



**PACKAGING 5.0**

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**EVERYTHING THAT YOU NEED TO KNOW  
ABOUT PACKAGING IN E-COMMERCE**

## PACKAGING 5.0 -

# EVERYTHING THAT YOU NEED TO KNOW ABOUT PACKAGING IN E-COMMERCE

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Whether you are a large or small company, a start-up or a long-established company, with a great deal of or very little prior knowledge – our e-book provides every reader with various facts and information on many different fields of knowledge relating to the important topic of e-commerce packaging.

## OUR E-BOOK CONTAINS THE FOLLOWING:

- Extensive basic information about the topic of packaging – from materials to functions to printing
- Special packaging requirements in e-commerce – and new solutions
- The marketing benefits of your packaging
- Numerous practical examples and clear illustrations
- Tip and tricks for you to put into practice
- Useful checklists for implementation





## E-COMMERCE BOOM AND DIGITALISATION

### PACKAGING 5.0

Digitalisation has for a long time been triggering one innovative wave after another – from Web 2.0 to the Internet of Things and Industry 4.0. And it is far from reaching the end of its revolutionary power. It has also pushed the area of packaging to take a major step forwards: Packaging 5.0 is the answer to the changes in society that are associated with the e-commerce boom and digitalisation – both regarding consumer behaviour and a wide variety of industrial sectors. Packaging 5.0 is creative, with almost limitless design possibilities, sustainable and characterised strongly by modern paper-based material compositions. At the same time, it is easy to handle, making it cost-effective and fit for the future. This means that companies can already use next generation packaging and benefit from its advantages today.



### VDW study\*: Looking ahead to the future

Starting with mega trends – which we could also refer to as meta trends – not only is society and the economy currently changing, so too is the way in which the customers tick and processes work in the consumer business, in commerce and especially in online commerce. Overriding trends and development drivers in this area include sustainability in all markets and corporate divisions, the digital interlinking of products, processes and other elements within the supply chain, the dynamism and globalisation of markets, along with the increasing personalisation of the purchasing experience.

These trends both influence and fuel each other. The economy in general, the various sectors and the individual companies must find a suitable response to these issues – solutions that are more transparent, faster, automated, customer-specific, flexible and cover the entire supply chain. Where packaging is concerned, this means enhancing its basic functions (see Section 1): From product protection and information transfer to the creation of a supply chain which is superordinate to the pure goods flow (see Section 2) through to image cultivation and emotionalisation (see Section 3). As a result, according to the summary of the VDW study, the packaging of the future must be reliable, sustainable and intelligent, as well as customer-specific and emotional.



\* The "Supply Chain 2025" study was published in 2015 by the German Zukunftsinstitut think tank and was commissioned by the Verband der Wellpappen-Industrie e.V. (VDW) (German association of the cardboard packaging industry), of which Schumacher Packaging is also a member, and is available to download free of charge at: <https://www.zukunftsinstitut.de/artikel/vdw-supply-chain-2025/>.



## SECTION 1

### THE ROLE OF PACKAGING IN ONLINE COMMERCE

- > E-COMMERCE PACKAGING - THE BASICS
- > DIVERSE FUNCTIONS OF THE PACKAGING
- > FILM, PAPER OR CARDBOARD? - DECIDING ON THE MATERIAL
- > PACKAGING TYPES ACCORDING TO LEVEL OF AUTOMATION
- > UNDER PRESSURE WITH REGARDS TO PRINTABILITY?





## THE ROLE OF PACKAGING IN ONLINE COMMERCE

### E-COMMERCE PACKAGING - THE BASICS

Every day, millions of packages in Germany make the journey from an online shop to a customer. Without packaging – whatever form it takes – this would not be possible and online commerce itself would be inconceivable. There are four important aspects to consider when selecting the right packaging:

- **The packaging material**
- **The level of automation during manufacturing**
- **The printing requirements**
- **The function of the packaging.**

## INTRODUCTION

### FROM A LOGISTICAL NECESSITY TO A PROMISING MARKETING TOOL

#### Dispatch vs. product packaging

Online commerce is booming worldwide. In Germany alone, e-commerce sales have tripled<sup>1</sup> in the past ten years. However, many online retailers continue to underestimate how important having the correct packaging is to ensuring sustainable business success. After all, one thing is indisputable:

**"There is no e-commerce without packaging."**

The requirements for packaging in online commerce are growing. From the highest possible efficiency and sustainability in the supply chain, to increasingly popular logistics trends such as bicycle couriers and delivery drones, through to "last mile" delivery and the all-important marketing purpose vis-à-vis the customer – all this is resulting in new demands. And as for the dispatched goods, the e-commerce motto "just in time" also applies to packaging: Available quickly, packaged simply, delivered as required.

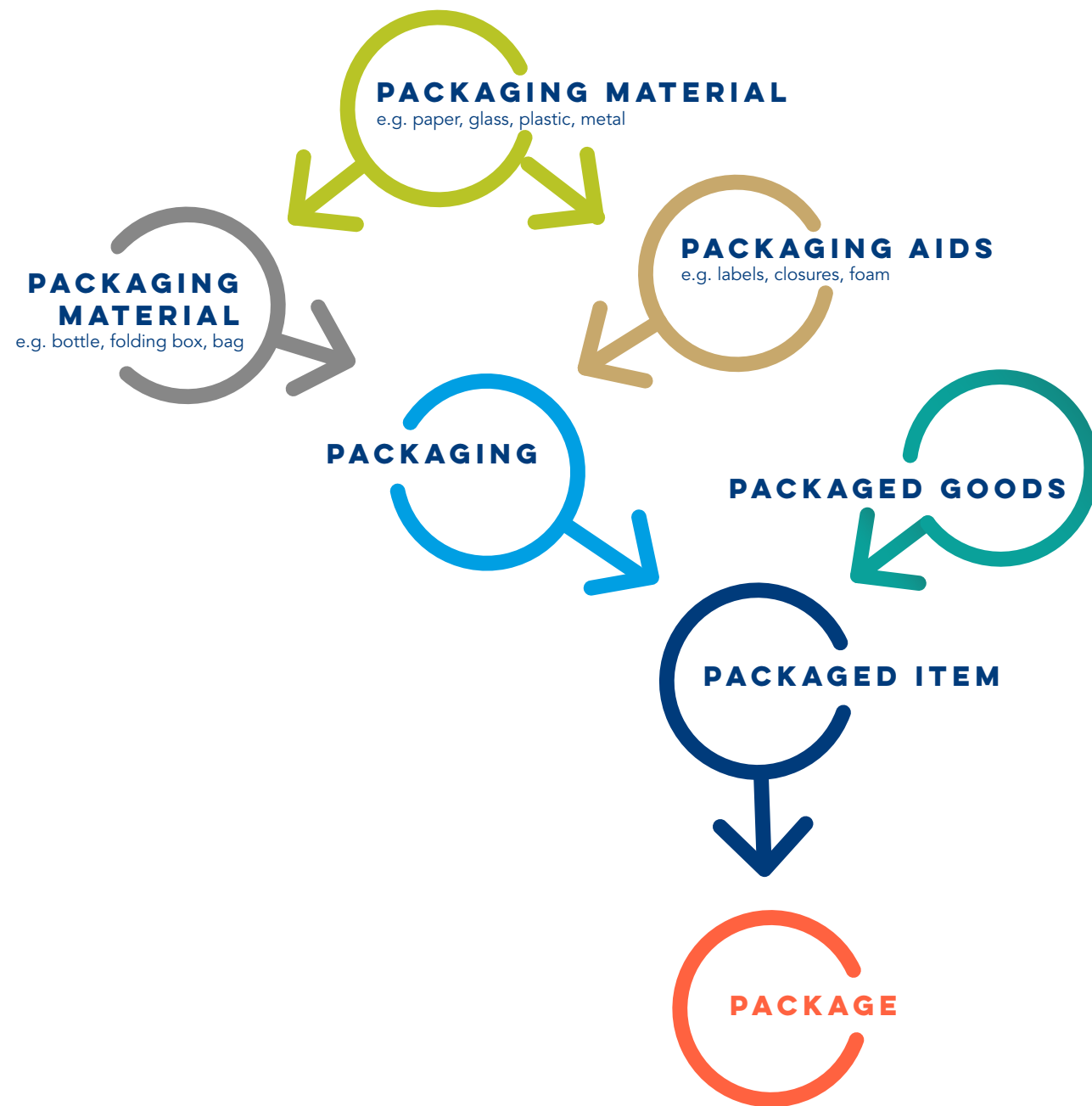


<sup>1</sup> <http://www.einzelhandel.de/index.php/presse/zahlenfaktengrafiken/item/110185-e-commerce-umsaetze>.

#### What exactly is packaging?

DIN 55405 specifically sets out what is understood by the term "packaging". In addition to the physical packaging enclosing a product – i.e. the material protecting the goods for transportation or storage purposes, or relating to marketing – the term "packaging" also refers to the unit comprising the packaging container (e.g. a carton or folding box), the packaging material (e.g. corrugated board) and packaging aids (e.g. adhesive tape, filling material and labels). Goods which are placed in the packaging are referred to as packaged goods. By packing the packaged goods in the packaging, a packaged item is created (= the goods and the product packaging). Only when this is packed into a transport or shipping unit is this referred to as the package (= the goods and their dispatch packaging), which may comprise multiple packaged items or multiple packaged goods.





## FROM THE PACKAGING MATERIAL TO THE PACKAGE

Image source: Schumacher Packaging

### Dispatch vs. product packaging

A distinction can generally be made in e-commerce between product and dispatch packaging. This refers either to the product's sales packaging, as well as that on the shop shelves, or the packaging in which the product is placed (including any product or sales packaging) for transportation to the customer. In special cases – for example when shipping magazines (film packaging) – the product and the dispatch packaging are, however, identical. Here, the address

information is simply added as a label or using a delivery note adhered to the paper envelope or film cover. However, as a general rule, online retailers (as well as manufacturers with their own online shop) need dispatch or transport packaging in order to transport and deliver their goods to the customer. Therefore:

**"E-commerce packaging generally refers to dispatch or transport packaging."**



**Special feature: E-commerce packaging**

The special feature of dispatch packaging in on-line commerce is that selection of suitable packaging primarily depends on its function. Here, the unboxing experience, the influence on post-purchase decisions, sustainability requirements,

ease of returns, product variety, protection requirements and much more play a role. In turn, all these requirements have an impact on the material used, the required level of automation and the printing of the packaging.

**"E-commerce packaging must be based on its function."**

This sets out the key selection criteria. Bear in mind: The weighting of special requirements which are laid down by the corresponding corporate divisions such as marketing and logistics can, under certain circumstances, also be used to attribute packaging costs to the individual departments.



**SECTION 1: THE ROLE OF PACKAGING IN ONLINE COMMERCE**

**DIVERSE FUNCTIONS OF THE PACKAGING**

The packaging used to dispatch items ordered online needs to fulfil a large number of functions. This primarily includes physical functions such as protecting the goods contained therein and meeting requirements with regards to the storage and transportation of packaging and of the finished package. However, for online commerce in particular, the marketing, information and guarantee purpose of packaging also plays an important role.



**Protective function**

Packaging must protect its contents from being lost and/or stolen as well as from dirt, damage and destruction. The aim is to retain the practical value of the packed product. To do this, the packaging must be able to withstand the mechanical and climatic influences (e.g. frictional, pressure and impact forces, along with temperature changes, solar radiation and moisture) both in the packaging, transport and loading processes and during storage. Sometimes it is also necessary to protect the environment and people from any adverse influences by the content – not least including hazardous goods.



### Transport function

The protective function is closely related to the transport function: The size and shape of the packaging, the quantity of the goods contained therein and the use of packaging aids must meet protection as well as handling requirements. The latter primarily requires the packaged items and packages to be easy and secure to grip, as well as to be easy to move, stack and store. This makes transportation safe, effective and efficient. Of course this requires the packages to enable comfortable handling thanks to their shape and stability.

Another aspect which needs to be taken into consideration with regards to the transport function of packaging is the formation of loading units and corresponding dosing and/or removal options – for example, orientated to the dimensions and load-bearing capacity of standardised transport pallets.

In online commerce, packages are generally loaded manually. E-commerce packaging should therefore make manual handling as easy as possible.




### Information function

Packaging is also always used to convey information about the product and/or handling. On product packaging, this includes details regarding the goods contained in the packaging and the composition thereof, e.g. nutritional values, filling capacities, dosing information, etc. This is in accordance with the legitimate consumer question: "What is actually in this?" On dispatch packaging, the printed information also relates to the content, but is generally used to provide information for transportation, such as information pointing out it is fragile or "This side up" markings.

