Aspects of Legal and Ethical Liability in International Trade with B2B Customised Products – Industrial Component Sector Experience

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Abstract

Purpose of the article: There has been a growing demand for customised solution offers prepared by companies on both B2B and B2C markets. Strong focus on product customisation generates legal and ethical business aspects, especially in the international trade. The purpose of this article is company behaviour changes mapping and trend identification specifically in international trade within the industrial component sector based on performed qualitative research.

Methodology/methods: Qualitative research in the form of research case studies was used. There were five companies selected representing a variety of industrial component suppliers, both producers and trade companies in different size categories located in several European countries. The research questions were formulated and research results and respective limitations were discussed.

Scientific aim: The scientific aim consists in observing and describing the current situation and trends in international trade within the industrial component sector with a high involvement of the product customisation. An important aspect also includes a multidisciplinary approach of the article covering marketing, trade and legal business issues.

Findings: The research results show an increasing importance of focus on offering product individualisation to customers as a key factor influencing their sustainable competitiveness. Companies also see an increased importance of related process optimisation, as well as streamlining customer communication.

Conclusions: Based on the presented five case studies, it is possibly to identify a trend of an increased demand for closer cooperation of the component suppliers with their customers independent of the country of location. Customers are also asking for supplier’s full responsibility for the solution delivered. On the other hand, companies are not yet ready to provide such services in an efficient way within the current structure of their distribution channels. In order to confirm those qualitative research results, there should be additional quantitative research prepared and performed mapping a broader range of companies in wider industrial sectors to get a better picture of both customer demands and company capabilities.

Keywords: customer solutions, relationship marketing, product customization, legal liability, international trade, and market orientation

JEL Classification: K12, L10, M10, M31
Introduction

It is possible to identify clear trends in product offer towards an increase in flexibility and increase in product customisation (Brun, Zorzini, 2009; Zhang et al., 2010). These trends are positively driven by Industry 4.0 and general digitisation of the economy that allows a significantly higher flexibility in production by using robotic production technology, 3D printing technology and of course also full digitisation of production preparation that shortens the time needed for any change in the production process (Brynjolfsson, McAfee, 2014). Thus companies are capable of offering customised products also in the case of physical products with lower added value where it was not economically reasonable in the past. At the same time, many companies are global and targeting customers worldwide. Product customisation typically requires excellent and effective communication with each particular customer, and also liability issues are very important for customer confidence (Berkowitz, 2014). Liability and ethical issues are ruled differently in national and international trade, and it is often not easy for the companies and also their customers to handle those issues internationally. This article focuses on liability and ethical aspects in international trade and involves qualitative research mapping industrial component sector experience.

1. Why customised products and solutions?

For many decades, the competitive advantage was primarily based on technological aspects associated with capabilities to develop and produce. Thus the items like capital, raw materials, production capacity and capabilities or human resources were scarce (Kellen, Wolf, 2003). The situation has changed dramatically within past few decades with the international business environment globalisation. Increased competitiveness in the environment increased focus on customer’s requirements (Franceschini et al., 2015) and relationship processes (Tuli et al., 2007). Thus the new scarcity can be seen in superior customer knowledge (Kellen, Wolf, 2003) and capacity to offer solutions (Biggemann et al., 2013). Efforts towards customer requirement knowledge led to rapid development of relationship marketing and customer relationship management – CRM (Payne, Frow, 2005). CRM is a great help to companies to increase their business competitiveness. On the other hand, CRM concentrates primarily outside the company towards customers but stronger internal focus on solution development processes is also crucial (Bennett et al., 2001). The research proves an increasing demand for individualised product solutions from customers. This demand increase is reflected in strategic plans and decisions of researched companies. An introduced empirical model of Customer Solutions Management could serve as a helpful guideline for the companies to increase their flexibility and capacity to offer, develop and deliver individualised product solutions to their customers (Chlebovský, 2016).

Significant reduction in transport costs, effective and rapid means of communication, and removing restrictions on transfer of goods, services, capital, knowledge and people for the purpose of free trade encourage companies to be increasingly engaged in international business and international partnerships (Hummels, 2007). When it comes to international trade, trading companies are expected to act in accordance with the basic business principles, legal norms and moral standards, both in the home country and in the international market.

