

# **The limits of standardisation?**

Work-in Progress Paper

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## **ABSTRACT**

Standardisation vs. adaptation of the marketing mix in foreign markets has been one of the key research areas in international marketing since the late 1960s. The main interest has so far been focused on the products. The product element seems to have been the most standardised and distribution the most adapted element.

The goal of this study is to analyze the limits of standardisation in marketing. We look at the limit from the point of the safety aspect. Is it ethical to standardise by bargaining the safety of a small customer group? The empirical part of the study focuses the standardisation of the jack used for tyre change on passenger cars. The car industry is one of the most competitive industries in the world. The industry has modularised and standardised the components and large assembly parts of the car.

The car industry has outsourced their products for several decades by having high purchasing power. Most passenger cars on the market are equipped with spare tyre, jack and basic tools for emergency tyre changes. However, there is a limited size segment of customers mainly in the North, who change all tyres twice a year by themselves due to harsh winter conditions. Outsourced low quality jacks provided by Ford for their model Mondeo have collapsed during the work and caused their users great risks of injury. We argue that the product safety risk should be taken into account in standardisation literature.

## **1. INTRODUCTION**

Standardisation vs. adaptation of the marketing mix in foreign markets has been one of the key research areas in international marketing since the late 1960s. On the one hand several authors have presented arguments favouring standardisation but on the other hand many authors have also supported the advantages of adaptation of the marketing mix (Vrontis and Trassaou, 2007). The main interest has so far focused on the product elements of the marketing mix (Birnik and Bowman, 2007). One great example of adaptation is the Barbie doll in Japan. The research results about the degree of standardisation or adaptation used have been mixed. The product element seems to have been the most standardised and distribution the most adapted element. The goal of this study is to analyze the limits of standardisation in marketing. In other words we question if there are any product safety risks in standardisation. The empirical part of the study will focus the standardisation of the jack for tyre change on passenger cars. The car industry is one of the most competitive industries in the world. The industry has outsourced the product for several decades (BERA; 2004). The supplier markets are heavily buyer dominated. The modular product design allowing the mix and match of modular components is now appearing in diverse product markets (Sanchez and Mahoney, 1996).

The remaining part of the paper is organized in the following way. First, we introduce some theoretical foundations of our study, including standardisation and adaptation in international business, modularisation and the classification of buyer seller relationship. Second, we describe the methodology of the study. The methodology is based on a case study analysis. Third, we report our empirical case with three sub-sections: 1) a brief description of the car industry and its main global purchase strategies 2) an examination of the Finnish sales of Ford cars. Finally, we draw conclusions and discuss implications and further research.

## **2. LITERATURE**

In this section we discuss the pertinent literature, standardisation vs. adaptation within a MNC, modularisation and classification of buyer – seller relationship related to our case of the collapse of jack during the change the tyres of Ford Mondeo.

### **2.1 Standardisation vs. adaptation**

The research on the standardisation vs. adaptation of the marketing mix has received during the years a lot of attention. Already in early 1960s it was argued that advertising could be standardised in European countries as it was standardised in the US (Elinder, 1961). In the 1970s this discussion got more attention (Sorenson and Wiechmann, 1975).

Theodosiou and Leonidou (2003:142), Lewitt (1983) and Ohmae (1985) see standardisation as the driving force behind greater market similarity, more technological uniformity, and higher convergence of consumer needs, tastes, and preferences. According to them standardisation is further facilitated by the growth of international communication channels, the emergence of global market segments, and the presence of the internet. A standardisation strategy offers several benefits: 1) economies of scale, particularly in research and development, production,

and marketing; 2) the presentation of a consistent brand image across countries, 3) reduced management complexity due to better coordination and control of international operations (Levitt, 1983; Douglas and Craig, 1986; Yip, Loewe and Yoshino, 1988).

Advocates of the adaptation strategy argue that variation between countries in such dimensions as consumer needs, use conditions, purchasing power, commercial infrastructure, culture and traditions, laws and regulations, and technological development are still too great, thus requiring the adjustment of firms' marketing strategy to each foreign market (Theodosiou and Leonidou 2003, Terpstra and Sarathy, 2000). The standardisation strategy is seen as a new kind of marketing myopia, oversimplifying reality, and contradicting the marketing concept (Boddewyn, Soehl and Picard, 1986; Wind, 1986; Douglas and Wind, 1987). The ultimate goal of the firm is not cost reduction through standardisation, but long-term profitability through higher sales accrued from a better exploitation of the different consumer needs across countries (Onkvist and Shaw, 1990; Rosen, 1990; Whitelock and Pimblett, 1997). According to Shaklin and Griffith (1996) standardisation is suitable for cost-based competition provided that it reduces the operation costs and gains economies of scale. Large size firms should use the product adaptation and a more customised product or service for their customers in the EU (Chung, 2005).