### Sales and marketing function

In terms of the sales and marketing function of packaging, a distinction must again be made between product and dispatch packaging. On product packaging, the design and information on it plays an important role by initially enabling the sales process and/or positively influencing it. With dispatch packaging, which is more relevant in e-commerce, and which under some circumstances also contains different types of goods, the requirement was also to use the packaging for advertising and sales purposes, although this has for a long time been second to the protective and transport function. However, these days, this marketing aspect is becoming increasingly important: How can the moment at which the package is received and unboxed be made to be as attractive as possible? How can the packaging have a positive impact on the post-purchase phase?

 Answers to these questions and many others relating to the marketing function of the packaging can be found in Section 3 from page 54 onwards.



### Storage function

If packaged items or packages are not being loaded or transported, they are usually in storage. In such cases, both stackability and static loading capacity is required. In addition, the online retailer must store the packaging before it is filled, along with packaging materials, packaging containers and packaging aids. However, because storage processes always incur costs, the packaging must be stored such that it takes up as little space as possible and so that it can be ready to use quickly.



### Service function

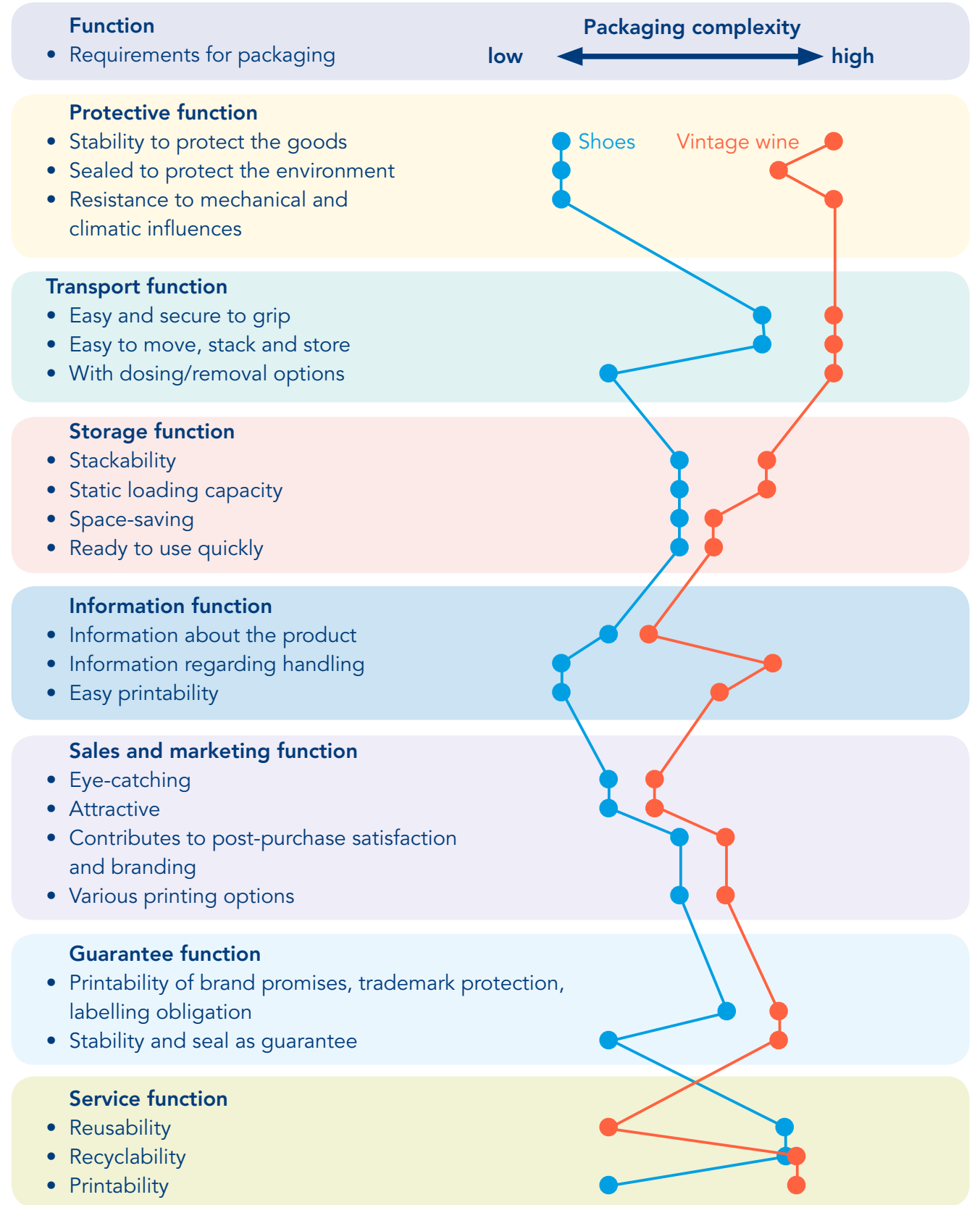
To what extent does the packaging act as a service? In addition to the basic requirements for storage, transport and handling, ease of erecting, opening and filling of packaging is also an important function. Further handling of the packaging is also relevant – whether for the purpose of easy returns or storage, e.g. of a toy, or for easy recycling of packaging materials, packaging containers and packaging aids. Consumers' growing awareness of sustainability plays an important role here.



### Guarantee function

The guarantee function is a special form of information function which predominantly relates to product packaging. Fully intact and undamaged, sales packaging provides a guarantee from the manufacturer that the packaging contains what is specified on the outside. Thus the product packaging forms the basis for the brand promise, trademark and consumer protection as well as product liability. This also includes statutory provisions (e.g. German Youth Protection Act [Jugendschutzgesetz] or the German Ordinance on Foodstuffs [Lebensmittelverordnung]) which require the type, composition, shelf life, etc. of the products to be marked on the packaging. However, dispatch packaging may also be subject to a labelling obligation. And defects in the dispatch packaging entitle customers to returns and the reimbursement of costs if the goods contained therein have been damaged or become lost as a result.

With dispatch packaging, which is of key importance for e-commerce, the content determines the complexity of the requirements for the packaging. Fragile products must be packed particularly securely, high-quality goods must be packed in theft-proof packaging, etc. The following example illustrates the relation between the product and the packaging complexity.



The more complex and extensive the range of functions to be met, the more complex the packaging: Robust products such as clothing and shoes (provided they are not part of an upscale brand range) require less protection and less information to be conveyed than exclusive vintage wines, for example. With these items, the packaging is significantly more complex. The diagram illustrates how the required packaging functions impact the complexity of the packaging for the product group of shoes or vintage wines respectively.





## SECTION 1: THE ROLE OF PACKAGING IN ONLINE COMMERCE

### FILM, PAPER OR CARDBOARD? - DECIDING ON THE MATERIAL

Online retailers must consider what material their e-commerce packaging should be made of depending on which items are being dispatched and what functions are required of the packaging.

#### Anti-theft protection: How can the packaging contribute to this?

When shipping high-value goods such as perfumes, jewellery or electronic devices, the security of the product is particularly important. If the goods are not received by the recipient, or if the goods are incomplete, this not only results in financial loss for the sender, but also a loss of confidence amongst their customers, who may subsequently order from another provider. The outer seal of the packaging is a guarantee to the recipient that their package has not been opened en route. In addition, adhesive closures make it harder for criminals to open packages and remove goods.

However, with exported goods, adhesive closures can be a disadvantage if the post office or customs need to inspect the package. Packaging that is difficult to open is also not convenient for the recipient. For this reason, there should always be a balance between handling and convenience on the one hand and the protection of goods on the other. However, online retailers can secure the packaging not only by closing and sealing it sufficiently, but also by making it look as inconspicuous as possible, for example by anonymising the sender and omitting the advertising imprint. As a result, the packaging gives no indication that it contains goods of a particularly high value. The less incentive there is for the packaging to be stolen, the more likely it is that it will arrive at the customer safely.



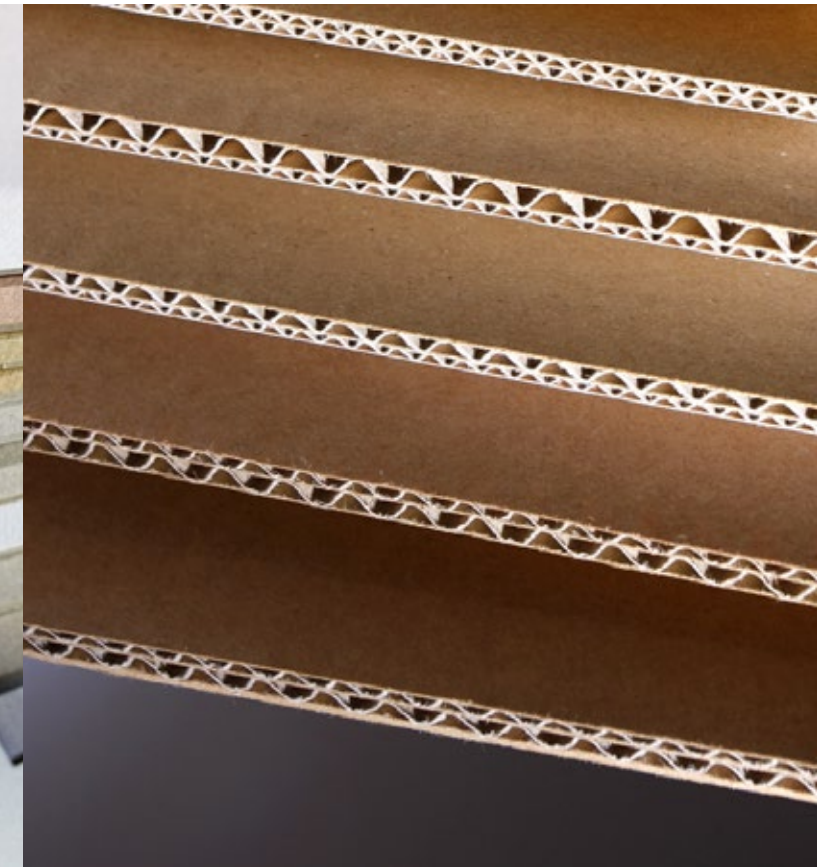
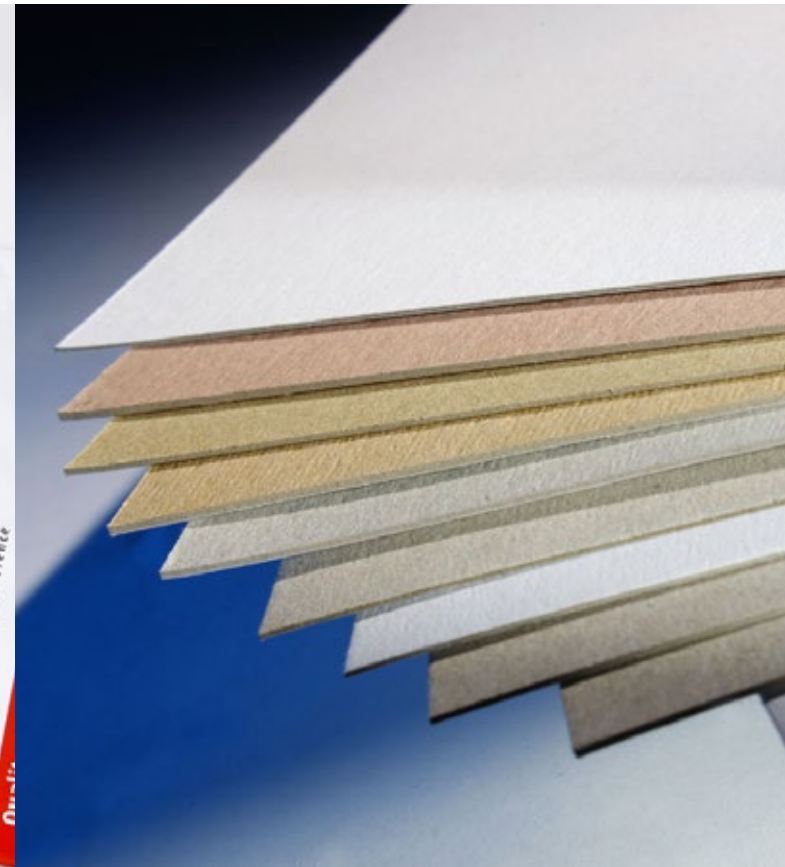
However, you can find out how packaging can meet your marketing needs anyway in Section 3 from page 54 onwards.





