eCommerce – Environmental challenges requires new sustainable solutions!

Conclusion by the authors

It's happening a lot in the last mile delivery business and it is essential to ensure sustainable environmental friendly solutions. New technology has opened up for solutions that for the most of us were beyond imagination only a decade ago. We see a big potential in better collaboration between retailers, carriers and consumers which can contribute to major savings in both the environment and in costs. Some of the solutions that were presented will need further maturing before they come up as a delivery option to the online consumer, since things happens so rapidly, it might be sooner than we believe. We will follow the new developments closely as we are probably only at the beginning of the road to what's possible. Wonderful Future!
Marie Fredriksson & Marly Nilsson

eCommerce EXPO UK

eCommerce EXPO UK in London on the 26th to 27th of September 2018, with its very exciting agenda, exhibitors and about 12,000 visitors gave an excellent opportunity to see where the market is heading and get the chance to listen and gain insights from speakers, experts in their areas. We spent well invested time listening to highly inspiring and experienced speakers from logistics companies, a logistics trade organisation and the engaged audience. In this summary, we share what we heard both from speakers and audiences about challenges and opportunities in the delivery market, as well as the pros and cons of the last mile delivery solutions which currently are being discussed. We hope that this summary will give you new insights as well as potentially give you brilliant ideas about smart solutions on how goods can be delivered to consumers in a cost-effective and environmentally-friendly manner.

Challenges

- With the increased demand for parcel delivery, we need to ask ourselves how it affects the traffic and environment in our cities.
- Will there be enough drivers to deliver all parcels? According to IMRG in U.K. 2020 they say there will not be enough drivers, as the trend looks right now
- How does the cost of failed deliveries affect the industry? "*According to Ofcom PCA (Post&Parcel) predict, with 5.6% of orders not arriving at their destination, and an average cost of failed delivery to the retailer of £14.35 ($19.23).*" https://postandparcel.info/93399/news/e-commerce/true-cost-implications-failed-deliveries/
- How does the Smart Locker industry affect the market? Will small carriers have access to lockers on high street or will they be dedicated only to the major players? And what does it mean to the consumer if they shop from different online stores, will they then need to pick up their parcels from different lockers? Or will the market for lockers be consolidated?
- How to support customers in rural areas?

Opportunities

- Increased demand for last mile delivery services will open up the market for new creative delivery options and more sustainable solutions for established as well as start-up companies
- Consolidation of the market - such as sharing smart lockers
- To involve customers in preventing failed deliveries by asking them to give pre-delivery advice i.e. alternative delivery addresses
- Provide the customer with easy-to-read tracking information and notifications regarding their delivery
- Closer cooperation between retailer and carrier to ensure better, faster and more cost efficient deliveries, especially important before big holidays i.e. Christmas.

We will summarize on the last mile solutions as presented at the conference, the well-established ones as well as the newer initiatives.

Amongst the audience, the following solutions were most interesting: home locker: 33%, geo-location-exact delivery-globally: 33% urban consolidation: 33% probable reason is that these were the newer ones.

Smart Lockers
Carriers
+ Cost efficient - delivery to many at the same time and no cost for failed deliveries
- Potential fraud, security issues and damages done to lockers
Consumer
+ Convenient pick-up-point near home or work, limited queuing if any at all
Retailers
+ Studies have shown that smart lockers increase shopping in stores with up to 40%
- The locker takes up space and requires high availability and quality of service
+ In France and Japan, they have them installed in fashion stores, which have opened for giving customers additional advisory services.

Opportunity - This service could be even better if it could handle returns and have a dressing room next to it for the customer convenience, according to the panel.

Home Lockers - an interesting option for property owners
Consumer
+ Very convenient from a consumer perspective and ideal if you are a regular shopper. Security code for access to the locker is required
- Requires camera monitoring to prevent damage to lockers or thieves from breaking in
Carrier
+ Very convenient from a carrier perspective, do not need to worry if the consumer is at home or not
- Assumed challenge to stay up to date on codes and security arrangements.

Air Born Drones
Not really for the mainstream delivery, but will probably be used commercially in the future. One of the biggest challenges to their success depends upon the regulation of the airspace and legislation.
Medical Retailer:
+ For Medical retailers, drones are thought of being a very effective delivery option, and the trend within this area is said to increase and during 2018, will 1 to 1.5 billion medical supplies be sold online
General questions raised by the panel:
- Environmental challenges, noise, air pollution etc.
- Who owns the "drone space"? Commercial air traffic, other drones and birds how to cater for that?
- Where will drones land and where can a parcel be dropped? What shall happen upon bad weather conditions?
- Drones are vulnerable to hacking
- Requires new types of insurances

AGV (Automated Guided Vehicles)
AGV is a portable robot that follows markers or wires in the floor, or uses vision, magnets, or lasers for navigation. Our conclusion is that the technique is similar to self-driving vehicles. The opinion from the panel and the audience was that there are some limitations if it is to be used in delivery to consumers.
Carriers
- It can only deliver within a radius of 4.8 km (3 miles) and the model showed at the conference could only carry one parcel at a time, meaning approximately 10 parcels/hour.

Geo-location
At the Panel discussion, the service was described as a GPS location service that could be used when there are issues with the exact address to consumers this can be the case in some rural areas.
+ There it's a benefit both for carriers and consumers as the delivery will be taken to the right address, and failed deliveries will be avoided.
There are other usages of Geo-location last mile services but they were not discussed at the conference.

In Boot Delivery
This solution only works for some modern vehicles using smart connected technologies that means it'll only work if you have a specific type of motor and that your car needs to be parked nearby an eligible delivery address. The consumer and owner of the car can change the delivery locations or block access to the car at any time.

Conclusion by the panel and the audience was that they didn't think this would be a mainstream delivery option in the near future since it requires smart connected technologies in the cars.

Being from a car manufacturing city we know that the in boot delivery service, is highly appreciated for its convenience.

3D Printing
Not for the mainstream delivery, but will probably be used commercially in the future.
At the moment highly controversial from an environmental perspective since the current print-outs are in plastic.
Consumer
+ Print your own products to avoid any shipping delays, advantages in cost and in time
+ A future attractive option when it will be possible recycle old things into new
Carrier
- No business for the carrier since the customers will print their own products

About the Authors': Marie and Marly have been working with business development and IT for more than 20 years in the Telecoms, Retail and Automotive industry. They both share a passion for eCommerce and CRM solutions and have been privileged to work with eCommerce programs, (online logistics and payments) and CRM solutions for leading multinational retail companies. The last 10 years they have been working as consultants. If you need highly dedicated, experienced and solution oriented consultants, we will be there for you.