Vrontis and Thrassou (2007) summarize the reasons for the UK based multinational companies (MNCs) to standardise or adapt their operations within the 7P model (product, price, place, promotion, people, process and physical). For standardisation product has for instance the following reasons: production economies of scale, stock costs reduction, consistency with customers, synergetic effects. For adaptation reasons for product are for instance meet differences in lifestyle, meet differences in beliefs and consumer practices, meet different legal/political requirements and restrictions. In their study Vrontis and Thrassou (2007) do not discuss any product safety risks in standardisation or a reason for adaptation. .

According to Quelch and Hoff (1986), Onkvist and Shaw, 1987, Jain, 1989, Cavusgil and Zou (1994) and Vrontis et. al. (2009) standardisation or adaptation should not be seen in isolation from each other, but as the two ends of the same continuum, where the degree of firms' marketing strategy standardisation / adaptation can range between them. Vrontis et. al. (2009) posit MNCs on a linear continuum which indicate their overall attitude towards standardisation/adaptation. According to them it is irrational for businesses to attempt complete standardisation of the marketing mix, except under clear set of circumstances and certain product categories. The balance between standardisation and adaptation is difficult to achieve. Neither Vrontis (2003) nor Vrontis et. al. (2009) discuss about the product safety risks of standardisations.

According to Birnik and Bowman (2007) the following conceptual factors affect to marketing standardisation (Table 1). As we can see they do not include potential product safety risks of standardisation in the table. The authors look the standardisation from two points of view: customers' perceived use value (PUV) and/or reduced costs. Birnik and Bowman (2007) define the PUV according to (Bowman and Ambrosini, 2000) as the customers' perception of the usefulness of a particular product or service. The higher customer PUV is higher brand preference, larger market share, larger customer base, more customer loyalty and finally higher

revenues are. Reduced costs imply higher margin. Figure 1 illustrates their view of PUV and production costs.

Table 1. Contextual factors and influence on standardization (Birnik and Bowman 2007:311)

	<b>Stronger evidence</b>	<b>Weaker evidence</b>
More standardization	<ul style="list-style-type: none"> <li>• Industrial products</li> <li>• High-tech products</li> <li>• Market similarities</li> <li>• Products in same stage in PLC</li> <li>• Fully owned subsidiaries</li> </ul>	<ul style="list-style-type: none"> <li>• Essential products</li> <li>• Luxury products</li> <li>• Indirect entry modes</li> <li>• Parent and subsidiary have similar competitive positions</li> <li>• High degree of communication between parent and subsidiary</li> <li>• Foreign operations centralized in an international division</li> <li>• Strategy based on either (a) cost -based competition or (b) product/innovation oriented</li> <li>• Centralization in decision-making</li> </ul>
Less standardization	<ul style="list-style-type: none"> <li>• Consumer products</li> <li>• High local competitive intensity</li> </ul>	<ul style="list-style-type: none"> <li>• Products used at home</li> <li>• Culture bound products</li> <li>• Direct entry modes</li> <li>• Local in-country production</li> <li>• Customer-based strategy</li> </ul>
Inconclusive		<ul style="list-style-type: none"> <li>• Size of local market</li> <li>• Country of origin of parent company</li> <li>• International experience of parent</li> </ul>