### Film packaging

Online retailers like to use soft film packaging for clothing. This is ideal for most items made from fabric, i.e. content which is flexible and has little need for protection. However, film packaging is not ideal for products with special protection requirements, e.g. those which must not be bent, broken or deformed. Nevertheless, plastic bags and film packaging keep the packed product clean, are lightweight, take up very little space and are cost-effective for the retailer. The disadvantage is that they are difficult to stack, they attract dust (via electrostatic attraction) and, under certain circumstances, make imprints and labels harder to read. In terms of sustainability, film packaging does not score well as it has mineral oil as its raw material. Customers therefore consider film material and the costly recycling associated with it as a largely negative aspect.



### Paper packaging

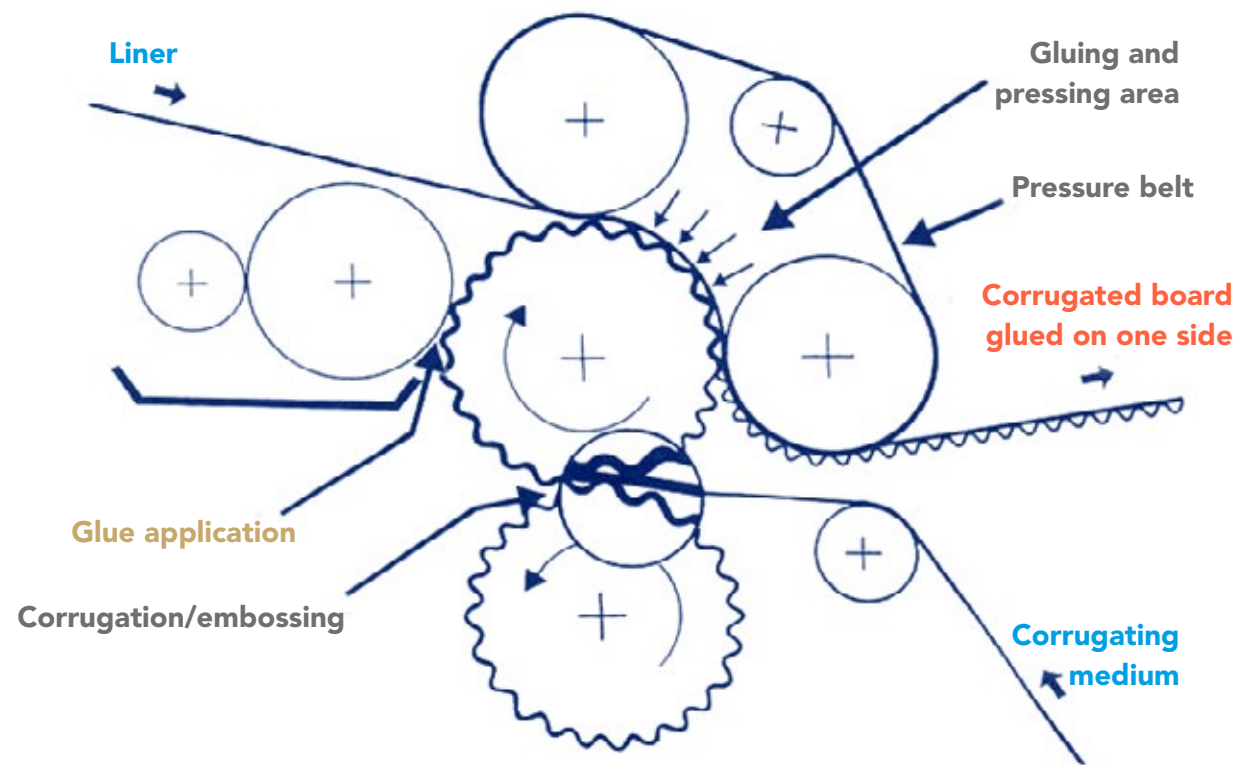
Simple paper packaging, such as a paper envelope, offer a cost-effective and lightweight alternative to film packaging, particularly for flat, robust goods. Paper is also environmentally friendly and requires less space in packaging warehouses. However, paper dispatch packaging does not have a protective buffering effect on the product (even if it is in its own product packaging). For transport and storage, the stackability then depends on the product packaging and for returns, paper packaging can barely ever be reused.

### What is the difference between paper, paperboard, corrugated and solid board?

Generally speaking, paper, paperboard and board raw or packaging materials are manufactured from similar basic materials and using similar processes. They are distinguished by their grammage and/or mass per unit area. According to DIN 6730, paper is defined as 7 g/m<sup>2</sup> to 225 g/m<sup>2</sup> and board from 225 g/m<sup>2</sup>. According to EU standards, the term "paperboard" does not exist, but broadly speaking paperboard is a thicker kind of paper which is pressed or couched (= layered whilst wet) in the same way to solid board from multiple paper webs or which is glued. With a mass per unit area of around 150 to 600 g/m<sup>2</sup>, paperboard is between paper and board. In Germany, the following differentiation has therefore become widespread: Paper has a grammage of 7 g/m<sup>2</sup> to 150 g/m<sup>2</sup>, paperboard of 150 g/m<sup>2</sup> to 600 g/m<sup>2</sup> and board of over 600 g/m<sup>2</sup>.

The number of flutes in conjunction with the paper composition determines the technical characteristics of the corrugated board, for example in terms of the ease with which it can be pierced or its edge crush resistance as well as its functional features. The corrugated board liners are particularly robust and resistant to tearing, and are easy to print on. Unlike corrugated board, solid board can be couched as one layer or multiple layers or glued in multiple layers. There are no air spaces between the layers as there are with corrugated board, which makes the packaging material particularly solid and dense. It is difficult to compress and has a high resistance to moisture. Due to its smooth and sealed surfaces, solid board offers the same printing options as corrugated board.



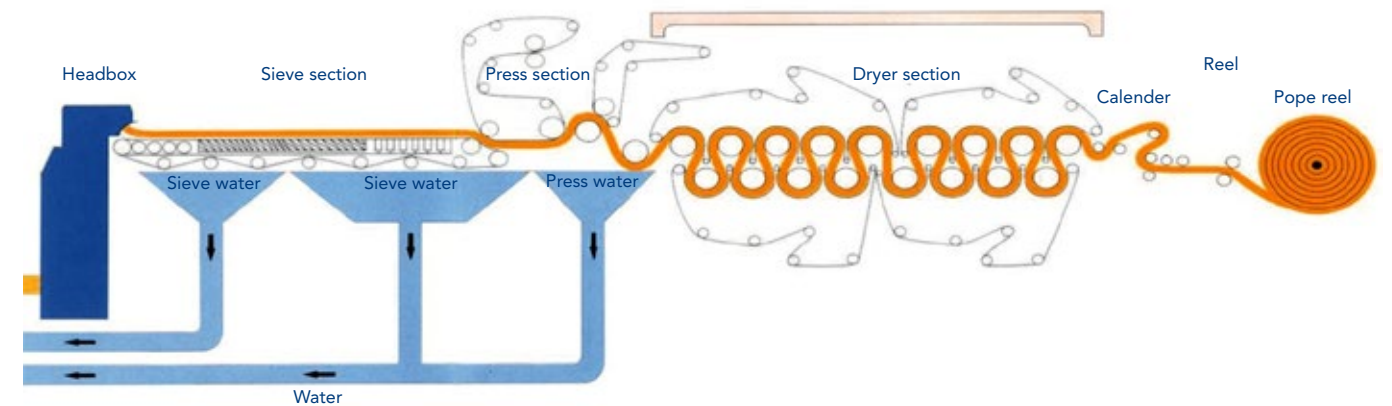


### How is corrugated and solid board produced?

Corrugated board comprises various paper webs made of corrugated paper which are glued to one another: One or more corrugated paper webs – known as the flute – are glued between two smooth paper webs or liners. Corrugated board is made in corrugator machines. Using heat, pressure and moisture, special corrugating rolls give the flute its shape. Then the corrugating medium is glued to a smooth paper web. This one-sided corrugated board can now either be glued to additional layers of one-sided corrugated board or be finished directly with a smooth paper web as the outer cover. Correspondingly, we refer to one-flute, two-flute or three-flute corrugated board. The number of flutes in conjunction with the paper composition determines the technical characteristics of the corrugated board, for example in terms of the ease with which it can be pierced or its edge crush resistance as well as its functional features. The corrugated board liners are particularly robust and resistant to tearing, and are easy to print on.

Solid board or paperboard is made from waste paper and pulp. First, a liquid pulp is produced from the relevant paper types. This is then highly diluted with water and fed over a roll to an endless, continuously moving wire sieve, where most of the water drains away immediately. The fibre fleece left behind is guided between multiple rollers. These push out any remaining water and press the fibres into various calibre thicknesses of 200 g to 1050 g/m<sup>2</sup>. By combining various layers, different board qualities can be achieved. Unlike corrugated board, solid board can be couched as one layer or multiple layers or glued in multiple layers. Unlike corrugated board, there are no air spaces between the layers, which makes the packaging material particularly solid and dense. It is difficult to compress and has a high resistance to moisture. Due to its smooth and sealed surface, solid board offers the same printing options as corrugated board.

### Paper machine



### Packaging made from corrugated and solid board

In e-commerce, dispatch packaging made from paperboard and/or solid/corrugated board is used most frequently. This is because these materials provide a buffer and (dimensional) stability so that the goods contained therein are optimally protected against any mechanical influences during storage and transportation. This means that online retailers can significantly reduce their number of returns due to damaged items. In addition, the corrugated and solid board packaging is relatively low cost and therefore highly cost-effective. Good recyclability is also a real plus due to the economic aspect of disposal and consumer perception.

The topic of sustainability is becoming increasingly important to many consumers (see note on page 24). Furthermore, packaging made from corrugated and solid board offers convenient handling, is easy to stack and can be printed with information or advertising slogans on both the interior and exterior in a number of ways.





### Why is sustainability becoming more and more important with regards to packaging?

Numerous studies show that sustainability is being given increasingly high priority within our society. One important parameter is the CO<sub>2</sub> level or "carbon footprint" as the level contributed by all greenhouse gas emissions throughout the relevant product lifecycle – from material extraction to manufacturing, distribution and use to disposal and/or recycling. This change in values is also having an impact on the requirements being placed on packaging by companies and consumers. For example, in its "ALL4PACK Paris 2016 European Survey", the French market research institute L'ObSoCo established that German consumers generally pay attention to the environmental sustainability of packaging.<sup>2</sup> The EHI Retail Institute, well-known in the German-speaking DACH region (Germany, Austria and Switzerland), also revealed in its study entitled "Versand- und Retourenmanagement im E-Commerce 2014" [Dispatch and returns management in e-commerce 2014] that sustainable packaging can be a decisive factor in creating a positive experience when the ordered goods arrive: Around four out of five consumers (79 percent) considered it important that excess packaging material is disposed of and a good half (51 percent) thought it was important for the packaging to be made of environmentally friendly materials.<sup>3</sup>

**"When choosing their dispatch packaging, online retailers should bear in mind the growing awareness of sustainability."**

Packaging made from corrugated board and paperboard has a major advantage here. It is rightfully regarded as especially sustainable because it is made from renewable resources with a high recycling rate. For corrugated board, this recovery rate is almost 100 percent.

<sup>2</sup> <https://www.all4pack.com/the-show/Previous-sessions/ALL4PACK-Paris-2016/ALL4PACK-Paris-2016-survey/>.

<sup>3</sup> <https://www.ehi.org/de/studien/versand-und-retourenmanagement-im-e-commerce-2014/>.



**Packaging made from corrugated and solid board – a sustainable cycle:** Packaging made from corrugated and solid board comprises naturally derived, renewable raw materials with a correspondingly beneficial carbon footprint. In addition: The recycling rate for used transport packaging is nearly 100 percent in Germany. All paper, corrugated board and paperboard which is thrown away is used to make new packaging. (Image source: Schumacher Packaging)

## SECTION 1: THE ROLE OF PACKAGING IN ONLINE COMMERCE

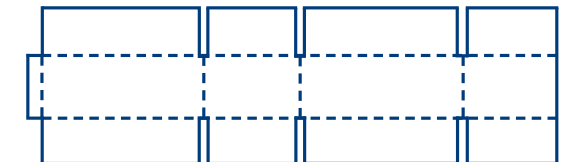
### PACKAGING TYPES

#### ACCORDING TO LEVEL OF AUTOMATION

Alongside the functionality and material used, the packing process also plays an important role when selecting suitable packaging. With boxes and cardboard boxes made from corrugated board, we distinguish between them by their automation level: Are they erected by a machine (automatically) or manually? Filling is generally a manual process.