2. International trade legal framework

When creating trade contracts concluded between entities located in different countries,
it is necessary to take into account not only the national legal framework, but also international agreements, customs in international trade, or the legal rules applicable to the contractual grouping of states – in our case, the European Union (Ondřej, 2009).

In this particular case of the component sector, the trade contracts are therefore affected by the following sources.

The first factor that may influence the possibilities of trading with company products on foreign markets is created by the technical and legislative rules for placing the product on the market. These rules are specifying whether and under what conditions the product can be offered to customers in the specific country or group of countries. Therefore, when preparing product entry into a particular market, it is necessary to analyse the related technical standards, any necessary certifications, licences, etc. that can regulate the supply of the product on the relevant market. Due to the progressive globalisation of trade and the formation of international free trade zones, these rules have been greatly simplified in recent decades (Ondřej, 2009).

This gradual simplification of the rules and the removal of barriers to international trade resulted in the conclusion of international agreements governing international trade rules. These are the GATT General Agreement on Tariffs and Trade and the GATS – General Agreement on Trade in Services, specifically focused on the provision of services. These agreements do not directly affect the preparation of the purchase contract itself. These agreements are concluded between states (World Trade Organization member states) and thus create a process framework for international trade with a clear impact on trade between private entities located in different countries (Rozehnalová, 2010).

The General Agreement on Tariffs and Trade (GATT) is a multilateral agreement containing rules on business management, business dealings and trade dispute resolution among members. The GATT is important for customers on both B2B and B2C markets because of its rules and procedures forming the framework of international trade and trade policy. This has a real impact on the choice of consumer goods and its prices (WTO-GATT, 2014).

The principles of the original GATT 1947 agreements have been transposed into the rules of the World Trade Organization by the international negotiation process. This international organisation primarily pursues the following objectives in international trade (Rozehnalová, 2010):

- eliminating discrimination in international trade,
- freeing barriers to international trade,
- predictability of the trading system,
- elements of free competition in international trade – removal of export support, damping etc.,
- support for developing countries in international trade.

The basic principles of the GATT WTO agreements are the Most-Favoured-Nation (MFN) Treatment, Reciprocity, Transparency and Tariff Binding and Reduction. All of these principles have a positive impact on the aforementioned WTO objectives. In addition to the GATT, the GATS (the above-mentioned services trade) and the TRIPS (Agreement on Trade-Related Aspects of Intellectual Property Rights) were also prepared at the WTO platform. The World Trade Organization agreements thus cover all the most common private business cases of international trade.

Irrespective of whether foreign trade takes place within the European Union market or whether a foreign business partner resides outside the EU, this is a private-law relationship between two private entities and its legal regulation. The so-called Vienna Convention, i.e. the United Nations Convention on Contracts for the International Sale of Goods (UN-CISG, 1980), is the basic source of the trade contract. The creation of the
The Vienna Convention was accompanied by a relatively long process of international trade rules, and the Convention is largely based on trade practices applied in international trade relations (Svatoš, 2009). The point is that traders prefer clear rules for their transactions, independent to the court that will decide on possible disputes. The Convention thus follows the so-called Lex Mercatoria (Rozeňhalová, 2010). For this reason, many states have adopted a single substantive law stemming from this convention (Houtte, 2002). The crucial second and third parts of the Convention deal with the conclusion of the purchase contract and the purchase of goods in international trade.

The Vienna Convention is primarily concerned with the procedural aspects of the international sale of goods contract. On the other hand, it deliberately does not define what the sale of goods contract is. From the individual articles of the Convention, the basic framework of the sale of goods contract can be inferred. The basic features of the sale of goods contract are shown in Articles 30 and 53, defining the fundamental rights and obligations of the seller and the buyer. Article 2 of Vienna Convention also provides a list of purchase types that are not covered by Convention. These include, for example, the purchase of goods for personal use or purchase at auctions, etc. In Article 3, the Convention defines differences between sale of goods contracts and contracts for work to which the provisions of the Convention do not apply.

