E-Commerce Trade and Technology Trends

Submitted by: WTO
Overview

– B2C developments
– B2B trends
– Technology and regulatory trends

Work program definition
E-commerce, is defined as the "production, distribution, marketing, sale or delivery of goods and services by electronic means"

What does this mean for trade and trade negotiations?
B2C Sales
2020 E-commerce predictions

Retail Ecommerce Sales Worldwide, by Region, 2020 billions

<table>
<thead>
<tr>
<th>Region</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia-Pacific</td>
<td>$2,448.33</td>
</tr>
<tr>
<td>North America</td>
<td>$749.00</td>
</tr>
<tr>
<td>Western Europe</td>
<td>$498.32</td>
</tr>
<tr>
<td>Central &amp; Eastern Europe</td>
<td>$92.91</td>
</tr>
<tr>
<td>Latin America</td>
<td>$83.63</td>
</tr>
<tr>
<td>Middle East &amp; Africa</td>
<td>$41.56</td>
</tr>
</tbody>
</table>

Note: Includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets, payments such as bill pay, taxes or money transfers, food services and drinking place sales, gambling and other vice goods sales; total retail ecommerce spending worldwide = $3.914 trillion
Source: eMarketer, May 2020

B2C
Strongest ecommerce growth?

• Philippines, Malaysia and Spain, nine economies are projected to see more than 20% growth in retail ecommerce sales this year
• Hard hit by the coronavirus their growth figures represent a substantial acceleration over 2019
• US ecommerce growth jumped to more than 30%, accelerating online shopping by nearly 2 years, with online sales reaching a level not expected until 2022.
• US ecommerce sales to reach $794.5 billion in 2020, up 32.4% from 2019. That’s a much higher growth rate than predicted, as consumers continue to avoid stores during the pandemic
### B2C growth

#### 2020 E-commerce predictions

**Retail Ecommerce Sales Growth Worldwide, by Region, 2020**

<table>
<thead>
<tr>
<th>Region</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central &amp; Eastern Europe</td>
<td>21.5%</td>
</tr>
<tr>
<td>Middle East &amp; Africa</td>
<td>19.8%</td>
</tr>
<tr>
<td>Latin America</td>
<td>19.4%</td>
</tr>
<tr>
<td>North America</td>
<td>18.1%</td>
</tr>
<tr>
<td>Western Europe</td>
<td>16.9%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>15.5%</td>
</tr>
<tr>
<td><strong>Worldwide</strong></td>
<td>16.5%</td>
</tr>
</tbody>
</table>

*Note:* includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets, payments such as bill pay, taxes or money transfers, food services and drinking place sales, gambling and other vice goods sales. Source: eMarketer, May 2020

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### 2020 pandemic purchase trends

**US Retail Ecommerce Sales Share, by Product Category, May 2020**

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books, music &amp; video</td>
<td>62.7%</td>
</tr>
<tr>
<td>Computer &amp; consumer electronics</td>
<td>49.5%</td>
</tr>
<tr>
<td>Toys &amp; hobby</td>
<td>47.8%</td>
</tr>
<tr>
<td>Apparel &amp; accessories</td>
<td>36.7%</td>
</tr>
<tr>
<td>Office equipment &amp; supplies</td>
<td>39.3%</td>
</tr>
<tr>
<td>Furniture &amp; home furnishings</td>
<td>29.9%</td>
</tr>
<tr>
<td><strong>Health, personal care &amp; beauty</strong></td>
<td>13.0%</td>
</tr>
<tr>
<td><strong>Auto &amp; parts</strong></td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>Food &amp; beverage</strong></td>
<td>3.7%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>22.0%</td>
</tr>
</tbody>
</table>

*Note:* includes products or services ordered using the internet via any device, regardless of the method of payment or fulfillment; excludes travel and event tickets, payments such as bill pay, taxes or money transfers, food services and drinking place sales, gambling and other vice goods sales. Source: eMarketer, May 2020
Cross border B2C e-commerce?

Online shoppers who make purchases from overseas retailers

57% Worldwide average

Europe 63.4%
Africa 55.5%

Asia-Pacific 57.9%
Latin America 54.6%

B2B Services
Coping with the pandemic

• Many B2B companies have managed to stay in business, operate and recover. This required moves toward digital transformation of both marketing and sales.
• Impact differs by sector: Two-thirds of firms in tourism and hospitality category saw substantial disturbance to their business. Others included personal services (60%), education (52%), wholesale (46%) and manufacturing (46%).
• The B2B sectors with minimal impact compared with others, were tech and telecom (21%), financial services (28%) and energy and utilities (29%).
• Catching up with B2C, marketplace platforms are emerging in B2B e-commerce
2020 Digital sales for B2B sellers

How would you describe your year-end ecommerce results for 2020?