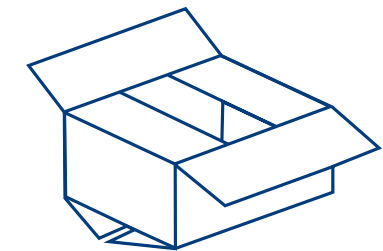
#### MANUAL ERECTING

has the advantage that capacities can be made dynamic and peak requirements are easier to absorb.



#### 0201 American Box

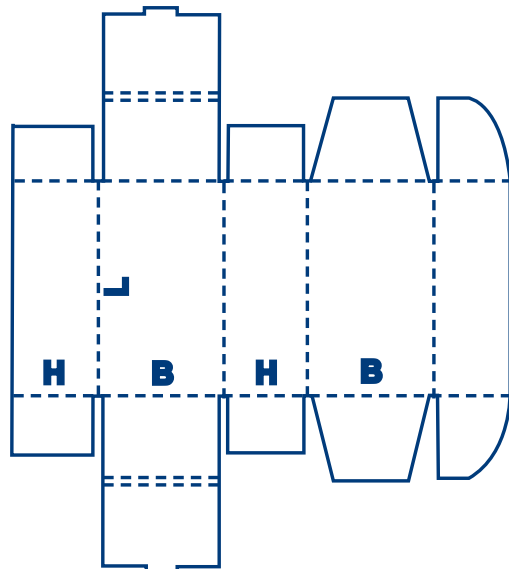
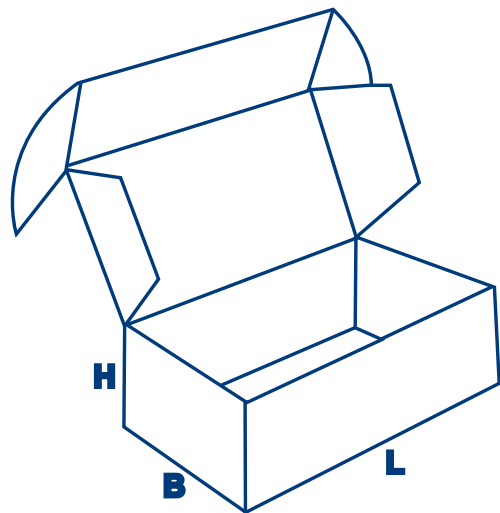
The simple 0201 folding box with outer flaps that all close in together is particularly cost-effective but time-consuming to erect.





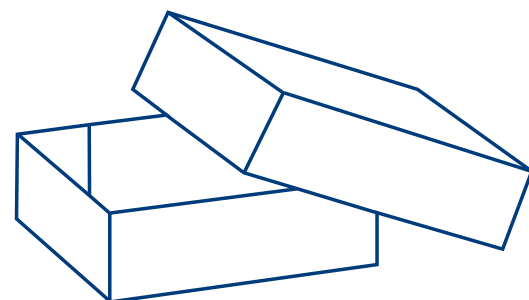
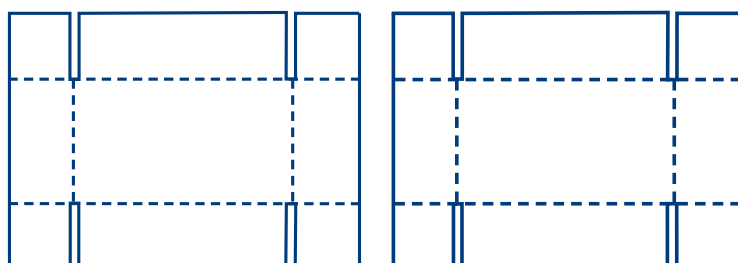
**Self-adhesive packaging with tear strips**

Self-adhesive packaging is easy to erect and flexible and quick to seal, but is slightly more expensive.



**Telescope-type box or four-point tray**

The telescope-type box always comprises at least two parts: Although this makes manual handling more difficult, the packaging is easy to fill and the design allows sufficient flexibility regarding the height of the packaging – depending on the extent to which the lid and the base overlap.



**AUTOMATIC ERECTING**

has a static capacity and is therefore suitable for the general basic load of packaging. Automation is quick and separates erecting from filling, which makes the packing process more efficient, but also restricts flexibility. After all, every automatic erecting system is fixed to the relevant size of the packaging.

**Automated gluing process**

With folding boxes such as the 0201 American Box and telescope-type boxes, pre-glued packaging makes the manual filling and/or packing process must simpler.

**Tray erectors**

Tray erectors make the packing process easier because then the boxes only need to be filled and sealed.

**Special/fanfold designs**

With special fanfold designs, packaging can vary in size. This offers maximum flexibility at a higher cost.





### What is fanfold corrugated board?


In e-commerce in particular, a fast and smooth packing process is a key factor for success. Online retailers are increasingly faced with the challenge of having to pack items of different sizes. This requires special packaging which can often only be ordered in specific quantities and then also needs to be stored accordingly. Fanfold corrugated board offers an efficient and flexible solution – one type of packaging for all products. Fanfold corrugated board is pre-scored, which not only means that it can be easily manually folded and packed around an item, but that it can also be used in packaging machines and on conveyor belts. It is stored in a zigzag fold on a pallet so that a packer only takes as much board as they need in each case.

Traditionally, this type of corrugated board is useful for packaging requirements in the furniture industry and for large bulky goods, although it is increasing in popularity in e-commerce. Instead of having to send orders in often oversized cartons in standard sizes, packaging can be individually made from fanfold corrugated board to match requirements and sizes. This means that goods are not only packaged more handily, but the customised packaging offers better protection and saves a great deal of padding and, ultimately, space and money.

## SECTION 1: THE ROLE OF PACKAGING IN ONLINE COMMERCE

### UNDER PRESSURE WITH REGARDS TO PRINTABILITY?

Beyond the material-specific grey, brown and white, packaging can be designed in various ways thanks to different printing techniques. Selecting a suitable printing process is often a real headache for online retailers. However, making the correct decision always depends on specific individual requirements – primarily the information, marketing and guarantee function of the packaging. What needs to be on the packaging? How should the packaging look?

 Answers to these questions and many others relating to the marketing function of the packaging can be found in Section 3, page 54.



### Flexo printing

Flexo printing is a high-pressure process whereby a distinction is made between printing elements which are raised and non-printing elements which are lower.

The water-based, low migration ink is applied using a roller to the raised areas of the printing plates which, in turn, transfer the print image to the packaging. These printing plates are generally long-life polymer clichés which last for several hundred thousand printing jobs. Depending on the fineness of the raster lines, the pixels of different sizes and colours create a corresponding print image.

With flexo printing, either the liner of the corrugated board can be printed first and then further processed, which is known as the pre-print

method, or printing can be carried out directly on the finished corrugated board using the post-print method, whereby printing and punching are possible "inline" in one work step. However, the print image can, under some circumstances, create an undesirable "washboard effect". In general, flexo printing reaches its limits at high-resolution print images, fine lines and intricate fonts. Nevertheless, due to its short pre-printing time and low costs, direct flexo printing is well suited for small and medium runs as well as for large series runs.



## OFFSET PRINTING



### Offset printing

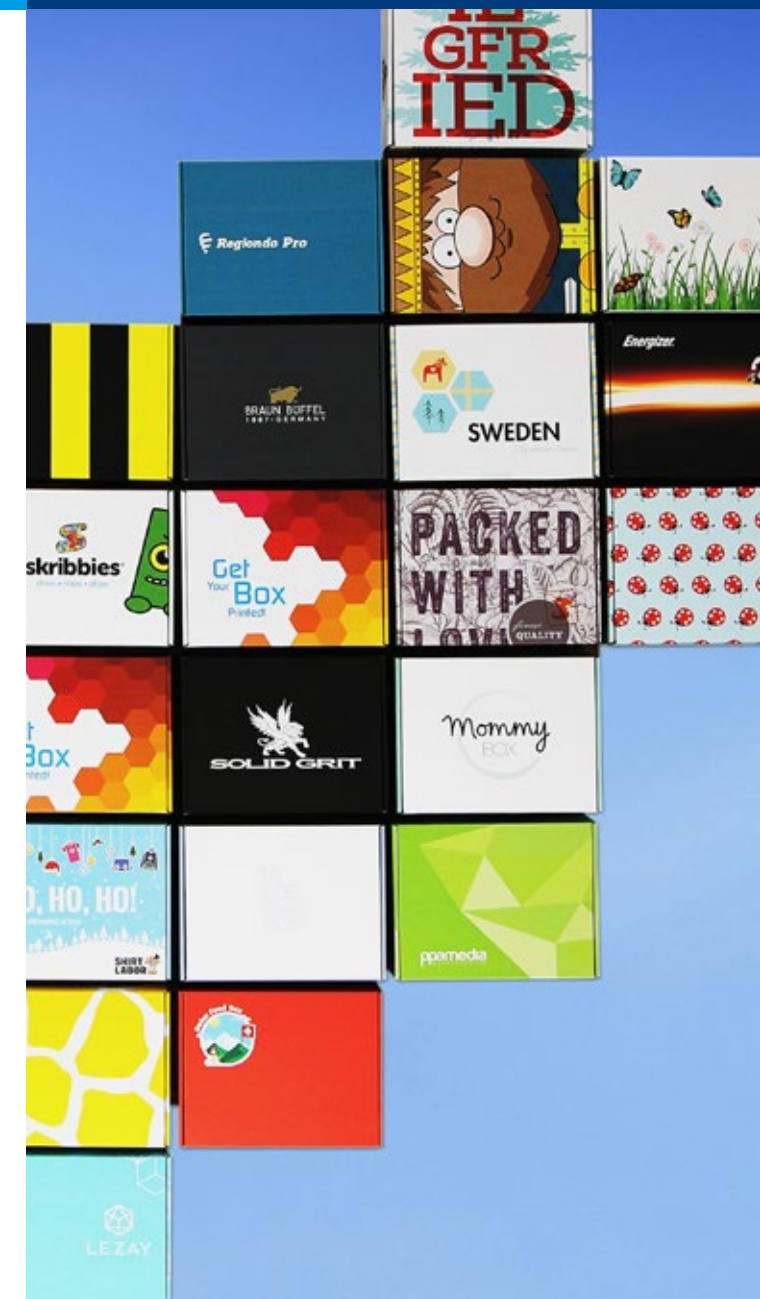
The offset method is a flat printing process. This means that printing and non-printing elements are positioned on the same level. While printing elements absorb the print ink and release it again, non-printing elements are treated so that they do not absorb any ink. For the most part, the process involves printing on a liner in order to subsequently press it onto a sheet of corrugated board (pre-print method). Although the printing plates in offset printing are less expensive than those for flexo printing, under some circumstances, the additional work steps of pre-printing increase the unit costs compared with direct flexo printing and the process takes longer overall. However, this method is far more suitable for high quality requirements, such as multicolour printing, high gloss effects and the finest and high resolution rasters and colour gradients. Conventional inks which normally dry in the air, UV inks which are dried using UV radiation and a hybrid form of the two which also dries under UV light are used here.



### Digital printing

Unlike with offset and flexo printing, digital printing does not require any printing plates or clichés, and therefore no solvents. This protects the environment, minimises the rejection rate, significantly shortens the time-to-market and saves on production and storage costs. Almost entirely without any lead time and initial printing costs, each individual sheet can be printed separately using a digital print image. This makes it possible to split large print runs into a number of sub-series so that the packaging can be produced, categorised and customised according to individual requirements, regardless of whether this is specific to regions, seasons, events, campaigns or customers. In addition, the print image fulfils every requirement and, in virtually offset quality, will impress on all liners, even on single face corrugated board.

## DIGITAL PRINTING





## ENHANCEMENTS



# DIGITALER WANDEL

### Attractive and sophisticated: Additional options for packaging design

In addition to conventional printing methods, there are other ways in which packaging can be enhanced, such as coating and embossing. Various coatings can be applied across the entire surface or just to certain parts of the packaging (spot coating). In offset printing, by using photopolymer plates, even text, logos and fonts can be printed using metallic paints. Embossing can be applied using hot or cold foils, or created as a matrix and patrix pattern (similar to the method used in a type foundry) using a blind embossing process. In digital printing, high-gloss print images can be applied to packaging via certain highlights in the colour – and entirely without paint.

### The digital revolution applies in the area of packaging printing too

The fact that digital technology is now also being used in the packaging industry is an indication of the social and economic changes occurring in the digital age. In e-commerce in particular, just-in-time requirements, the required reduction in storage costs, high competitive pressure and the increase in demand for small, customised and/or series print runs are responsible for the breakthrough of digital printing. This is because it allows packaging to be printed more cost-effectively and with more flexibility than with conventional methods whilst producing printing results of the same or even higher quality. While the pre-print stage for all printing processes has already been digitalised and now only works with computer technology, digital printing is still in the development phase. Offset and flex printing methods currently dominate the sector, but a significant change is expected over the next few years. This is because digitalisation is changing the demands customers and consumers are placing on packaging and their – customised – design: Digital printing is also the most promising solution for the packaging sector in terms of mass-volume production.