The individual provisions of the Convention are also reflected in the relevant national legislation – for example in the Czech Republic, Act No. 91/2012 Coll., on Private International Law, partly also Act No. 89/2012 Coll., Civil Code. Similarly, this applies to other countries. In Germany, the basis is included in the EGBGB (German Civil Code Bürgerliches Gesetzbuch) in Articles 3 to 49 (EGBGB, 2014).

Another important source is the legislation valid within different communities of states, i.e. in our particular case, the legislation of the European Union. These are EU common trade policy rules underlying the EU regulation known as Rome I – Regulation (EC) No. 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I) (EURLEX, 2008). Within the European Union, another important regulation is the Brussels I – Regulation No 1215/2012 of the European Parliament and of the Council on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (EURLEX, 2012).

As in the case of the above-mentioned Convention, important provisions of the European legislation are directly reflected in national legislations.

Parallel to the described national legislative structure based on the above-described international agreements and national or supranational (EU) regulations, a non-governmental structure has gradually emerged in order to facilitate the effective functioning of international trade. This is above all the already mentioned Lex Mercatoria and also the chambers of commerce, the members of which are directly involved in the business. Internationally, the International Chamber of Commerce (ICC) has a privileged position. Among the strongest instruments and ICC products, there are the opportunity to conduct arbitration between business partners in the international trade as well as INCOTERMS. It is a set of international rules for the interpretation of the most commonly used trade clauses in international trade.

3. Industrial component sector specifics and related research questions

Within the industrial component sector, the competitive advantage is very often based on high level of product customisation. Customisation and flexibility towards customer requirements is getting more and more im-
important due to growing Asian competition primary from China competing by strong pricing strategies. In this competitive environment the focus on customisation based on superior knowledge of customer needs and wide range of possible product applications is the only way to keep and explore the position in the market (Chlebovský, 2017).

One of the key success factors to support the customisation strategies is based on highly educated, experienced and motivated sales engineers working with customers on daily base.

The second important issue is responsibility and liability related to the solution offered and delivered to customers (Chlebovský, 2017).

It is obvious out of the market environment analysis that a long-term sustainable competitive advantage can be reached only through efficient capacity to offer and deliver customised solutions together with superior customer service and fair reasonable pricing (Biggemann et al., 2013). A customised solution can often represent a cost reduction factor for the customer – no need to do complicated assemblies on the customer side when a ready-to-fit solution is already provided by the supplier.

In order to make customised solution offer time and cost effective, it is necessary to fully control the process under unified organisation umbrella with an excellent communication system. The organisation has to be based on well-educated and experienced sales engineers responsible for direct communication with customers and capable of communicating all customer requirements and solution proposals internally through R&D and production (Chlebovský, 2017). Buyer-Seller bonding is then often discussed when close cooperation is applied. In this focus on product development, production and delivery is called technical bonding. Technical bonding relates to the characteristics of products and services exchanged in the relationship (Johanson, Mattsson, 1987).

Keeping the entire solution development, production and delivery process under unified organisation umbrella brings a high advantage in the clear liability and responsibility for the entire solution delivered to the customer. This gives customers commitment that one supplying company is responsible for the solution delivered.

The following research questions were formulated based on the described situation in international trade and specifics of the industrial component sector:

1. Do the industrial component suppliers perceive increased requirements for close cooperation with the final customers independent of the country of customer’s location?
2. Do the industrial component suppliers perceive increased requirements for full liability and responsibility for the product – a solution offered and delivered independent of the country of customer’s location?
3. Are the industrial component suppliers adapting their sales channel organisation structures in order to streamline the cooperation with final customers independent of the country of customer’s location?
4. Are the industrial component suppliers adapting their sales channel organisation structure in order to provide full liability and responsibility for the product independent to country of customer location?

4. Research methodology

In order to answer the above formulated research questions within the selected sample of companies, qualitative research was used.
Qualitative research is seen as a very useful tool to observe real conditions and situations in real environments. What is important is the scope of the problem from the researched subject’s perspective. Qualitative research works with the research question only and does not test the hypothesis. Qualitative research based on case studies is used very often to observe, describe and prove research models in specific organisations (Eisenhardt, 1989, 1991). Thus case study research was chosen in this situation.