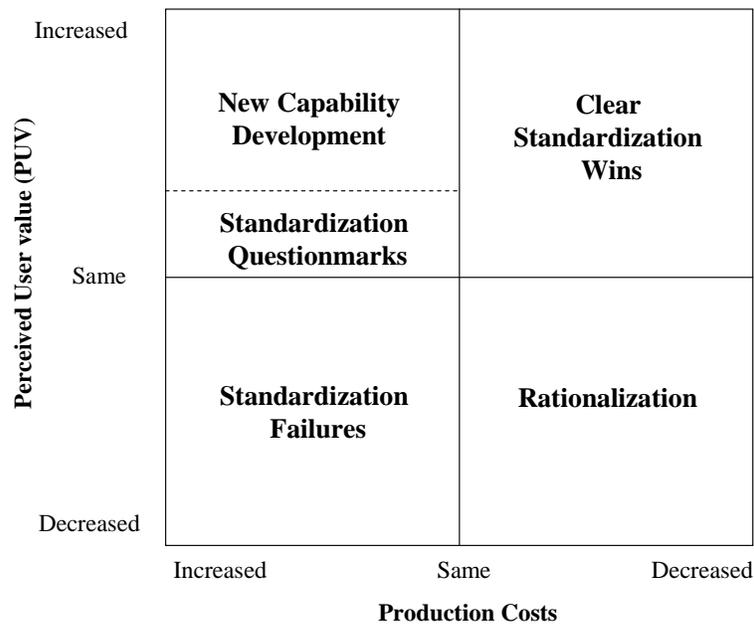


Figure 1. PUV and production costs (Birnik and Bowman 2007:312).

## **2.2. Modular Product Design**

Modularity has been a research topic in management and engineering literature for over forty years (Salvador, 2007). The research on modularity has traditionally been focused on the design of products (Baldwin and Clark, 1997). Modularity enables mixing and matching of modules in a way that the final product fits the needs of the buyer (Baldwin and Clark, 1997). In addition, it also enhances flexibility by increasing the number of possible configurations (Schilling, 2000). This paper examines modularity in the context of financial services.

According to Shirley (1990) product designs using modular components provided a large number of product variations while reducing overall manufacturing costs. Sanchez and Mahoney (1996) suggested that modularity in product design creates many options for product variations in the form of feasible combinations of modular components, some of which may be drawn from 'design library' of existing components. The modular product design is flexible because product variations can be leveraged by substituting different modular component into the product architecture without to redesign other components (Sanchez, 1995) and Garud and Kumaraswamy (1993). In the 1980s Black and Decker designed its entire line of power tools the way with enabled to use a lot common modular components (Utterback, 1994).

Modularity generates advantages for the producers and their customers. Modularity has been seen as one of the enablers of mass customization (Salvador, 2007). When the standard interfaces of components creates compatibility, mixing and matching is possible, and this again creates a chance for mass customization (Voss and Hsuan, 2009). Via mass customization a wide range of products can be offered for customers. These products meet the specific needs of an individual customer and the costs are nearly as low as mass production costs. (de Blok et al., 2010) Modularity creates also huge flexibility (Sanchez and Mahoney, 1996; Baldwin and Clark, 1997). It enables parts of the product to be recombined quickly in a way that fits the need of a customer (Schilling, 2000).

According to Schilling and Steensma (2001) there are three ways to create modularity in organizations: 1) contract manufacturing, 2) alternative work arrangements and 3) alliances. Contract manufacturing makes it possible for companies to match their offer for the market demand without increasing the number of their own labour forces or binding capital in production investments. The company is also able to focus on its core competence. Contract manufacturing increases flexibility and economies of scale. The downside is that companies have to be careful with the information they share with the contractors. In addition transaction costs have to be analyzed as well as the missed learning opportunities. (Schilling and Steensma, 2001)

## **2.3 Classification of buyer – seller relationships**

Campbell's (1985) classification of buyer – seller relationships is based on the three types of governance structure proposed by Williamson (1979) for commercial transactions. Equity is guaranteed in exchanges usually by the market mechanism. A fair price is established in competitive markets, and the price itself contains most of the information needed by the parties. These relationships are independent. If the exchange is contingent on uncertain future events,

assessment of price is very difficult. Nevertheless, the requirement for equity remains and, for this reason, a bureaucratic, or hierarchical, relationship is preferred. The perception of equity depends on a social agreement that the bureaucratic system has the legitimate authority to decide what is fair. In these relationships, one party is dependent on the other. Independent, dependent, and interdependent relationships arise in different situations. For example, independence arises in a buyer's market (having many competitive sellers), and in a seller's market (having many buyers). Interdependence arises when both parties approach the relationship with a strategy of cooperation. Both are willing to establish a long-term relationship, to exchange information openly, and to trust each other. Finally, a dependent relationship results from the dominance one party exerts over the other.

