

DLG Expert report 1/2020

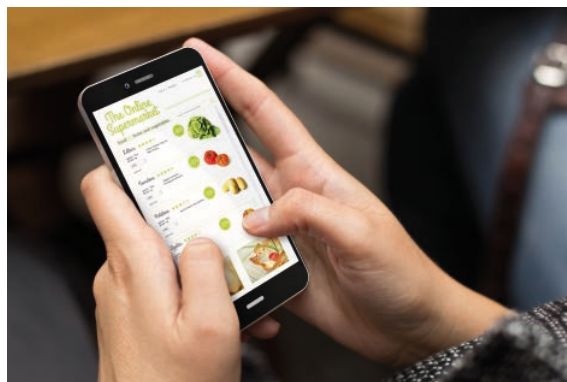
Online trade with food and beverages – Success factors for greater quality and safety



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The food trade in e-commerce has become just as much a part of our everyday lives as online shopping for other consumer goods too. There are hardly any products anymore that cannot be ordered by a mouse click and delivered directly to your front door. However online sales are a fast and constantly growing market not only in the B2C sector, but also in the B2B sector, e.g. raw materials, ingredients and animal feeds.

The following Expert report is to describe the critical success factors about online trading of food, beverages and their ingredients. It is intended to give specialists and management staff from the food and beverage industry in general as well as from medium-sized businesses in particular a “guide” with practical suggestions for building up their own digital distribution channels and inspiration for improving existing online shops.



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1. Background

Whereas in recent years consumers have shown themselves to be rather sceptical about online shopping for food and have wanted to examine the goods especially in the case of fresh products optically and haptically with their own senses prior to buying them, a change now appears to be taking place. Furthermore, large suppliers such as Amazon Fresh, REWE delivery service, myTime, or HelloFresh and Mymuesli as well as a large number of Start-ups and former Start-ups such as Picnic or Getnow have become committed in the digital sector and thus motivated consumers to change their own shopping habits. They are permanently expanding their online ranges, using crowdfunding to finance their expansion, and in this way are also reaching a place on the product shelves of the stationary food retail trade. (Example of disruption)

According to a representative survey by A.T. Kearney in 2019 (n= 500; see “Online trade with foods – Focus as the key to success”) online trade with foods is continuing to grow, but currently still remains a small market in Germany. Its share of the overall food market grew to 1.5 per cent in 2018 (2016: 1.2 per cent). Around 60 per cent of German consumers have ordered foods via the internet at least once. Only 18 per cent buy their foods online regularly, i.e. at least once a month. The growth of online food trade is for the first time being reflected in rising numbers, although at a relatively low level as yet. The crucial reason for online shopping lies in the “comfort/convenience”, which for 72 per cent of the customers surveyed is represented by delivery to their home, for 52 per cent by being able to shop round the clock, and for 50 per cent by personal time-saving.

However, if one considers the matter from the standpoint of food and beverage suppliers, the promising practical implementation of e-commerce and the setting up of online trading call for preliminary conceptual considerations. This is because in the case of sales of food and their ingredients via the internet too, operators of online shops must comply with a wide range of requirements in order to follow the valid laws, ensure maintenance of the food quality in the delivery chain, and prevent food spoilage and the associated loss of confidence and possible harm to consumer health. Ultimately the same legal requirements apply for online trade with perishable goods as for stationary retail trade.

2. Success factors in e-commerce with food and beverages

2.1 Advantages and disadvantages of online food trade

Ever more people are shopping online; the upward trend in digital shopping cannot be stopped. No wonder, on the web everything can be found simply via a mouse click. Given today’s working hours, which repeatedly ex-

tend into the evening, and the weekends filled with hobbies, there is often not enough time for relaxed shopping in local shops. It is precisely in connection with this point, as well as with a few others, that online shopping offers immense advantages. There are no opening hours restricting shopping times, no long drives to the shops if one wishes to shop supra-regionally for a change instead of regionally, no searching for parking spaces, and no long waiting times at the check-out. The giant international online shop is open 24 hours a day and 365 days a year, and alongside the time benefits, it also allows simple price comparisons and a comfortable delivery service, if desired even right up to the front door. The right of revocation strengthens and protects consumer rights and it is not necessary to bother with cash either, because payment can also be carried out digitally. So many advantages, but what about the customary shopping experience? What about creative rummaging along the shelves and examining the product quality with one's own senses? What about the personal advisory services by expert staff? Furthermore, there are price surcharges due to the resulting and transferred shipping costs, and delivery times have to be taken into account, because it is not possible to take the goods with you straight away. Another prospective off-putting factor is the possibility of minimum order quantities. Online trade must counter these aspects, reserved for shopping in stationary trade, with correspondingly attractive concepts and offers in order to win and sustainably maintain the trust and confidence of consumers.