There were five companies selected that represent various industrial component suppliers. They represent producers and trade companies. The selected companies also represent different size categories from large global corporations to medium and small businesses. They are located in several European countries: Switzerland, Germany, Austria, and the Czech Republic.

The research case study template was created prior to conducting the research, primarily covering the following groups of information: company business basics, product group characteristics, marketing and sales process characteristics, product customisation capabilities, strategic development plans and competition characteristics. All groups of the described information are specifically focused on current and future capabilities of the companies in customer solutions development and capacity to handle liability issues.

The data collected for the case study protocols are from three major sources:

1. Secondary source research within the past four years – primarily financial reports, annual reports (if applicable) and the Amadeus database (Bureau Van Dijk, 2015) were used.
2. Observations inside all five companies in regular time intervals within the period 2015–2018.
3. In-depth interviews with company managers at all management levels in all companies. The interviews were conducted during the period April to July 2018.

The following companies were researched (their names are modified to keep sensitive information confidential):

AAAA is a Swiss producer of electric DC and EC motors, gearboxes, drive electronics and other components and respective accessories. The company was established approx. 50 years ago and built up a global market presence through a network of either subsidiaries (on major markets) or distributors.

BBBB is a German manufacturer of components for drive technologies and industrial automation. The company has approx. 200 employees and an annual turnover close to 25 mil. EUR.

CCCC is an Austrian company focusing on the trade and engineering of components and subsystems in the field of industrial automation. The company is active in Austria and also other countries within the CEE region (the Czech Republic, Poland, Slovakia, and Hungary).

DDDD is a Czech company representing several foreign industrial component producers on the Czech market. It was established in 2008 and has gone through a dynamic development. The turnover reached 3 mil. EUR in 2017. The company has approx. 15 employees at the moment.

EEEE is an Austrian company representing a number of foreign industrial component producers on the Austrian market. It was established in 1990 and grew up to 20 mil. EUR in the turnover in 2017.

5. Research summary and analysis

The information collected through case studies is summarised in Table 1, showing the current situation of the companies researched and also in Table 2, which summarises the future plans and visions of the company managements in order to stay sustainably competitive in their markets. The results presented in Table 1 are based on all three information sources mentioned above – the
Table 1. Summary of the case studies.