Campbell (1985) calls marketing or purchasing strategies which result when one party has a dominant position of strength command strategies. The independent, interdependent, and dependent types of relationships result from the interplay of interaction strategies, classified by Campbell them as competitive, cooperative, and command. The interplay of these strategies leads directly to the nine-cell matrix in Figure 2. There are three cells with independent relationships, one with interdependent relationships, two with dependent relationships, and three called Mismatch. Marketing and purchasing managers can readily identify the type of situation they are facing.

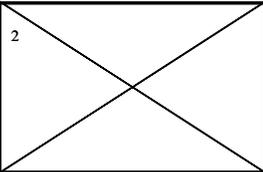
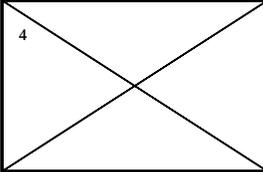
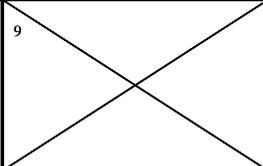
		Marketing strategy		
		Competition	Co-operation	Command
Purchasing strategy	Competition	1 Independent Perfect market	2 	3 Independent Seller's market
	Co-operation	4 	6 Mutually dependent Domesticated market	6 Dependent Captive market
	Command	7 Independent Buyer's market	8 Dependent Subcontract.	9 

Figure 2. Classification of the seller buyer relationship (Campbell, 1985)

### 3. RESEARCH DESIGN AND METHODOLOGY

In our analysis, we take a qualitative research approach for the collection and analysis of primary data (Yin, 2009). In a case study the most important is the depth of the analysis, both in terms of the number of factors studied and sources of information used “(Yin, 2009)”.

According to Yin (2009), a single case study is an appropriate design under when the case represents a critical case in testing a well-formulated theory, proposition or model. The single case can represent a significant contribution to knowledge and theory building. Since the present case, the jack of Ford Mondeo, can be regarded as a critical case in testing the standardisation / adaptation literature from the view point of product safety risk, the choice of the case was appropriate.

The author experienced himself the collapse of the jack. This lead him to the investigation of the event. The estimated number of collapses is based on newspaper articles and Internet discussions. The percentage of the persons changing seasonally (in spring and autumn) tyres were estimated in random poll in management training. The sale of Ford passenger cars was estimated from the statistics.

## **4. JACKS IN FORD MONDEO**

### **4.1. The competitive car industry**

The car industry with its many fiercely competing brands is today one of the most competitive market in the world. The global trade has enabled them to build world wide distribution systems. It has also expanded global competition all over the world. Japanese automakers utilize technology to enhance production and thus increase their competitive advantage. The world's largest manufacturers continue to invest into production facilities in emerging markets to reduce production costs. There are several global alliances and more will be made. The U.S. automakers have merged or established commercial strategic partnerships with other European and Japanese automobile ones. The industry has consolidated and the global competition has increased. (BERA, 2004).

According to Mudambi and Helper's (1998) 'close but adversarial' model of the buyer-supplier relations was reasonable well supported by the data of the U.S. auto industry. Their model has a framework of formal cooperation accompanied by noncooperative behavior. While cooperative buyer-supplier relations are an important source of competitive advantage, noncooperative behavior persists widely. They also say that within such a framework, the buyer takes the advantage of competitive weaknesses of the suppliers to reap short-term gain. Since periodic profit maximization means that all realizable gains are attractive to the buyer, switching to a cheaper source is just as likely in the case of a relatively important purchase as in the case of a relatively unimportant one (Mudambi and Helper, 1998:786).

### **4.2. Specialties in Finland and Nordic countries**

Finland is a country of hard winters and slippery roads. Since the mid 1970s it has been compulsory in Finland to use winter tyres on passenger cars for three months (Sweden and Norway, as well). In these countries many people are still willing to change the tyres twice a

year tyres by themselves. Cars have become more and more complicated and the change of tyres is one of the last things an average do-it-yourself driver can do. In the spring 2011 a survey at a management training course showed that 12 participants out of 17 participants change tyres themselves. The flexibility (no need to book time and visit a dealer or other company) plus time and money savings create value for them.