2.2 Status quo in online food trade

A number of different studies were considered in order to gain an overview of the current situation in online trade with food and beverages. For example, the DIN (German Standards Institute)-Consumer Council complained that there are currently no standardised and uniform quality criteria for assessing the food online trade that cover above all the field of e-commerce with fresh products too. Yet the focus lies in particular on the field of product quality as well as beyond this on the process quality too, where aspects of hygiene, cooling and consumer information are to be taken into account. Defining the special demands for the food online trade, at present specifications and recommendations are being developed in a DIN-Working Group.

A study conducted by the company THIMM Consulting GmbH + Co. KG, Northeim, provided a specific insight into the current situation. Within the framework of a practical test "Foods in online trade" it was found in spring 2019 that there are "conspicuously few fault-free concepts in online shipping of foods". In altogether 24 online shops (regional and supra-regional) the packaging concepts in particular alongside the general ordering and delivery process were examined. For this foods from four categories were ordered online:

- Foods representing daily necessities (simulated shopping basket with fresh meat/sausage, fruit/vegetables, dairy products, frozen products)
- Frozen products
- Fresh fish
- Fresh minced meat

The results showed that 27 per cent of deliveries took place outside the agreed delivery times; in nearly half the cases (43 per cent) the foods ordered reached the consumer a day later, in other words on the next day. A comparison of the online shops showed that the delivery costs, consisting of additional and dispatch costs, accounted for over a quarter (on average 26 per cent) of the total costs. Some suppliers charged additional costs above all for refrigerating of the products. When it came to types of dispatch, where offered, express dispatch up to 12 noon was selected.

A further particular difficulty for online vendors lies in the correct selection of packaging, because it is necessary to comply with the respective product requirements. Crushed corners, holes and cracks, or damp/soggy dispatch packaging were established in 14 out of altogether 29 cases, even though notes concerning delivery date, refrigeration or danger of breakage were printed on the packages.

Of all the foods ordered, 78 per cent appeared to be in a good condition optically. However, half of the lettuces were limp, two of eight yoghurt cups were burst and there were broken eggs in every second moulded pulp packaging. The test also showed that the share and recycling capacity of the packaging materials were not optimal and – especially against the background of sustainability – offer potential for improvements. The same applies for temperature observance. The results of the tests conducted directly after receipt of the order showed the worst values for core and surface temperatures above all for frozen products. A good 44 per cent of the foodstuffs were not sufficiently refrigerated. Only five of the 24 orders were delivered within the legally admissible temperature range. It is only possible to deliver food and beverages with the quality and shelf-life promised to the consumers by the vendors if the refrigeration chain is uninterrupted and the packaging is correct. These test results provide an insight into the complexity and show that there is still potential for improvement in current practice.

In the opinion of the authors, further important current problems in relation to online food trade are:

Ordering process on the website:

- conspicuously frequent one-sided product photos and incorrect, incomplete product information,
- lack of feedback about product availability and stocks during the ordering process. The customer is often only informed during the payment procedure that the desired article is no longer available.

Delivery service:

- inflexible, frequently unfriendly delivery service – announcements of “same day delivery” are then mostly not realisable.
- alongside heavily damaged products, faulty deliveries are also conspicuous.
- enormous amounts of shipping packaging waste also lead to annoyance on the part of customers.

The above aspects can frequently be traced back to a lack of product knowledge on the part of the online vendors and insufficiently trained staff, resulting in, for instance, incorrect product handling and leading to a loss of customer trust and confidence.

2.3 Critical success factors

What are the critical success factors and what must be considered explicitly in e-commerce with food and beverages? The following section contains answers to these questions.

Product quality, information management & traceability

As in stationary trade too, a maximum of transparency forms the first step towards building consumer trust and confidence. Professional information management is the basis for this and thus also represents the crucial argument for selecting a particular online shop in the e-commerce sector. The description of the products offered and their quality aims to ensure that all the product information and labelling elements specified by the Food Information Regulation (LIMV) are made available. This provides the consumer with ideal support in the product selection and ordering process and the complete process is subject to legal security. The allocation of customer data to corresponding order numbers and the linking with product information ensures the transparency required for traceability. Through-going process transparency (product tracking) along the complete ordering and transport path (Supply Chain) is ideal. This provides customers with logistics information on product availability (stocks in storage), the current order status and whereabouts of the product up to the time slot of package delivery for customers. If customers are also given an opportunity to provide feedback and their assessments publicly so that they can be viewed online, a high degree of informational transparency is ensured.