***"Before online retailers decide on a printing method, they should weigh up the advantages and disadvantages of the different technologies according to their individual requirements."***

#### **Selecting the right process**

Many aspects play a part in selecting the optimum printing process. Under some circumstances, unit and cliché costs can be about the same for small print runs using offset and flexo printing, while they are non-existent with digital printing. Another important factor is how quickly the packaging can be printed: With direct flexo printing, the finished packaging is likely to be ready earlier than with two-stage offset printing. With digital printing, the lead time is reduced even further, which might be a key aspect for an e-commerce campaign. The size of the packaging must also be taken into account, because offset, flexo and digital printing machines process different maximum sheet widths.

Last but not least, the required print image is of course another criteria to consider: Here, digital printing is only just behind offset printing, while flexo-printed packaging does not achieve high-resolution quality. However, this also depends on the packaging liners. While in offset and flexo printing clear differences can be seen between uncoated (absorptive) papers and coated papers, the print results for digital printing remain at virtually the same high quality in both cases.



#### **TO SUMMARISE**

- It is recommended that packaging in e-commerce is always developed based on its function.
- E-commerce packaging fulfils functions such as protecting the goods and the environment, transport and storage, sales and advertising as well as service, guarantee and information.
- The difference between paper, paperboard, corrugated and solid board is determined using the grammage in g/m<sup>2</sup>. In online commerce, packaging made from corrugated board is particularly popular due its properties.
- Sustainability plays an important role in e-commerce packaging, which is why the entire material flow should be made as environmentally friendly as possible.
- The selection of packaging depends on the functions, the material as well as on handling. The packing process changes depending on how the packaging is assembled and filled and whether it is erected manually or automatically.
- Fanfold corrugated board is a cost-effective option for individually packing items of different dimensions.
- Packaging can be enhanced using special foils and coatings. More often, however, they are printed using offset, flexo or digital printing methods. Future requirements relating to quality, flexibility and customisation are most likely to be met by digital printing.





## SECTION 2

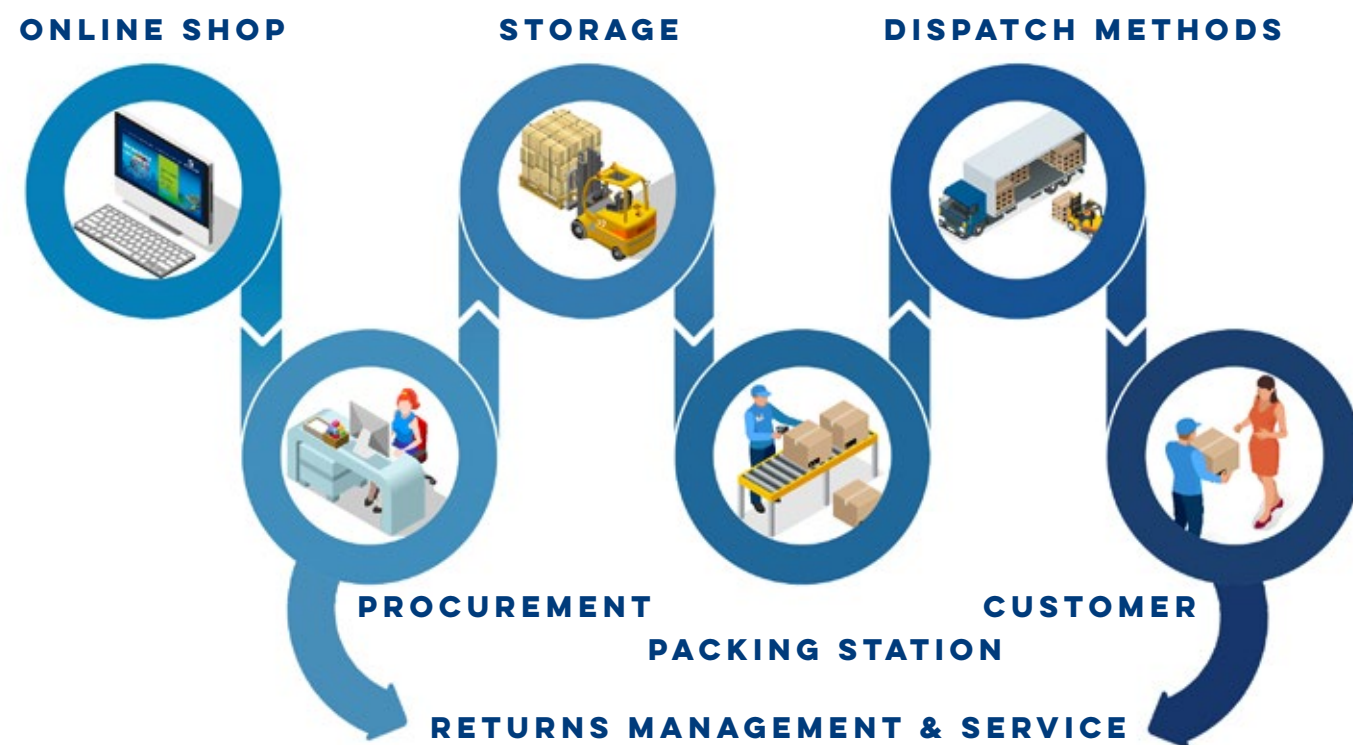
### PACKAGING IN THE E-COMMERCE SUPPLY CHAIN

- > PACK IT WELL AND YOU'RE HALF WAY TO DELIVERY
- > PACKAGING AS AN IMPORTANT FACTOR IN THE SUPPLY CHAIN
- > ON THE WAY TOWARDS CUSTOMISED PACKAGING
- > CHOOSING THE RIGHT PACKAGING PARTNER
- > CHECKLIST

**SECTION 2: PACKAGING IN THE E-COMMERCE SUPPLY CHAIN**

**PACK IT WELL AND YOU'RE HALF WAY TO DELIVERY**

With the growing demands of customers to have virtually every conceivable item delivered to their home as quickly as possible and at the desired time, the logistics requirements for online companies are also increasing – from procurement and storage to packing and dispatch through to returns management and service.



**Packaging in the e-commerce supply chain:** From procurement and storage to packing and dispatch through to returns – packaging is a key factor in the supply chain and has a corresponding influence in online commerce.

**Conflict of targets for e-commerce logistics**

New sales concepts, such as multichannel, crosschannel and omnichannel, are also presenting new challenges along the supply chain. The customer wants to be able to collect their goods from the shop or have them delivered to their home. For established online retailers in particular, this requires a complete reorganisation of the logistics chain. This means that the company has to deal with a conflict between

flexibility and rapidity in delivery on the one hand and having the necessary but costly storage facilities on the other. As a result, the online shop operator not only needs to offer attractive products, but also optimally manage the various processes of procurement, packaging, storage, putting together shipments and dispatch.

**SECTION 2: PACKAGING IN THE E-COMMERCE SUPPLY CHAIN**

**PACKAGING AS AN IMPORTANT FACTOR IN THE SUPPLY CHAIN**

The aim of any supply chain management system is to create added value in general: To increase customer satisfaction, optimise inventories and processes and to achieve appropriate transparency and cost-effectiveness throughout the entire supply chain. At what point does packaging impact the supply chain?

**Influencing factor: Packaging**

Many companies incorrectly believe that the marketing and sales aspect of packaging should take priority. This may well apply to product packaging which was designed for the point of sale. In e-commerce, however, the purchase decision is initially made without the customer even seeing the product packaging. The point of purchase is the buyer at home. However, the dispatch packaging is the initial physical contact between the consumer and the product or online shop.

Information about the difference between product and dispatch packaging can be found in Section 1.







**C flute**

**B flute**

**B flute packaging reduces the load volume by around 40 percent.**

**Wrap around packaging transportation: Improved transportation, more efficient supply chain**

An online retailer packs the packaging they require for drinks bottles using a wrap around made from corrugated board. Up until now, they have used the C-flute corrugated board classification. The empty packaging would be packed onto a Euro pallet (dimensions: 0.8 m x 1.2 m) in two stacks with a height of 1.8 m and sent to a distribution centre 200 km away. One lorry has 34 allotted spaces for Euro pallets, which allows one lorry load to transport 34,952 packages.

After packaging optimisation, it was however established that the retailer also has the option of using a wrap around made of thinner B-flute board. This is because their packaging product is self-supporting which means there is virtually no chance of the stack being crushed. The outcome of this optimisation is that with the individual packaging at the same height, 412 more packages can be accommodated on one pallet, i.e. 1440 in total. Thus, the same lorry with 34 allotted spaces can now transport 48,960 packing units.

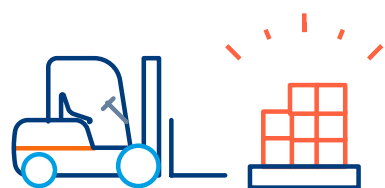
The online retailer needs around 100,000 empty beverage containers per month. Based on a year, the optimisation of their wrap around solution for the pallet, from the C flute to the B flute therefore means a reduction of nine lorries. If we assume that a lorry costs around EUR 450 for a return journey, that is a cost reduction of EUR 4050 per year. This also improves the carbon footprint.



**Savings per year = EUR 4050**

 You can find out why sustainability plays such an important role in the note on page 24.

Another benefit is that the online retailer needs to store fewer pallets, along with the packaging material, in the distribution centre. Where they previously rented 49 allotted spaces for EUR 5 per month, they now only need 35 spaces, thus saving EUR 840 a year – in addition to the EUR 4050 for the lorries. This clearly illustrates the impact that can be made on the supply chain by just a small change in packaging. The result:



**"By choosing the right packaging strategy and optimum packaging, e-commerce companies can create significant added value."**

**Integrating packaging in the supply chain correctly**

When introducing one or more types of packaging for a company's own product range, the first priority is to fulfil the protective function. (You can find detailed information on the functions of packaging in Section 1 on page 13).

If the package, or even the content, arrives at the customer damaged, this also creates a bad impression of the retailer and damages their image. In any event, the packaging is the first physical contact and thus also creates an image-defining link to the online shop. If the customer is annoyed or disappointed as a result of the damage, they are likely to order from another online retailer next time round.

In addition: If the packaging is too large, has too much filling material or is even comprised of different materials, the recipient must dispose of all this themselves with considerable effort. They are then highly unlikely to consider the retailer to be environmentally conscious or sustainable. If you want to impress the recipient, it is recommended that you therefore use packaging of an appropriate size, which can be recycled and which provides the recipient with convenient handling – for example with tear strips and self-adhesive closures for return delivery.

**"Dispatch packaging impacts the protection of the product, along with the handling, storage, transport and costs along the supply chain."**



**Optimised poster roll dispatch:** Instead of sending posters in round cardboard tubes with plastic lids, square cartons (in three different lengths) have been integrated into the supply chain. The result: For a comparable price, it was possible to reduce the storage space required for the packed posters by 50% and to lower the rather high complaint rate as a result of damaged posters due to lids coming off.



With all this intensive customer orientation, we should not forget to take into consideration the costs and benefits in other areas of the supply chain. An online retailer must keep a close eye on their procurement, storage and distribution costs. For this reason, sometimes a type of packaging is more suitable, not because it is the ideal size for the goods, but because it is easier to stack on a pallet, which reduces the logistics costs.

**"Optimum packaging requires a comprehensive look at the entire e-commerce supply chain and weighing up the various cost factors and benefits."**

## SECTION 2: PACKAGING IN THE E-COMMERCE SUPPLY CHAIN

### ON THE WAY TOWARDS CUSTOMISED PACKAGING

In addition to the basic aspects which play a role when selecting or developing e-commerce packaging – such as the various packaging functions and requirements along the supply chain – there are numerous other individual factors.

#### Various requirements for one solution

Every company has specific packaging requirements. And regardless of whether it is a pure online retailer or a company with an additional digital sales channel – the various divisions of the company will have different priorities when it comes to packaging. Purchasing prefers a cost-effective solution. Production (where applicable) looks for packaging which can be seamlessly integrated into the production process. The aim for logistics is to ensure that storage is efficient and to make handling and delivery as convenient as possible. Last but not least, the marketing department requires a packaging solution which reinforces the purchasing incentive at the customer and which conveys a positive image in online commerce. All these factors along the supply chain should be considered when developing suitable customised packaging for e-commerce.