<table>
<thead>
<tr>
<th></th>
<th>AAAA</th>
<th>BBBB</th>
<th>CCCC</th>
<th>DDDD</th>
<th>EEEE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company size / number of employees</strong></td>
<td>Large / 2000+ worldwide</td>
<td>Medium / 200 in Germany</td>
<td>Medium / 20 in Austria and Czechia</td>
<td>Small / 10 in Czechia</td>
<td>Small / 25 in Austria</td>
</tr>
<tr>
<td><strong>Annual turnover (mil. EUR)</strong></td>
<td>250+</td>
<td>25</td>
<td>12</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td><strong>Trends of financial ratios</strong></td>
<td>Stable growing even with CHF Exchange rate issues and fluctuations</td>
<td>Unstable</td>
<td>Decreasing margins</td>
<td>Decreasing margins</td>
<td>Decreasing margins</td>
</tr>
<tr>
<td><strong>Product type</strong></td>
<td>Components – production</td>
<td>Components – production</td>
<td>Components – distribution in multiple countries, services</td>
<td>Components – distribution in the Czech Republic, services</td>
<td>Components – distribution in multiple countries, services</td>
</tr>
<tr>
<td><strong>Internal focus</strong></td>
<td>Product technology</td>
<td>Customised solutions, technology</td>
<td>Customised solutions based on distributed products</td>
<td>Product distribution</td>
<td>Customised solutions based on distributed products</td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td>Limited, stable</td>
<td>Limited, decreasing</td>
<td>Medium, decreasing</td>
<td>High, stable</td>
<td>Medium, stable</td>
</tr>
<tr>
<td><strong>Product management</strong></td>
<td>Yes</td>
<td>Yes but limited to some applications (medical)</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Product complexity</strong></td>
<td>Good, growing</td>
<td>Good, stable</td>
<td>Insufficient portion of services (primarily SW); Dependent on respective producer</td>
<td>No</td>
<td>Dependent on respective producer</td>
</tr>
<tr>
<td><strong>Market and customer orientation</strong></td>
<td>Insufficient internal coordination</td>
<td>Insufficient orientation on competition</td>
<td>Good</td>
<td>Insufficient orientation on competition</td>
<td>Good</td>
</tr>
<tr>
<td><strong>Customised product offer</strong></td>
<td>Yes – in high quantities</td>
<td>Yes – all products, all quantities</td>
<td>Yes – in cooperation with the respective producer</td>
<td>No</td>
<td>Yes – in cooperation with the respective producer</td>
</tr>
<tr>
<td><strong>Customised solution responsibility</strong></td>
<td>Full in countries with daughter business units / limited and shared with distributors in other locations</td>
<td>Full in countries with daughter business units / limited and shared with distributors in other locations</td>
<td>Limited – shared with the respective producer</td>
<td>No</td>
<td>Limited – shared with the respective producer</td>
</tr>
<tr>
<td><strong>Knowledge management</strong></td>
<td>Good stable</td>
<td>Insufficient knowledge sharing platform</td>
<td>Insufficient knowledge sharing platform</td>
<td>Insufficient knowledge sharing platform</td>
<td>Insufficient knowledge sharing platform</td>
</tr>
<tr>
<td><strong>Innovation orientation</strong></td>
<td>40 registered patents</td>
<td>29 registered patents</td>
<td>1 registered patent</td>
<td>0 registered patents</td>
<td>0 registered patents</td>
</tr>
<tr>
<td></td>
<td>Annually invested 9% of the turnover into R&amp;D</td>
<td>Annually invested 6% of the turnover into R&amp;D</td>
<td>R&amp;D investments</td>
<td>R&amp;D investments</td>
<td>R&amp;D investments</td>
</tr>
</tbody>
</table>

*Source: Author’s own study.*
secondary data from the financial reports, observations in the selected companies, and in-depth interviews with company managers.

The results in Table 2 are based on the in-depth interviews with company managers and their assessment of the current situation and future business plan.

The data in both Tables are summarised out of the respective research case-study protocols.

Table 1 shows that production companies are still focusing more on technology excellence rather than customer requirements. The examined companies have limited flexibility in general and they do not use project-based organisation towards product and solution development. On one side, they have a good level of product complexity but their product offer individualisation capability is rather limited.

When it comes to the future orientation shown in Table 2, the companies perceive the importance of the capacity to offer customised product solutions to customers and also the importance of good customer knowledge and communication.

### 6. Discussion, conclusion and limitations of the research

Based on the qualitative research summary presented in the Table 1 and Table 2, the following notes were formulated in relation to the defined research questions.

The qualitative research performed in the form of case studies in the above-described five companies within the industrial component sector in Europe shows the increasing importance of focusing on offering product individualisation to customers as a key factor influencing sustainable competitiveness. This was stated by the managers of all involved companies within the in-depth
interviews. They also confirmed that this increased importance of product individualisation was driven by an increased demand from the customer side. They also see an increased importance of related process optimisation, as well as streamlining customer communication. On the other hand, only two bigger component producers – companies AAAA and BBBB are planning to build up their own global distribution network in order to eliminate external distributors and keep full responsibility and legal liability for the solutions offered and delivered to their customers independent of the country of customer’s location.

Therefore, generally based on the presented five case studies, the research questions one and two, the answer is yes – the companies see the clear trend of an increased demand for closer cooperation with their customers independent of the country of customer’s location. Customers are also asking for supplier’s full responsibility and liability for the solution delivered.

On the other hand, the companies are not yet ready to provide such services in an efficient way within the current structure of their distribution channels. Thus the answer to research questions three and four is no – the companies are not yet adapting their sales channel organisation structure.

The major limitation of the presented research and its results consists in a small number of companies covered by the qualitative research.

In order to confirm those qualitative research results, it would be desirable to conduct subsequent quantitative research to map a broader range of companies in wider industrial sectors to obtain a better picture of both customer demands and company capabilities.

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