Process management: safety, hygiene, refrigerating temperature & logistics

Further essential critical success factors relate to the process management before and after the ordering process. Key aspects here are an appropriate and professional product storage, proper commissioning and packaging, as

well as the selection of appropriate types of shipping and delivery that match the product. A well-thought out process management concept that matches the products offered and their quality observance, as well as fixed and defined written standards concerning the company's in-house logistics and a HACCP concept are elementary. Furthermore, concrete contractual rules in this respect should be agreed and fixed with a possible external logistics service provider in order to handle the tight time frames, especially for perishable products. The same applies for further possible partners in the process chain, possibly in the field of storage or commissioning. In addition to the appropriate timing, the valid hygiene standards and hygiene laws as well as the defined refrigerating temperatures (cooling chain and temperature checks) are to be maintained throughout the process and the selection of an appropriate product packaging (where necessary both primary and secondary packaging, insulating material, refrigerating elements) including a note on the packaging for the deliverer and the end customer should be taken into account. A further aspect to be considered in the process management is the establishing of a standardised and clearly communicated complaint management system, including contact information and a transparent invoicing method, as well as a safe and reliable digital payment process.

Staff qualification

In order to ensure reliable process management and a proper logistic system, it is necessary to ensure appropriate staff qualification. This relates not only to basic knowledge concerning food science and knowledge of the merchandise, but above all also to regular teaching of the legal requirements regarding product and personnel hygiene in the context of food safety. It also includes aspects of product refrigeration and the demonstrable adherence to the cooling chain right through the complete process. Staff qualification is not only to be ensured within the company, but in this connection rules must also be agreed with possible external service providers (e.g. logistics, storage, commissioning) who are ultimately also co-responsible for the observance of the product quality after the product has left the production chain, and for safe product transport through to the consumer.

Packaging & sustainability

Packaging is one of the key elements in online trade with food and beverages. Both the packaging material and its form must satisfy a number of requirements at the same time. These arise in connection with product protection and breakage resistance and involve consideration of the food safety, hygiene and corresponding uninterrupted product cooling and must also satisfy the legal requirements of the applicable packaging guidelines. Corresponding packaging concepts should be worked out and appropriate packaging materials be selected where appropriate both for the primary packaging and for the secondary or transport packaging. In addition to appropriate marking/labelling, it is necessary here to ensure the desired information transparency, as well as to take waste disposal and recycling concepts into account in order to meet the growing demands regarding sustainability.

Special features in online trade with alcoholic beverages

When shipping alcohol, it is important to comply sufficiently with the associated legal framework (above all protection of minors) for producers of alcoholic beverages (including wine, champagne, spirits) with their own online shop, as well as for vendors. After all, as in stationary retail trade, it must be ensured in mail order business too that alcoholic beverages are not handed out to minors. The best practice approach to "shipping alcohol and protection of minors" of the German Federal Association of E-Commerce and Mail Order Business (BEVH) includes for instance the following points:

- (A) Established customers can continue to be supplied without any separate examination and where appropriate documentation of their age. The necessary minimum age is considered to be known.
- (B) Deliveries to new customers can only be carried out when the deliverer conducts an age check. Such an age check is considered to be conducted if the deliverer can assume on the basis of the overall circumstances that the recipient clearly has the minimum age. In cases of doubt, evidence of the required minimum age is to be submitted by presenting an official document containing a photo. Documentation of the age is not carried out at any time.

- (C) In all cases the shipping packaging is to be provided with a clearly visible printed warning message pointing out that the package may not be handed out to minors. E.g.: “Alcoholic beverages – may not be handed out to children and young people under the age of 18.”
- (D) In all cases notification of the possibility of conducting a visual check of the age must be provided at the latest at the time of completing the order. Such a notification has a deterrent potential and once again reduces the danger of minors ordering alcohol.

To summarise, when building up and successfully conducting e-commerce with food and beverages, it must be ensured that – as in stationary trade – correct and appropriate handling of the food and beverages is ensured along the complete supply chain, observing the legal regulations and quality standards. One essential component for building consumer trust and confidence is a customer-friendly process design that comprises an appropriate measure of information transparency and safety in the online payment process as well as ensuring reliable transport and delivery sequences matching the product.

3. „DLG Trusted Food“ and „DLG Trusted Wine“ – Trust and Quality in online trade with food and beverages

DLG’s new certification standards that have been designed specifically for online trade offer a possible way of ensuring compliance with legal requirements as regards both declaration and information as well as the logistic handling of an online order.



A neutral control by the DLG experts in accordance with clearly defined criteria supports online vendors in building up or checking their e-commerce service and supply. Proper handling of the products, compliance with legal regulations and process standards and the reliability of the logistic steps are checked. The weak point analysis carried out in the course of the control shows potentials for improvement and provides valuable assistance in continuing quality monitoring of the online trading method.

The “DLG Trusted Food” or “DLG-Trusted Wine” offers online customers, in other words the consumers, an important building block in building up trust and confidence, as it guarantees safe and customer-oriented procedures in connection with buying and selling food and beverages via the Internet.