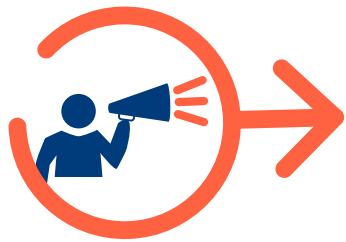
#### From the idea to the finished packaging

The process starts with the idea of a new product or product range, the potential of which is checked using market analyses. The next step is to consider exactly how this selection of goods or a specific item should be dispatched. When developing suitable dispatch packaging, numerous departments must be involved:



Which packaging should be used? Should packaging have perforations and tear strips to make it easier to open and adhesive closures for returns? Purchasing needs to know which materials should be used and at what cost. The initial costs of clichés, tools and, where possible, the costs incurred for changing the packaging strategy, should also be given consideration. Furthermore, the quantities in which the packaging is to be produced and/or dispatched should be clarified – large quantities mean a lower purchase price but higher storage costs.

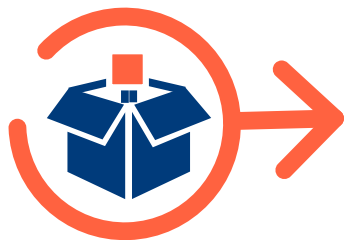




For the marketing department, the extent to which the packaging should communicate with the customer is crucial: What impact should the packaging have on the customer? What information must be present on the packaging? Does the branding need to be strengthened? Is a sophisticated design planned to act as an eyecatcher? Does this require special printing? Is customisation required? Which printing method should be used for this? Marketing must include all this information and meet all these requirements when developing the packaging.



For the production department, or pure online retailers, the most important aspect is how packing can be integrated into the central operating process. This is where the handling, printing, level of automation of packaging as well as the design of the packing station or the packing process plays a crucial role.



In terms of storage, optimum utilisation and appropriate cost management is of primary interest. This concerns the storage of packaging materials and packaging aids on the one hand and the storage of packaged goods or shipments on pallets and on shelves on the other.



In the goods out, logistics and transport area, the focus is primarily on the protective and transport function of the packaging: Does it provide adequate protection of the goods to be shipped? Are the packages easy to handle, stack and move? Is the transport process efficient and ideally also sustainable, for example with regards to CO<sub>2</sub> reduction?



Last but not least: The customer's viewpoint remains as important here as with the various corporate divisions. When developing the packaging, things to consider include whether the packaging arrives at the customer undamaged, whether they have a positive unboxing experience and whether packaging disposal or return delivery is convenient.

### The optimum packing station

Every packing station should be geared towards the operator in terms of information provided and ergonomic aspects. Each station should have a specific workplace description including all process steps, sufficient space, a height-adjustable work surface, all materials within easy reach and goods that are automatically conveyed to the packing table via boxes or conveyor belts. This is the only way to ensure that employees can work efficiently and safely when at maximum capacity. Furthermore, a packing station should have a depot with a range of different, but sorted, packaging types and packaging aids. To save time, the operator should indicate

in advance what should be used for what. Make sure that refilling the material does not disrupt the packing operations. The packaging should be easy to erect manually (or already be erected and conveyed automatically to the packing station). It should also be possible to fill quickly and close/seal easily – with adhesive closures or automatically using a closure machine. The location and erecting of the packing station must ensure that the packaged goods can subsequently be seamlessly transported onwards.

## SECTION 2: PACKAGING IN THE E-COMMERCE SUPPLY CHAIN

### CHOOSING THE RIGHT PACKAGING PARTNER

A professional partner is required in order to effectively and efficiently integrate packaging into the e-commerce supply chain. The following tips can help you find the perfect partner.



**Tip 1:**  
**Check their skills and experience.**

There are a great many packaging manufacturers and suppliers that claim to specialise in e-commerce. The first thing to check is: Does the provider have experience in supplying online retailers? What references do they have? Do these online retailers have a similar structure to your own company? Can the supplier take on individualised requirements and draw up a comprehensive packaging concept? How is the supplier themselves set up? Do they have flat hierarchies? Can they respond quickly and flexibly? Ideally, the packaging manufacturer should be able to develop customised packaging solutions which optimally meet the individual requirements for online commerce.



**Tip 2:**  
**Look for process expertise.**

Can the potential supplier also provide advice on process-related issues? In the fast-moving e-commerce business in particular, online retailers need flexible packaging solutions which meet your specific requirements at all times. What is important here is that the packaging has to be appropriate not only for the product, but also for the process. Successful customisation of packaging depends on whether the pre-packing process and delivery goes smoothly and whether the handling requirements are always met. Thus, for example, packaging with hook and loop fasteners can save time and money for many online retailers for whom manual packaging processes are unavoidable. The electronics sector in particular designs its product packaging so that it is already ready to ship by providing a simple delivery label. Online retailers benefit from the absence of additional packaging material and a simplified dispatch process whilst customers can take advantage of easier disposal.



**Tip 3:**  
**Ask about support for supply chain integration.**

When working together with a packaging supplier, they should provide you with competent support, not just in the packing process, but also along the entire supply chain. Check the extent to which the provider can also offer solutions for other processes such as the distribution of packaging, dispatch per unit and lorry, labelling obligations, marketing-relevant options for packaging design and returns management. In e-commerce divisions where returns are frequent, such as the clothing sector, high quality packaging ensures that the goods are returned to the retailer undamaged. The retailer thus keeps their time and costs to a minimum. Your packaging supplier should be able to draw up an appropriate concept.



**Tip 4:**  
**Test their end customer orientation.**

In addition to answers to questions mainly relating to packaging technology, a professional packaging manufacturer should also have solutions ready for improving customer satisfaction. The point at which the recipient is holding the package in their hands is an important moment in terms of physical customer contact – and for online retailers this is often the first and only time this happens. It is therefore very important that your packaging also makes a professional impression. The more attractive the packaging and the more convenient it is to handle, the happier the recipient will be and the higher their level of satisfaction. Your supplier should be able to advise you on this matter competently and professionally. Can they offer packaging with tear strips or adhesive closures? What printing options are they offering? All this is important when selecting a suitable packaging supplier.



**Tip 5:**  
**Promote a sense of responsibility and sustainability.**

Packaging made from corrugated board and paperboard is intrinsically environmentally friendly – it is made from renewable raw materials and is easy to recycle. This not only means that an online retailer who uses this type of packaging is helping to protect the environment, but also that they can benefit from the positive image of having a sustainable packaging strategy, for example by including an appropriate label.

**"Online retailers achieve real sustainability, but only if the recyclable packaging material is also actually fed back into the cycle of materials."**

A provider who is aware of their responsibilities should ensure that return packages are returned and processed in a resource-saving manner.





### Successful supply chain implementation

**Starting situation:** An IT systems house has the following workflow: Pallets with items arrive via a lorry and are then stored in a high-bay warehouse. Items are removed from the high-bay warehouse using "pick to voice" technology. The items arrive in plastic tubs, which are then transported to the packing stations via conveyor belts. The packers pack the items into packaging made from corrugated board, label them and place them back on a conveyor belt to the loading stations for the lorries, where the goods are dispatched as a unit.

#### Requirement 1:

The problem with plastic tubs is storing and maintaining them: The tubs cannot be folded, are difficult to stack and take up a large amount of storage space – of which there is a limited supply. Plastic tubs are also time-consuming to clean if they get dirty. An alternative made from corrugated board should be used here.

#### Result 1:

The solution was to introduce double fluted self-locking trays the width of the conveyor belt. These can be stored flat and can be easily disposed of with waste paper if they get dirty.



#### Requirement 2:

Until now, the range of corrugated board packaging has been divided into 20 size categories. An analysis of the size and structure of the packaging that is used should reveal optimisation potential.

#### Result 2:

After analysing the products in terms of their size, four size categories were determined for the packaging. The customer benefits from better prices because they can now also order larger quantities.



#### Requirement 3:

Overall, the packing of items at the packing station should be sped up in order to save time and money.

#### Result 3:

Having fewer packaging types to choose from made it quicker to select one. In addition, some packaging is fitted with an automatic base, which means that the underside does not need to be taped. The additional introduction of an adhesive closure saves on valuable packing time and thereby also reduces costs.



## Checklist: Implementation of packaging in the e-commerce supply chain

1. Which products are to be packed and dispatched?
  - Product 1: \_\_\_\_\_
  - Product 2: \_\_\_\_\_
  - Others where applicable
2. How many products are packed and dispatched per year?
  - Product 1: \_\_\_\_\_ units
  - Product 2: \_\_\_\_\_ units
  - Others where applicable
3. What are the dimensions of the products to be packed? L x W x H?
  - Product 1: \_\_\_\_\_ (L x W x H)
  - Product 2: \_\_\_\_\_ (L x W x H)
  - Others where applicable
4. How will the products be packed?
  - Manually
  - Automatically (erector)
5. How will the packages be closed/sealed?
  - Adhesive closure     ...     ...
  - Adhesive tape     ...     ...
6. How will the products be dispatched?
  - Fulfilment centre     Parcel service     ...
  - Courier     ...     ...
7. What are the packing stations like?
  - How many different types of packaging do you use? \_\_\_\_\_
  - Is the packaging tailored specifically to the product?
    - Yes     No
  - Which different packaging materials will be used?
    - \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_
    - \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_     \_\_\_\_\_
8. What is your storage capacity?
  - How many packages fit on one pallet/one shelf or in one storage location? \_\_\_\_\_
  - How many of these storage locations do you have? \_\_\_\_\_
  - How many storage locations do you need for the packaging? \_\_\_\_\_
9. Does the packaging need to be printed?
  - If so, with how many colours?
    - 1c     2c     3c     4c
  - If so, using which process?
    - Flexo printing     Offset printing     Digital printing     Labels
  - If so, what percentage of the packaging requires printing? \_\_\_\_\_
10. Should the packaging also be used for any returns?
  - Yes     No



## TO SUMMARISE

- E-commerce packaging is an important part of the supply chain: It impacts the protection of the product, along with the handling, storage, transport and costs along the supply chain.
- E-commerce packaging must be integrated seamlessly into the supply chain in order to make online commerce as efficient as possible.
- By choosing the right packaging strategy and optimum packaging, an e-commerce company can create significant added value.
- All the corporate divisions involved – purchasing, marketing, production and logistics – as well as the customers' wishes should be incorporated when developing the packaging.
- Various material flows converge at the packing station: Time and costs can often be optimised even further here.
- A good choice of packaging partner is not only familiar with the packaging, they also act as an advisor and supporter for all aspects relevant to your e-commerce supply chain – from increasing efficiency to marketing solutions through to sustainability.





## SECTION 3

### PACKAGING AS A MARKETING TOOL

> AN EXPERIENCE FOR THE CUSTOMER

> "SURPRISE ME!": THE PERFECT UNBOXING EXPERIENCE

> CUSTOMISATION AND SERIALISATION THANKS TO DIGITAL PRINTING



### SECTION 3: PACKAGING AS A MARKETING TOOL

#### AN EXPERIENCE FOR THE CUSTOMER

In the traditional shop business – beyond the discount shelves and bargain bins – conventional retailers often invest a great deal of time and energy into the presentation of their goods. And no business owner would dream of letting customers walk away with their goods packed in a simple brown cardboard box. Why should it be any different in e-commerce? Especially because the moment at which the customer and the goods encounter each other live for the first time is the most emotional in the entire purchasing process. Anyone who sees their e-commerce packaging solely as a logistics requirement is ensuring no more than that their goods arrive undamaged. They are failing to use the real potential of the dispatch packaging. The following is true:

**"Packaging is an ideal marketing tool in e-commerce".**

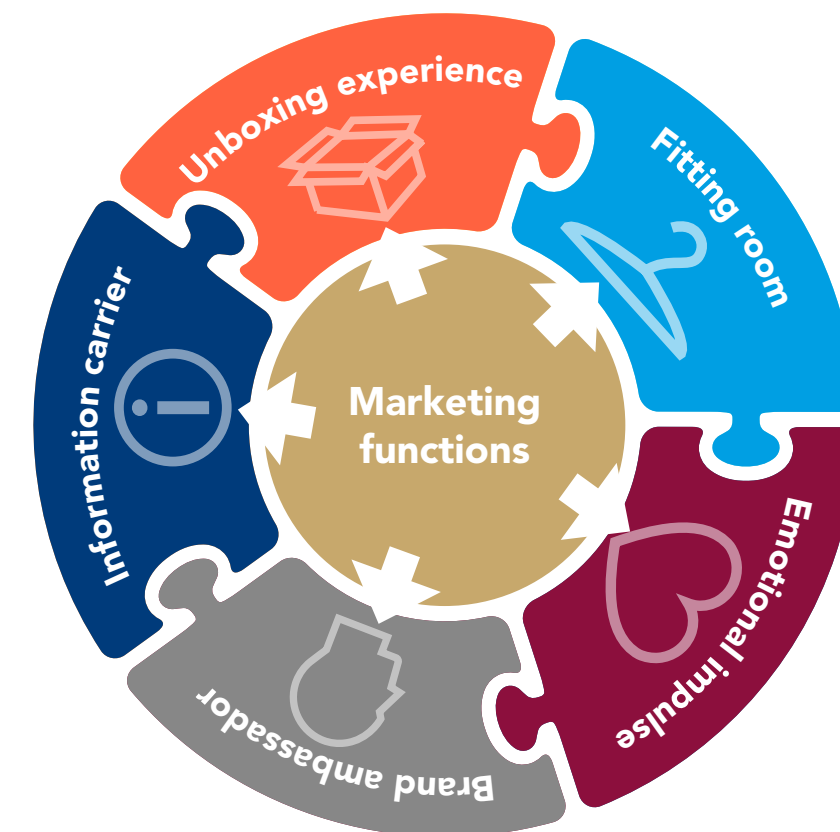
#### Marketing functions of e-commerce packaging

