have been used as an important input for calculations and assumptions. All figures exclude VAT.
## E-commerce market size - categories

*Billion USD (2013)*

<table>
<thead>
<tr>
<th>Category</th>
<th>Billion USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi - Channel - Transportation &amp; Accommodation</td>
<td>2.3</td>
</tr>
<tr>
<td>Pure Online – Market Place</td>
<td>0.9</td>
</tr>
<tr>
<td>Pure Online - Betting</td>
<td>0.8</td>
</tr>
<tr>
<td>Pure Online – Multi Category</td>
<td>0.7</td>
</tr>
<tr>
<td>Pure Online – Private Shopping</td>
<td>0.7</td>
</tr>
<tr>
<td>Multi-Channel – Electronic</td>
<td>0.5</td>
</tr>
<tr>
<td>Pure Online – Transportation &amp; Accommodation</td>
<td>0.4</td>
</tr>
<tr>
<td>Pure Online – Vertical</td>
<td>0.3</td>
</tr>
<tr>
<td>Multi-Channel – Clothing &amp; Footwear</td>
<td>0.3</td>
</tr>
<tr>
<td>Multi-Channel – Home &amp; Decoration</td>
<td>0.2</td>
</tr>
<tr>
<td>Multi-Channel – Leisure</td>
<td>0.1</td>
</tr>
<tr>
<td>Multi-Channel – Other</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Numbers may not add up due to rounding
E-commerce market size - categories

Main differences are the covered transactions and methodology. In this study, annualized traffic data, average conversation rates and basket sizes are used to calculate the size of the e-commerce market. Model assumptions and outputs are also adjusted and validated with both publicly available information and additional information provided by ETID. Accordingly, regardless of payment types, online placed orders have been taken into account, to the extent possible.
## E-commerce global comparison (2013)

<table>
<thead>
<tr>
<th>Country</th>
<th>Online Retail / Total Retail</th>
<th>Internet Penetration*</th>
<th>Online Shoppers**</th>
<th>Per Capita Income USD k (PPP)</th>
<th>Population (mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Developed Countries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>10.4%</td>
<td>87%</td>
<td>85%</td>
<td>37</td>
<td>64</td>
</tr>
<tr>
<td>USA</td>
<td>7.4%</td>
<td>81%</td>
<td>72%</td>
<td>53</td>
<td>316</td>
</tr>
<tr>
<td>Germany</td>
<td>6.0%</td>
<td>84%</td>
<td>79%</td>
<td>40</td>
<td>81</td>
</tr>
<tr>
<td>France</td>
<td>5.5%</td>
<td>83%</td>
<td>75%</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Japon</td>
<td>4.2%</td>
<td>79%</td>
<td>77%</td>
<td>37</td>
<td>127</td>
</tr>
<tr>
<td>Spain</td>
<td>3.1%</td>
<td>72%</td>
<td>55%</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>Italy</td>
<td>1.8%</td>
<td>58%</td>
<td>44%</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>5.5%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Developing Countries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>5.6%</td>
<td>42%</td>
<td>44%</td>
<td>10</td>
<td>1.361</td>
</tr>
<tr>
<td>Poland</td>
<td>5.3%</td>
<td>65%</td>
<td>30%</td>
<td>21</td>
<td>39</td>
</tr>
<tr>
<td>Brazil</td>
<td>3.1%</td>
<td>49%</td>
<td>34%</td>
<td>12</td>
<td>198</td>
</tr>
<tr>
<td>Russia</td>
<td>2.8%</td>
<td>53%</td>
<td>38%</td>
<td>18</td>
<td>143</td>
</tr>
<tr>
<td>India</td>
<td>0.7%</td>
<td>12%</td>
<td>23%</td>
<td>4</td>
<td>1.243</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>3.5%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Turkey</strong></td>
<td>1.3%</td>
<td>49%</td>
<td>24%</td>
<td>15</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: EIU, emarketer, Euromonitor, IMF, ITU and TURKSTAT; data is as of 2013. Internet penetration figures are for the year 2012 (Turkey -2013). Turkey's online retail / total retail rate are calculated by dividing calculated e-retail size to the total size of the retail sector.

**Online shoppers as a percentage of internet users.**
E-commerce global comparison (2013)

Source: EIU, eMarketer, Euromonitor, IMF, ITU and TURKSTAT; data is as of 2013, internet penetration figures are for the year 2012 (Turkey 2013).

Turkey's online retail / total retail rate are calculated by dividing calculated e-retail size to the total size of the retail sector.

For developed countries, the U.S., Germany, France, UK, Italy, Spain, Japan, and developing countries Brazil, China, India, Poland and Russia are taken as a sample.

Percentages specified next to the country names represent the online retail share over total retail volume. Flag sizes are proportionate according to this ratio.
THANK YOU

We would like to express our appreciation to Deloitte Danışmanlık, Elektronik Ticaret İşletmeleri Derneği, ComScore and sector companies for their valuable contributions.

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