The testing and subsequent certification of the online vendor is carried out in three steps with a practical orientation:

1. The start and thus the first step are formed by an online check in which the interested online vendor has to answer detailed expert questions about the business model in accordance with the DLG Certification-Standard online and must upload corresponding business documents.
2. In the second step “mystery shopping” purchases are carried out, in which the existing processes of the online vendor are examined and analysed in accordance with the DLG quality standards. The digital process check can be supplemented through on-site visits by auditors with food expertise.
3. Finally, in the third step of the certification process, the **test results are summarised in a final report**. Here possible weak points and potentials for improvement are pointed out and where appropriate requirements are set. After the online vendor interested in certification has drawn up a corrective action plan, worked through this with the DLG experts, and then confirmed the requirements and set deadlines for implementation, the certification is successfully completed. A maximum period of 12 calendar weeks starting from the day of the online check through to the issue of the certificate is defined for the complete certification process. The certificate is valid for a period of two years, with DLG reserving the right to conduct random audit checks or monitoring within this period.

The certificate documents the responsible action of the participating online vendor and minimises the risk of faults and reputational damage. Consequently, the complete certification process is a key building block in the risk management of the online vendor and certifies trust and reliability to his customers and consumers shopping online.

Within the context of the certification process, essentially the following quality criteria that have also been set out in detail in Chapter 2 as relevant for consumers and required by law are examined:

- **Information and declaration:**

The product data are set out correctly in the online shop so that customers receive all the legally necessary information prior to purchasing/ordering.

- **Data security and traceability:**

The customer and product data are stored in such a way that both the requirements of data protection and the necessary transparency in the event of recall actions are ensured. The product declarations follow the legal requirements.

- **Food safety and observance of quality:**

The labelling and handling of the products comply with the legal specifications (such as e.g. presence of and compliance with an HACCP concept; observation of the specifications regarding alcohol dispatch and protection of minors). Regular training of the staff in connection with food safety and hygiene is ensured.

The consistency of the cooling chains and the legal requirements made of refrigerating temperatures and their monitoring are observed and products are packed and stored under correspondingly safe conditions.

The transport packaging is of sound nature and satisfy the criteria of resource protection and environmental protection.

Trust and confidence are among the most important criteria in online shopping for food. Around 65 per cent of online shoppers feel safer when shopping online, if neutral quality seals are available. (Survey by Ernst & Young, 2017). Online shopping for wines is becoming increasingly popular among consumers and displays annual growth rates of up to 10 per cent in online turnover. With the professional and neutral testing and certification process oriented especially to the needs of online vendors, DLG offers the industry valuable support and an alternative to the certification offers available to date.

4. Prospects

Various studies have shown that online trade with food and beverages is considered to be one of the most strongly growing areas in e-commerce in Germany and beyond. Even if the current share is at a relatively low level by comparison with total sales of food in Germany, the advancing digitisation and in particular the demographic change will push ahead developments and growth in this sector.

What is essential and thus characteristic for success here is that online vendors establish well-thought through and extremely standardised logistic and transport processes adjusted technically to online sales and dispatch of the food and beverages offered, that guarantee legal certainty and ensure a maximum of transparency for consumers. Only then can sustainable trust and confidence be built up and a successful online distribution service be established, that either supplements existing traditional stationary sales or allows a completely new service sector to be built up. Food and beverage producers should look into this topic in order not to lose out on the valuable competitive benefits resulting.

Further reading:

- A.T. Kearney Consulting, Studie „Onlinehandel mit Lebensmitteln: Fokus als Schlüssel zum Erfolg“ https://www.atkearney.de/documents/1117166/1959415/201902_Online+Food+Retailing+Studie_08_WEB.pdf (Stand: 16.12.2019)
- Bundesverband E-Commerce und Versandhandel Deutschland e.V. – Alkoholverbund und Jugendschutz – Rechtsrahmen und Vorschlag für ein Best Practice, Berlin, 2. Mai 2019
- DIN-Verbraucherrat – Lebensmittelonlinehandel – Veröffentlichung der Studie „Lebensmittelonlinehandel mit Frischeprodukten – Normungsaspekte aus Verbrauchersicht“; 2017
- Ernst & Young, Befragung 2017 „Onlineshopping von Lebensmitteln in Deutschland“, Shopsiegel-Monitor 2017/2018
- THIMM Consulting, Studie „Praxistest: Lebensmittel im Onlinehandel“, <https://www.thimm.de/presse-events/presse-meldungen/news-detail/onlineversand-von-lebensmitteln-im-praxistest/> (Stand: 10.02.2019)

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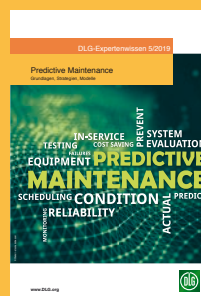
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DLG Expert report: concise information on topical issues in the food industry

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