

EXPERT ARTICLE

September 2017

## Consumer trends

### Online commerce: packaging and logistics requirements

Today it is nearly impossible for any industry to do business without Internet-based commerce. Shipped products naturally have to be packaged appropriately to ensure that they can be stacked, for example, and to prevent damage to valuable contents. Yet online commerce would be inconceivable without cutting-edge marking technology and the associated software and IT solutions. The protection of goods extends beyond the packaging materials alone: 2D codes, tamper-proof protection and complete traceability are other measures that provide increased security in the supply chain.

#### The supermarket in the living room

Online commerce is enjoying a greater boom than any other sector. According to the German E-Commerce and Distance Selling Trade Association (bevh), sales in this sector in Germany grew to almost €14 billion in the second quarter of 2017. Throughout Europe, the industry association Ecommerce Europe reported in June 2017 that annual sales for 2016 had reached €530 billion, and forecast growth of 13.6% for this year, to €602 billion.

It is no longer just the traditional items such as books or electronics that are behind the steady growth in online commerce: furniture, lights and decorative items, DIY needs, flowers, and computers, accessories and games together account for about a third of the online market. All this suggests that this rapid growth will continue in the years to come.

#### Well packed for the journey

The need for packaging and labelling solutions that will meet the particular challenges of online commerce and growing consumer expectations is also growing accordingly. After all, manufacturers ship their products worldwide, and often have to assure overnight or same-day delivery.

**Veranstalter  
Organizer**  
NürnbergMesse GmbH  
Messezentrum  
90471 Nürnberg  
Germany  
T +49 9 11 86 06-0  
F +49 9 11 86 06-8228  
fachpack@nuernbergmesse.de  
www.fachpack.de

**Vorsitzender des Aufsichtsrates  
Chairman of the Supervisory Board**  
Dr. Ulrich Maly  
Oberbürgermeister der  
Stadt Nürnberg  
Lord Mayor of the  
City of Nuremberg

**Geschäftsführer  
CEOs**  
Dr. Roland Fleck, Peter Ottmann

**Registergericht  
Registration Number**  
HRB 761 Nürnberg

The packaging solutions used range from the traditional box to posting bags and stylish, customised packaging. Flexible packaging made of PE film is highly rated because of its light weight, and is popular for sending textiles, in particular. Most online orders, however, are still shipped in boxes. Boxes offer the advantage of being suitable for machine handling as well as being quick to fill, and involve a low cost to manufacturers, particularly when purchased in large quantities. They are also stable and thus offer protection for the contents. The fact they can be stacked makes them a preferred option for transport and logistics.

Filling boxes on the packing line makes increasing use of unprinted blank boxes, known as white cartons. These are printed on the packing line, making each box a one-off item. Product manufacturers and sellers benefit from lower purchasing and warehousing costs for the packaging materials this way. In-line printers combined with the appropriate software environment also enable the required customisation.

### **Individual appeal**

A familiar example of successful product customisation is that of muesli mixes, which are put together and dispatched to suit the customer's request. But for contact lenses ordered online, for example, with their varying strengths, the system has to be able to reliably produce and process single-item batches throughout every stage. One of the methods manufacturers use to implement this on the production line is NFC chips. They are fitted to individual components for cars, for example, and contain information about the date of manufacture, cycle time, injection pressure, processing temperature and job data.

Apart from the product itself, the packaging must do more in terms of customer communication than simply be appealing or protect the product. Refined, high-quality sales packaging for products such as spirits, confectionery or cosmetics add value. Producers in these and other consumer areas can achieve higher margins with products and product combinations that are offered on a seasonal basis or structured for a particular occasion. Manufacturers of packaging machines meet these requirements with machines that can be quickly adapted to new product formats. The necessary flexibility is achieved using robot technology, with multifunctional tools and modular machine designs.

### **Packaging that communicates**

Online shoppers expect innovative packaging solutions with smart features in terms of visual appeal, convenience and sustainability. The overall “smart package” increasingly includes the option of automatically re-ordering products. That makes it increasingly attractive to order foodstuffs for home delivery or supply to central packing locations, which retailers are now providing at railway stations, for example.

These latest developments are implemented using the “Internet of Things” by merging the packaging with the product and with smart technologies. The result is “smart” packaging, which makes use of solutions like QR codes in combination with the appropriate additional products and services via the Internet. In the case of foods of animal origin, for example, manufacturers link to online content that provides a description of the ingredients, detailed information about the producers or individual farmers, and ideas for recipes. By linking to Internet platforms, pharmaceutical manufacturers provide useful tips about their product and how to use it. Packaging also assumes an interactive role through the use of codes or augmented reality features, which are applied using the latest labelling technology and can be accessed via Smartphone.

Two-dimensional codes are on the advance in this area. They encrypt a vast amount of data in a small space and satisfy statutory labelling obligations. The quality of the codes in such cases depends greatly on the use of state-of-the-art printing systems. For these tasks, suppliers offer solutions such as continuous inkjet printers, which are capable of applying the required data (e.g. use-by dates) on the production line in clearly readable form at the required sizes, and at high speed. And smart codes are also indispensable in intralogistics, for proof of origin and as protection against counterfeiting.

### **Nothing beats the original**

Counterfeit brands pose a challenge to the healthcare and pharmaceutical industries, in addition to the beauty industry, and this challenge is exacerbated by online shopping. Help with this difficult situation is provided by the use of 2D codes, which ensure comprehensive and consistent package labelling. Delegated Regulation (EU) 2016/161 on protection against counterfeiting of prescription medicines is currently pending implementation, and is expected to become mandatory in all EU Member

States during 2018. It will involve a combination of serial numbering and anti-tampering devices.

Systems for customisation and unique identification to ensure complete traceability and serve as proof of originality require a clever combination of manufacturing and packaging processes, as well as the appropriate labelling technology.

Providers of packaging solutions have developed the appropriate solutions to deal with these requirements: from serial coding of labels, to adhesive labels with digital printing and originality seals, experienced manufacturers now offer complete packages and advise customers on how to implement the legislative requirements.

These technological developments and highly sophisticated purchasing behaviour constantly demand new solutions, and will surely continue to ensure fascinating responses from the packaging and labelling industry. One thing is certain: online commerce is here to stay. The latest innovations from the European packaging and labelling industry will be on show at FachPack, to be held at the exhibition venue in Nuremberg from 25 to 27 September 2018.

### **About FachPack**

FachPack is the European trade fair for packaging, processing and technology. With its extensive range of products and services relating to the packaging process chain for industrial and customer goods, the event will be held in a compact three-day programme running from 25 to 27 September 2018. FachPack is fresher, stronger and has a higher profile with its new brand identity “Tomorrow begins when you create it”. It will be just as solution-oriented, specific, reliable and pragmatic as ever. With a unique portfolio made up of packaging materials, packaging accessories, packaging materials, labelling and marking technology, peripheral packaging machinery and equipment, packaging printing and finishing, intra-logistics and packaging logistics and services for the packaging industry, FachPack is the meeting place for the European packaging market. It draws trade visitors from all packaging-intensive sectors: food and beverages, pharmaceuticals and medical technology, cosmetics, chemicals, automotive and other consumer and industrial goods.

**[www.fachpack.de](http://www.fachpack.de)**

**Press and media contacts**

Stefanie Dietz, Jasmin McNally

T 49 9 11. 86 06-85 21

F 49 9 11. 86 06-12 85 21

jasmin.mcnally@nuernbergmesse.de

All press releases and more detailed information and photos are available  
from: **[www.fachpack.de/press](http://www.fachpack.de/press)**