What has long been taken for granted for product packaging is only now having to be implemented by many online retailers with regards to their dispatch packaging:

**"The way to a successful product is via the packaging."**

Thus, product packaging contains all the important information and has an attractive design, all of which is appropriate to the product identity and the needs of the target group. However, this should also apply to dispatch packaging because this is the first – and often the only physical – contact with the online shop: A moment which determines the decision to buy or not to buy and the customer's future opinion of the relevant online retailer. In so doing, the packaging – particularly for the online fashion retail segment – acts as a kind of fitting room in which the product recipient can try out and touch the product as well as acting as an information carrier and brand ambassador. The packaging also determines the experience of opening and unboxing the product, whereby it can trigger both negative and positive emotions. Therefore:

**"The packaging design and the presentation of the item within the packaging must fit the image of the online shop."**



**Marketing functions of e-commerce packaging:** Dispatch packaging can be used in various ways to communicate with the buyer – as an information carrier (e.g. for handling advice), as a brand ambassador, as a physical point of contact and for the positive emotional customer experience with the product and the online shop.



## Unboxing as a happy moment and marketing ploy

**"The moment the product is unboxed is the first actual point of physical contact, and therefore the most important moment, between the customer and the goods as well as the online shop."**

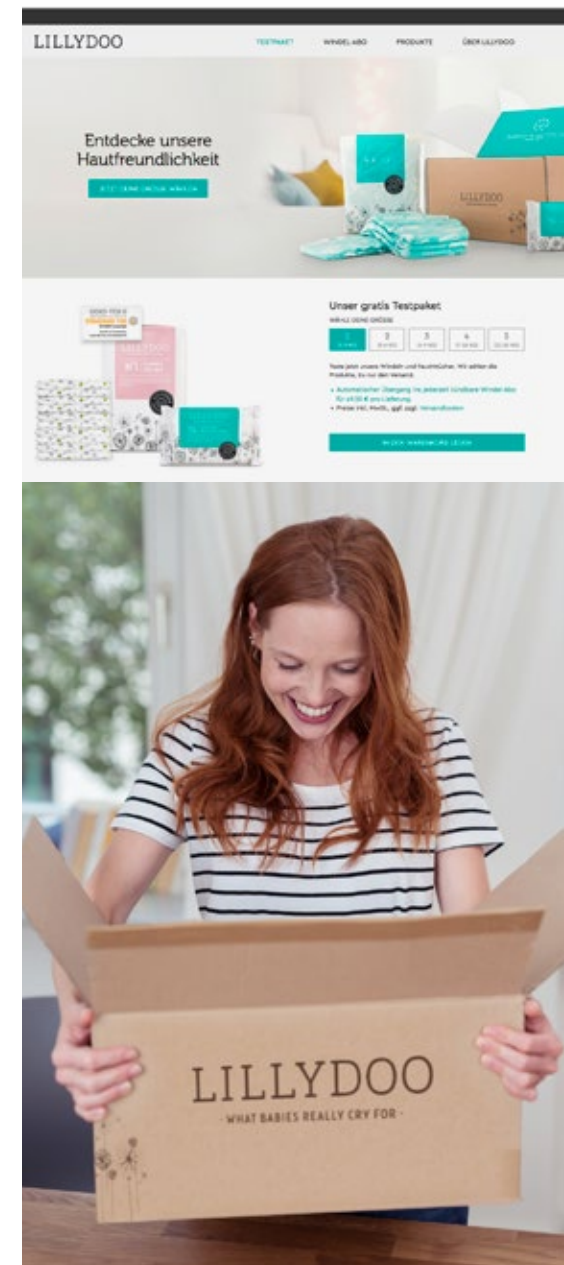
The moment starts as soon as the buyer receives their package on the doorstep (or in the parcel shop, or from the packing station). Zalando's legendary "scream for joy" advertisement really hit the nail on the head: In it, the initial joy at receiving the ordered goods reaches its climax. The idea behind it was that the recipient receives a package and knows what it is immediately from the shop logo. This reawakens their desire for the goods and arouses their curiosity about the real item or items. Obviously, it is still essential that the packaging is intact. Otherwise, the recipient would worry that their goods had been damaged – more shock than joy.



**The most important moment:** Together with the German market research portal MaFo, Zalando asked online shoppers what moment they generally looked forward to most when they ordered clothes or shoes. The most common answer from over half (52 percent) of those questioned was the moment at which the parcel arrived and they could unbox their new things.


\*There is no doubt that packaging plays a role in creating a positive customer experience when the goods arrive: The EHI Retail Institute found that visually attractive dispatch packaging was considered a crucial factor by over half of online shoppers (59 percent). 41 percent of customers thought the inside of the packaging should also be attractive and a good 35 percent also thought this should apply to the product packaging.<sup>4</sup> A positive unboxing experience is therefore a marketing tool with which the online retailers can make their customers happy, stand out from the competition and, in an ideal scenario, even reduce their rate of returns. But how exactly does it work?

<sup>4</sup> <https://www.ehi.org/de/studien/versand-und-retourenmanagement-im-e-commerce-2014/>.



## Creating the right unboxing experience

As a general principle, unboxing should be convenient, e.g. using tear strips or pull tabs for easy opening, self-adhesive strips for resealing and dispatch packaging of an appropriate size that can be easily filled.

 You can find detailed information on the variety of packaging available in Section 1 on page 13.

Do not underestimate that the recipient can generally see at first glance whether the packaging is of high quality and whether it was suitable for their order. The customer can also see as soon as they hold the packaging in their hands or open it whether it is environmentally friendly. Relevant labels relating to recyclability and the carbon footprint of the packaging give a good impression of the sender from the outset.

Furthermore, e-commerce packaging can also be used to tempt the recipient, appeal to their emotions, highlight the nature of the product and, by customising it, show the customer that they are somebody special. The ways in which these effects can be achieved are virtually unlimited: A personal message or thank you card to the recipient that they see straight-away inside their package; the positioning of the product in the carton; the chosen filling material; vouchers included with the order or special features on the inside, or even the outside, of the packaging, e.g. printed QR codes for competitions or additional product information, invitation to rate the shop, etc.

**"It is essential that the selected methods correspond in terms of style and visual appearance to the corporate design and to the identity of the shop."**

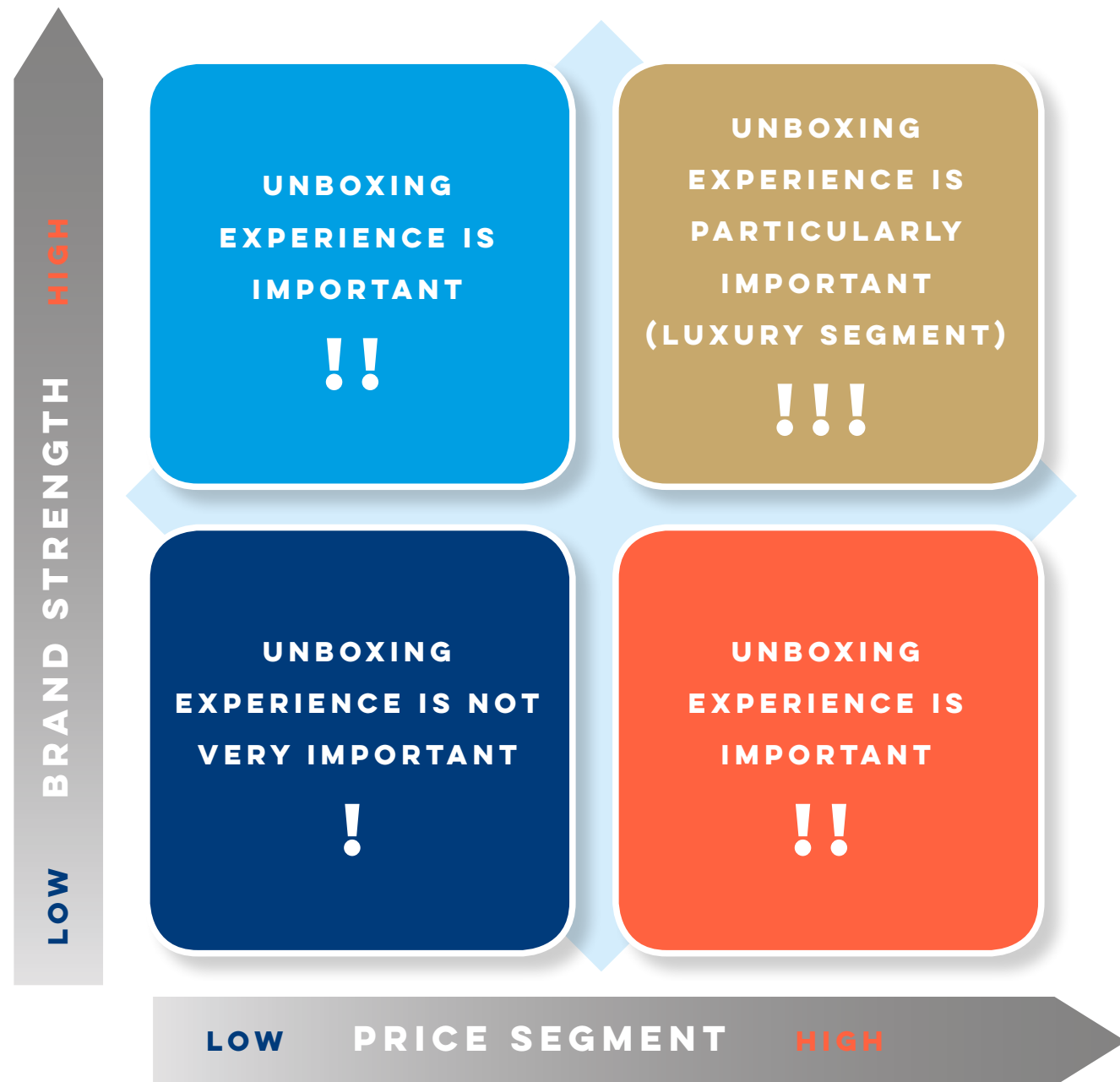


Online retailers should, as a result, consider whether it would be worthwhile investing in a special unboxing experience for their customers and what this might look like so that both the packaging and the product presentation are suitable for the ordered items and so that the presentation in the online shop can continue to be convincing.

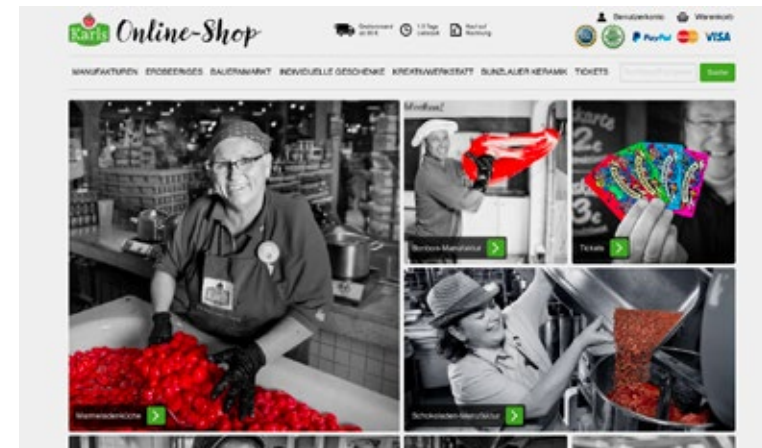


## "SURPRISE ME!": THE PERFECT UNBOXING EXPERIENCE

The fact that the goods ordered in the online shop arrive at the recipient on time and intact is, of course, taken for granted. In order to exceed the buyer's expectations and surprise them in a good way, online retailers should make unboxing into an experience. But how?



