Building the Omni-channel Supply Chain

Frits van den Bos, innovation manager GS1 Netherlands
12 November 2015
Vacant points of sale

In the UK, the vacancy rate has already reached 15% "Big chains won't return to high street because of rise of online shoppers", Mary Portas Review

1 - Extrapolated in 2015 and 2020 on the basis over average annual growth 2008-2012; vacancy is defined as a vacant building that is intended for sale. Buildings that used to be shops but are now used differently will not be included.

SOURCE: Locatus, Expert Reports "The New Shopping Street"
Underlying trends

**CONSUMER**
- Social media
- 24/7 connected
- In control and informed
- Responsible individual

**NEW TECHNOLOGIES**
- Mobile, location based, touch points
- Big data
- Digitalization (products and services)
- 3D printing
- AutoID: RFID, barcoding
- Internet of things

**Growth e-commerce**

**SUSTAINABILITY**
- People require sustainability
- E-commerce effects on the planet increase
- Profits leave little room for large investments

**NEW LEGISLATION**
- Privacy
- Consumer rights
- Safety
- Sustainability
- Cross border e-commerce

The Global Language of Business
© GS1 Nederland 2015
Global Key B2C E-commerce Data of Goods and Services at a Glance 2014

Top 10 e-commerce countries in turnover (in billions of dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Turnover</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>$538</td>
</tr>
<tr>
<td>USA</td>
<td>$483</td>
</tr>
<tr>
<td>UK</td>
<td>$169</td>
</tr>
<tr>
<td>Japan</td>
<td>$136</td>
</tr>
<tr>
<td>Germany</td>
<td>$95</td>
</tr>
<tr>
<td>France</td>
<td>$75</td>
</tr>
<tr>
<td>Canada</td>
<td>$28</td>
</tr>
<tr>
<td>Russia</td>
<td>$27</td>
</tr>
<tr>
<td>Spain</td>
<td>$22</td>
</tr>
<tr>
<td>Australia</td>
<td>$21</td>
</tr>
</tbody>
</table>

* B2C & C2C goods & services, excluding insurances

7,223 million people live in the US
2,737 million people use the internet
1,139 million people are e-shoppers
* excluding people aged 66+.

Forecast 2015
$2,251 billion turnover e-commerce goods & services

Estimated share of online goods in total retail goods 72%

Share of Internet users accessing the web through a mobile device worldwide 72%

Global
$1,943 billion +24%
Total B2C e-sales of goods and services 2014

Cross-border B2C e-commerce

Most popular countries:
- USA 47%
- UK 38%
- China / HK 31%
- Canada 17%

“309 million consumers bought cross-border last year and this is expected to increase to 328 million in 2015.”

Tweet: “2.1 billion active social media accounts worldwide”
The Omni-channel supply network

- Manufacturer
- Wholesaler
- Retail Distribution Centre
- Logistics Service Provider
- Store
- E-fulfilment centre
- E-Store
- Parcel service
- Pick up point
- Consumer
- Collies
- Items
- Baskets / Parcels
The customer journey 2020?
Online retail turnover in the Netherlands
Billions of euros

Value per delivery
EUR

Number of parcels
Million

- ~1.5 million parcels delivered per day
- ~60 small parcels per year per household\(^2\) in 2020
- 35% of current parcel traffic is air traffic at the moment

1 Based on growth in accordance with the experts in the GfK Expert Report
2 Decrease of 2007-2012 extrapolated
3 Based on approx. 9-10 million households in 2020

SOURCE: GfK Expert Research; Expert Report “Cross-border (e-)Commerce”; parcelbox4u.com; PostNL
Delivery for free, where and when I want it....

- Delivery cost are charged separately
- Delivery for free (Delivery costs are included in the selling price)
- Delivery costs are partly charged and partly included in the selling price
- Delivery costs are charged separately, unless the order amount exceeds a minimum amount and delivery costs are dropped.

2014 (n= 123)
- 46% Delivery cost are charged separately
- 21% Delivery for free
- 22% Delivery costs are partly charged and partly included
- 0% Delivery costs are charged separately, unless the order amount exceeds a minimum amount and delivery costs are dropped.

2020 (n= 113)
- 26% Delivery cost are charged separately
- 11% Delivery for free
- 22% Delivery costs are partly charged and partly included
- 12% Delivery costs are charged separately, unless the order amount exceeds a minimum amount and delivery costs are dropped.
What will have the biggest impact on the supply chain?

1. All stock available and transparent for all channels (on and offline)
   - 17% No impact
   - 13% Limited impact
   - 26% Considerable impact
   - 44% Major impact

2. Decreasing lead times towards online customers
   - 14% No impact
   - 20% Limited impact
   - 27% Considerable impact
   - 40% Major impact

3. Lack of standards increases complexity for tracking & tracing
   - 33% No impact
   - 31% Limited impact
   - 22% Considerable impact
   - 15% Major impact

- Increase in off shore production costs
  - 37% No impact
  - 26% Limited impact
  - 24% Considerable impact
  - 13% Major impact

- Off shore production lead times will limit flexibility
  - 41% No impact
  - 26% Limited impact
  - 23% Considerable impact
  - 10% Major impact

The Global Language of Business

© GS1 Nederland 2015
Required capabilities

- Sourcing
- Inventory & planning
- Handling
- Transport
- Returns
- ‘Leftovers’

Flexibility

Information

Collaboration

Integral revenues and cost

The Global Language of Business

© GS1 Nederland 2015
Collaboration: where to add value
Flexibility: on time delivery at low cost
Information

Stock accuracy

Product data

Parcel delivery

Sourcing

Inventory & planning

Handling

Transport

Returns

‘Left overs’
Product data

More parties in the value chain

Bigger assortments – Customer specific articles

Data quality

Standards

More product data

More granular product information
Example: Product data at batch level
Parcel delivery: need for standards

- Collaboration can reduce costs
- Cross border delivery costs obstruct Single Digital Market in Europe
  - More transparency in delivery costs needed
  - Lower switching costs needed
- Market is dominated by postal companies with their own interoperability system
- Many E-retailers act local
- Many E-retailers have a limited number of parcel delivery services
- return processes
Building the omni-channel supply chain

Flexibility
- Sourcing
- Inventory & planning
- Handling
- Transport
- Returns
- ‘Leftovers’

Information

Collaboration

integral revenues and cost
Omni-channel retail and GS1

More granular, unique everlasting authenticated identification

GS1 Standards & Services

Adapted to omnichannel

Last mile delivery standards

Product data

EDI
API
RFID
Summary

- Omni-channel supply networks: More parties, increased complexity
- Collaboration, Flexibility, Information are required key capabilities
  - Identification: unique, everlasting, authenticated and more granular,
  - Product data: more data, more data quality
  - Last mile delivery: need for standards