- Up 75%+ 12.7%
- Up 50-74% 14.6%
- Up 25-49% 29.9%
- Up 11-24% 20.0%
- Up 1-10% 10.0%
- Flat 10.0%
- Down 1-10% 1.6%
- Down 11-25% 2.7%
- Down 25%+ 0.6%
- Unsure 1.6%

Source: Digital Commerce 360, 27 Jan 2021

B2B Organizations in Select Countries Experiencing Significant Disruption due to the Coronavirus, by Industry, April-May 2020

<table>
<thead>
<tr>
<th>Industry</th>
<th>% of respondents in each group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism, hospitality and arts</td>
<td>66%</td>
</tr>
<tr>
<td>Personal/consumer services</td>
<td>60%</td>
</tr>
<tr>
<td>Education</td>
<td>52%</td>
</tr>
<tr>
<td>Retail/wholesale</td>
<td>46%</td>
</tr>
<tr>
<td>Manufacturing (other)</td>
<td>46%</td>
</tr>
<tr>
<td>Government &amp; nonprofit</td>
<td>45%</td>
</tr>
<tr>
<td>Business and professional services</td>
<td>43%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>41%</td>
</tr>
<tr>
<td>Manufacturing (FMCG &amp; food)</td>
<td>39%</td>
</tr>
<tr>
<td>Construction &amp; engineering</td>
<td>38%</td>
</tr>
<tr>
<td>Energy &amp; utilities</td>
<td>29%</td>
</tr>
<tr>
<td>Financial services</td>
<td>28%</td>
</tr>
<tr>
<td>Tech &amp; telecom</td>
<td>21%</td>
</tr>
</tbody>
</table>

Note: *Australia, Canada, China, France, Germany, Japan, Singapore, UK and US
Source: B2B International as cited on company blog, May 6, 2020
Commercial & tech developments

Technologies
• Broadband & mobile telecom advances
• Artificial Intelligence – software algorithms
• Blockchain and other transactional data networks
• 3D printing – a.k.a. additive manufacturing

Business models
• Cloud (storage, processing & delivery)
• Big Data & AI – Large scale data processing
• Internet of Things – connecting physical objects
Pandemic: Mobile revenue vs. broader economy

Source: FierceTelecom.com 14 Dec 2020
Data centres & the cloud

- Over a decade, spending on cloud infrastructure services has risen from little or nothing to $100 billion annually
- Many new data centres came online in 2020 despite COVID-19 logistical issues
- Amazon and Google opened the most data centers, accounting for half of the new ones. Oracle, Microsoft, Alibaba and Facebook were also active
- U.S. accounted for 40% of the major cloud and internet data centre sites, followed by China, Japan, Germany, the U.K. and Australia, which together accounted for 29%
- However, companies with the most global footprint are leading cloud providers - Amazon, Microsoft, Google and IBM. Oracle and Alibaba also have global data centre presence.
The pandemic wipes out $200 billion of IoT revenues by 2025

- The impact of the 2020 slowdown will reverberate over the longer term more in spending than volumes. As a result, while global IoT revenues will triple by 2025, this is 20% lower ($200 billion) than what it would have been without the pandemic.
- Most of the competitive intensity is focused at the application and analytics layer of the IoT value chain.
- Conversely, commoditization is the reason for connectivity skimming to just 1% of the value chain. Operators have been expanding their capabilities beyond connectivity to capture a larger proportion of the overall market.
Industry adoption of AI

Leaders in the adoption of AI also intend to invest more in the near future compared with laggards.

Future AI demand trajectory, % change in AI spending over next 3 years:\n
<table>
<thead>
<tr>
<th>Year</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>1.0</td>
</tr>
<tr>
<td>2021</td>
<td>2.0</td>
</tr>
<tr>
<td>2022</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Leading sectors:
- Financial services
- High tech and communications
- Energy and resources
- Automotive and assembly
- Media and entertainment
- Consumer and packaged goods
- Retail
- Professional services
- Healthcare
- Transportation and logistics
- Travel and tourism
- Building materials and construction
- Education
- Manufacturing

\(^1\)Estimated average, weighted by company size; demand trajectory based on midpoint of range selected by survey respondents.

\(^2\)Adopting 1 or more AI technologies at scale or in business core; weighted by company size.

Source: McKinsey Global Institute AI adoption and use survey; McKinsey Global Institute analysis

Goods traded as software?

3D Printing Projected Industry Growth

3D Printed Part Market Grows to $8.4 Billion in 2025

- Aerospace
- Medical
- Automotive
- Electronics
- Consumer

Source: Lux Research, Inc. www.luxresearchinc.com
Implication: Data generation

Global flows of trade and finance are flattening, while data flows are soaring.

45X growth in data flows 2005-2014

Emerging regulation

Source: ECIPE, Digital Trade Estimates Database
Many interlinkages

1. COVID-induced online purchasing habits are expected to continue beyond the pandemic
2. More businesses & consumers turning to the cloud for storage or services that use it
3. With cloud comes more network & data traffic
4. IoT to generate massive data & data traffic
5. AI means huge datasets are better analysed & more useful to business & consumers
6. Internet traffic will increasingly move on 5G networks

The trends underscore the importance of global data transmission

Source: Cisco® Global Cloud Index (2015-2020)

Implications of regulation for trade?

Regulation or restrictions in one part of the e-commerce/digital commercial value chain have spill over affects on all other segments and on economies at large