**The importance of the "unboxing moment":** Suppliers sending exclusive and expensive brand products have a demanding and affluent target group. Consequently, the packaging and the products should satisfy the demands of the customer and be appropriate to the shop's price segment. By contrast, an online shop which is positioned on the market as a cost leader with massive price discounts and dumping prices is unlikely to want to invest in top-quality packaging because of lower margins. In any case, this type of customer will focus more on an affordable price than on an emotional experience. So there are two questions to answer: How strong is or are the brands of the products being dispatched? And are they in the low or high price segment? The stronger the brand and the higher the price of the goods, the more important an optimum unboxing experience is.



**Tip 1: Extend your packaging.**



Packaging is more than just a logistical means to an end. The first impression counts – and this applies equally to traditional commerce, e-commerce and the manufacturer. The packaging of the goods is the first thing that the customer notices. This is where information is carefully positioned, e.g. data from the supply chain or information on the environmental friendliness and disposal of the packaging. Using special markings, such as QR codes, you can also provide your customers with access to additional information, campaigns and/or social media. This extended packaging offers online retailers varied options for communicating and interacting with their customers.

**Tip 2: Make your packaging distinctive.**



Select a distinctive packaging design appropriate to the style of your online shop and to the preferences of your target group: Single face, bold colours and, of course, your brand name on the packaging. The creativity options here are limitless. This will make you stand out from your e-commerce competitors. You are creating a recognition factor which has a positive impact on every unboxing experience your customers have. Increase the anticipation of getting the delivery as soon as the package is received. Also consider the fact that a customer who is very satisfied with their unboxing experience may share their experience with friends. In an age of social media, there can be no better branding campaign for your shop than customers uploading photos and videos of their package.





**Tip 3:**

**Ensure that the unboxing process is convenient.**

"All show and no substance" – clearly this is not what you want. Make sure that expectations are not disappointed, particularly with regards to original and attractive dispatch packaging. Along with the visual and tactile aspects, the unboxing experience also includes optimum handling. Information on which way round the package should be unboxed, tear strips and similar should be included. Your item should also be positioned securely in the carton so that it is protected against damage. However, with regards to packaging and filling material the following applies: Use as much as necessary and as little as possible. After all, your customer has to dispose of it all. In the case that a customer wishes to return a product – which continues to be a relatively common occurrence in e-commerce – they should also be able to use the dispatch packaging easily as the returns packaging.



**Tip 4:**

**Offer a customised extra.**

Small gifts preserve friendships, as the saying goes. What about also offering your customer a free extra: A chocolate thank you for the first order, a free care product for the goods purchased or a small sample of the latest cosmetic product. Exclusive vouchers for their next order are also popular amongst online shoppers and increase the chances of them ordering from you again in the near future. However, you need to bear two things in mind: Firstly, you should not advertise your gift beforehand, otherwise it will no longer be a surprise. Secondly, remember when selecting your extras that customers are disappointed if they suddenly stop receiving gifts after the third or fourth delivery.



**Tip 5: Communicate with the recipient in a personal and intelligent manner.**

A number of online retailers already use enclosed flyers as a cooperation medium with other suppliers or as an additional source of income. Unfortunately, these flyers end up in the bin along with the filling material. This is because they are inappropriate and impersonal – although they are also underestimated. In fact, with the right enclosures, not only can you arouse the interest of your customers, you can also advertise your entire product range. You can track the preferences and needs of your customer in your shop through their clicking and purchasing behaviour. Product recommendations and useful information compiled on this basis are ideal enclosures. This is because they address the recipient personally and are far more relevant than randomly selected advertising flyers. Combined with a discount or waiving the dispatch costs for the next order, you can increase the number of returning customers.



**SECTION 3: PACKAGING AS A MARKETING TOOL**

**CUSTOMISATION AND SERIALISATION THANKS TO DIGITAL PRINTING**

In parallel to the increasing digitalisation, data queries, online tracking methods, etc. which companies use – particularly those in the online business – to get to know their customer base better, consumer demands are also growing: They want providers they actually understand and who address them personally instead of being overwhelmed with heavy-handed and unsuitable advertising messages. Increasingly shorter lead times for marketing campaigns are also a factor here. A new market trend needs a response in the form of a suitable campaign almost immediately. Anyone who sleeps through them will be losing out on massive sales potential. The good news is that technology is not only the challenger and driver of these developments, it also provides appropriate options to keep pace with the market trends – for example, through digital packaging printing.



**Personal, more personal, personalised**

These days, the purpose of marketing is about more than just establishing an individual customised dialogue with the customer. It is not just about personally addressed newsletters and mailings, but about a comprehensive marketing concept which focuses on the individual customer. In e-commerce in particular, this concept also includes dispatch packaging. However, customisation includes far more than just the specific address on the label or the correct title in the accompanying invoice – customisation means that the recipient is entering into a personal communication, and one which may also be quite subtle. An example: A clothes shop which promotes its customer's favourite colour using its clothing range can impress in terms of personalisation if the packaging, filling material and/or printing is also in the customer's favourite colour – the customer then associates the same positive feeling they have for their favourite colour with the online shop. Even if they see through this marketing ploy, this demonstrates to the customer that the online retailer is prepared to adapt to the individual needs of its customers.

### Digital printing – New marketing worlds

For special campaigns and personalisation measures, a marketing department which recognises the potential of packaging needs visual incentives and interaction options on its dispatch packaging more and more frequently and in increasingly smaller quantities. The challenge for packaging printing is to split large quantities into a number of sub series, to generate high quality print images and to produce these at high speed. It is therefore hardly surprising that digital printing is currently veritably booming, but is still providing exactly the right solutions for new requirements. Digital printing technology enables contactless printing of materials of

various thicknesses and structures, whilst maintaining the same excellent print image quality. It is possible to print coated papers with a sealed surface and unlined sheets with a high-quality appearance and extraordinary colour fastness, using environmentally friendly, food-safe and odour-neutral printing inks. In addition, a print run of identical dispatch packaging can be produced with any number of print images – ideal for series, marketing campaigns and seasonal business. This results in needs-based production with less surplus and/or residual quantities, which in turn saves on storage costs.



**New variety of packaging design:** Digital printing technology opens up entirely new design opportunities and an unprecedented range of variants in the printing of corrugated and solid board dispatch packaging.

### Specific marketing benefits of digital printing

- Small to large print runs can be printed according to customer requirements – whether this is specific to series, regions, seasons, events or individuals.
- No costs for clichés, printing plates or retrofits for serialisation.
- The lead time is very short. This means that marketers can be right up to date – ideal for spontaneous marketing ideas.
- The print results are high quality, almost as good as offset quality, and are not dependent on the material surface quality.
- Guarantees a repeatable and consistent print image.

### Limited edition: Always gets to the market flexibly and quickly

Flexibility is required not just at a personal level. Specific packaging designs are also needed for regional, seasonal and other restricted marketing campaigns. This is the only way that marketing can respond to demands in the market and implement packaging permanently as a marketing tool. In e-commerce, Christmas is the most lucrative time of the year: In 2015, the online retail business generated over a quarter (11 billion euro) of its annual sales (39.8 billion euro) in the pre-Christmas and Christmas period.<sup>5</sup>

Thanks to digital printing, existing packaging designs can be adapted to the season – for example, by printing on seasonal motifs and promotional codes and by making it possible to reuse as gift packaging, in order to further stimulate the Christmas trade.

<sup>5</sup> <https://de.statista.com/statistik/daten/studie/166745/umfrage/einzelhandel-umsaetze-im-internet-insgesamt-und-zu-weihnachten/>.



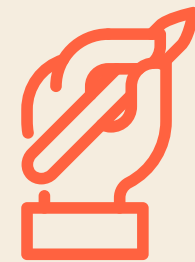
**Series printing:** Digital printing technology enables product packaging to be printed specific to the region, season, event or campaign – and it can do this quickly and cost-effectively. In online shopping too, small print runs with different designs can provide variety. (Image source: Schumacher Packaging)





#### **Checklist: Marketing aspects of dispatch packaging – have you thought of everything?**

- What dispatch packaging do your competitors use?
- How effective is your packaging compared to that used by the competition?
- How can your dispatch packaging be designed so that you can harmonise your product range with the shop identity?
- Does the packaging address your target group, and thus the recipient?
- Have you coordinated the colours with the content and/or the corporate design?
- Are the brand or shop names clearly printed on the packaging?
- Is the packaging to be printed on the outside – risk of theft (see Section 1, page 18) – and/or on the inside?
- Does your dispatch packaging evoke trust, interest, anticipation and curiosity?
- Is the packaging effective even in poor light?
- Can your packaging positively influence current or future purchase decisions?
- What are the packaging costs, including the design, in relation to the product value?



#### **TO SUMMARISE**

- Dispatch packaging is a versatile marketing tool.
- The moment at which the product is unboxed is the first physical contact the customer has with the ordered goods and/or the online shop: The most important and most emotional moment in online shopping.
- With the correct dispatch packaging, you can positively influence the unboxing experience.
- Thanks to digital printing technology, packaging can be adapted to the region, season, event or campaign, or even serialised to suit the specific customer.
- Various material flows converge at the packing station: Time and costs can often be optimised even further here.
- For all this creativity, the packaging should always be appropriate to the target group of your online shop and reflect its identity.

**SUMMARY: YOUR SUCCESS AS AN ONLINE RETAILER CAN BE EFFICIENTLY COORDINATED**

**DO IT PROPERLY AND YOU WILL SUCCEED!**

**Checklist: How to get the most out of your e-commerce packaging.**

1. Does the packaging provide sufficient protection for dispatch so that the goods reach the recipient undamaged?  
 Yes  No
2. Is the packaging... ?  
 Sturdy and resilient  Stackable  Easy and secure to grip  
 Easy to handle  Possible to store in a space-saving manner  Printable  
 Easy to open  Recyclable  Suitable for returns  
 ...  ...
3. Is special anti-theft protection needed?  
 Yes  No
4. What material is the packaging made from?  
 Film  Paper  Solid board  Corrugated board
5. Should information about sustainability be printed on?  
 Yes  No
6. Is the packaging cost-efficient? Is the quantity and price of the materials as high as necessary but as low as possible?  
 Yes  No
7. How should the packaging be printed?  
 Not at all  Season-specific  Region-specific  
 Event-specific  Campaign-specific  Customer-specific  
  
 Offset printing  Digital printing  One colour  Two colours  
 Flexo printing  None  Three colours  Four colours  
 With embossing: \_\_\_\_\_
8. Does the (planned) printing fit the corporate design?  
 Yes  No
9. What do you do to ensure an optimum unboxing experience?  
 Nothing (yet)  Communicate sustainability  Original exterior design  
 Gifts  Personalised enclosures  Original interior design  
 Ask for feedback from customers  Unboxing aids (perforations, information)  Alternating customised designs  
 ...  ...
10. Do you already have a packaging service provider and/or are you happy with them?  
 Yes  No, because  
  - \_\_\_\_\_
  - \_\_\_\_\_
11. Do you have any optimisation requirements with regards to packaging?  
 No  Yes, e.g.:  
  - \_\_\_\_\_
  - \_\_\_\_\_



## ABOUT SCHUMACHER PACKAGING

### TEAM SPIRIT, CUSTOMER FOCUS, FLEXIBILITY.



#### PROGRESS AND VISION

We are one of the largest packaging manufacturers in Germany – with sales markets from Scandinavia to Italy and from the UK to eastern Europe. Through continuous, organic growth, we create and secure jobs all over Europe. Our aim is to expand our presence to international market leadership.



#### INNOVATION AND TECHNOLOGY

We continually invest in the development of future-oriented technologies and have been an innovation and productivity leader in the packaging industry for many years. We offer our customers current solutions according to their individual requirements, along with flexible and rapid manufacturing and supply, all over Europe.



#### RESPECT AND RESPONSIBILITY

We act with our environmental and social responsibility in mind. We produce our packaging from renewable raw materials – with a beneficial carbon footprint. We try to reduce our energy consumption with every investment decision. We thus focus our activities on sustainability and being fit for the future.



#### STRENGTH AND EXPERTISE

We draw on the expertise, performance and economic potential of a total of 27 European sites with over 3000 employees. For us, the functionality and reliability of our products and services are a top priority and we ensure compliance with the highest quality standards.



#### TRADITION AND VALUES

We are an owner-managed family company in the third generation. Our philosophy is "packaging made by people, for people": Having a trustworthy relationship with our employees, customers and suppliers is especially important to us. Our many long-term partnerships are evidence of our efforts in this area.



# schumacher

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