In autumn 2006 several jacks of Ford Mondeo broke during the change of the winter tyres in Finland. In autumn 2006 the Finnish Consumer Agency reported four cases and gave a notice: **FORD MONDEO CARS HAVE HAD DANGEROUS JACKS**. By March 2007 totally 40 people reported the collapse of jack during the tyre change to the Consumer Agency (Pippuri, 2007). This problem existed in Mondeos sold since 2001. There was lively discussion on the topic on the Internet. Somebody had posted Ford's arrogant response to his or hers complain: "We are sorry for this collapse of the jack. The jack was designed for an emergency situation and not for seasonal changes of either winter or summer tyres. The warranty of a car is one year and since your car is three years old you are not entitled to a new jack for free." Ford's import company in Finland asks the customers to go to their dealers for changing tyres. In March 2007 the Ford Finland send a letter with the similar message and an additional page to the user's manual to 20 000 Mondeo users in Finland.

The US based Ford has manufactured cars in Europe since the 1920s. In the 2000s several models such as Ka, Fiesta, Focus and Mondeo were manufactured in Europe. The first two ones are small while the last two ones are of the family type. Mondeo is the largest model. All models are manufactured hundred of thousands a year. Most of them are sold in the Central Europe. In 2005 totally 10260 Ford cars were registered in Finland. The distribution between models was as follows: Ka 104, Fiesta 819, Focus (including C-Max) 6684, and Mondeo 2653. Car manufacturers (including Ford) have had supplier networks for a long time. They buy large amounts of components and sub-assemblies from their subcontractors. They use normally reverse auctions in their purchasing.

## **5. CONCLUSION**

The automobile manufacturers are experienced users of modularization. The different models or even brands within same manufacturer (like Volkswagen) have the same components (used as modules). This way they create both economies of scales in manufacturing and stock cost reduction the modules. This system works also for jacks in Ford. The jack is just a module for a car. Ford standardises its jacks to all models. However, this standardisation is challenging. This can be illustrated on the modified Birnik and Bowman's (2007) PUV and production costs – matrix (see Figure 3). The x- axis includes all cost such as production, storing, warranty and product liability costs. The advantages of standardisation of jacks such as economies of scales in purchasing, stock costs reduction and synergistic advantages are easily estimated. On the contrary, the PUV of standardised jacks is not so easy to estimate and forecast. The poor quality jack not used at all or used only once in an emergency situation does not bring any value to the car. However, a poor quality jack in the hands of a person changing tyres (not knowing or not thinking of the quality of jack) can destroy the value not only for this particular person but for other Mondeo owners by lowering the brand image and the sales value of the car. Figure 3

shows the position (the red ellipse) of the jack in PUV and costs –matrix. The costs (in terms of lost brand image loss and potential product liability costs due to the poor quality jack) may increase dramatically. At the same time PUV is reduced due to a potential injury. Lowest part of the jack is clearly on the area where standardisation fails.

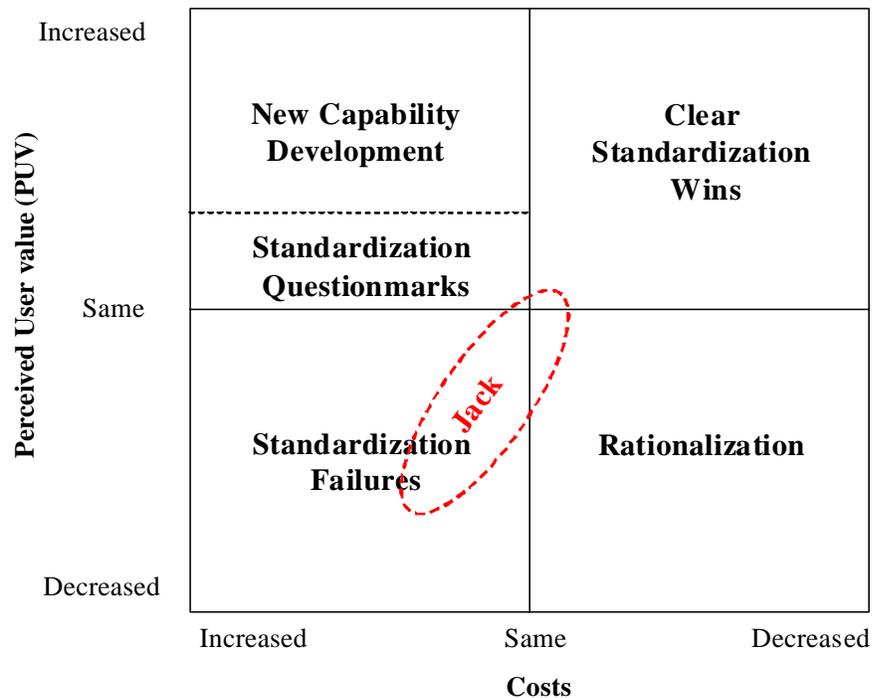


Figure 3. Mondeo’s jack in PUV and production costs matrix.

Vrontis et. al. (2009) also suggest that complete standardisation of the marketing mix is irrational, except under clear set of circumstances and certain product categories. It seems that in the case of Mondeos' jacks the circumstances were not clear (at least in Finland). Thus, Ford should have had adapted them to this certain market segment where people are willing to change tyres. According to Ching (2005) large size firms such as Ford should use the product adaptation and a more customised product or service for their customers in the EU.

As we saw standardisation provides trouble to the largest model, Mondeo. The company deliberately neglects this small segment of customers (who seasonally change tyres themselves) driving Mondeo in the Nordic countries. This segment is so small that the product safety risk of a collapsing jack (even with personal injuries) is worth taking. The great savings of mass produced standardised jacks (fitting all models) can easily compensate the safety risk taken in a small segment.

In the purchase side a car manufacturer as a big customer is very powerful against its suppliers of components (such as jacks). The car manufacturers operate on buyer’s market in Campbell’s (1985) matrix. Tight bargaining may also end up purchases from a low quality supplier or

products made of low quality raw material. Mudamdi and Helper's (1998) findings support this view. The jack is an individual module for a car and it is easy to order. One euro savings in the price per a jack in a lot of 400 000 units makes €400 000. There are also stock cost savings.

Car manufacturers operate in a totally opposite way on the customer side. They try to make their customers as dependent on them as possible. According to Campbell (1985) they like to create captive market. They don't want consumers to do any maintenance work on their cars. In some extreme cases you might even need a special tool to change the light bulb. The same logic applies to tyre changes. The car is a black box and a tyre is a part of it.

According to Kano's (1984) terms jacks have turned from "Must-be-requirement" (see figure 4) to dispensable accessories and the company's attitude towards this change is clear. When one unsatisfied customer contacted Ford's import company on the subject, the lady at the spare parts department gladly told him that their jack is just a poor tool. Thus, the personnel knew the poor (and dangerous) quality of the jack. They also knew that somebody could have dropped or could drop the car on his/her feet or legs. The attitude of the company was the same as it was in the case of Ford Pinto in the U.S. According to Lee (1988) Ford's bosses had been accused for coldly deciding to produce and market Ford Pinto even after the company's crash tests had showed that its gas tank would break in the rear-end collisions even at low speeds.

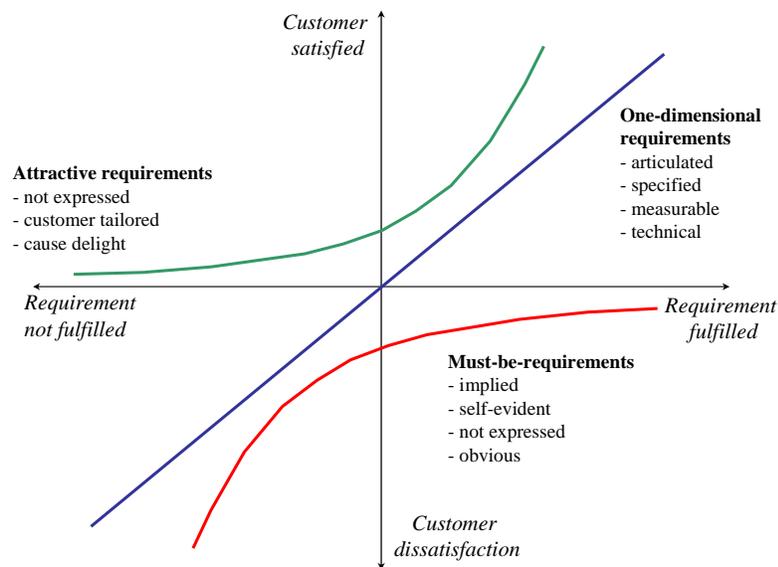


Figure 4. Kano's model of customer satisfaction (Berger, 1993)

Based on this study we argue that the product safety risk should be taken in the discussion and models of standardisation. The standardisation literature should also take the view of customer safety of a small customer group into the account.

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