The changing role of brands in the age of empowered consumers

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Gunnar Klaming
Matriculation Number: 04-983-862

Supervisor: Prof. Andreina Mandelli
Co-Supervisor: Prof. Ivan Snehota
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- Prof. Andreina Mandelli (Università della Svizzera italiana, Lugano, Schweiz & SDA Bocconi, Mailand, Italien),
- Dr. Thomas Schwetje (Principal bei BBDO Consulting), und
- Prof. Ivan Snehota (Università della Svizzera italiana, Lugano, Schweiz).

Für weitere Fragen steht Ihnen Herr Gunnar Klaming gerne unter der E-Mail-Adresse gunnar.klaming@googlemail.com zur Verfügung.
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List of abbreviations

CERN ................................................... Conseil Européen pour la recherché nucléaire
CLV .................................................................................................................. customer lifetime value
e.g. .................................................................................................................. exempli gratia / for example
e-brand ........................................................................................................... electronic brand
e-commerce .................................................................................................. electronic commerce
ed .................................................................................................................... editor
eds. .................................................................................................................. editors
e-mail ............................................................................................................. electronic mail
et al. ................................................................................................................ et alii / and others
eetc. ................................................................................................................ et cetera
i.e. ............................................................................................................... id est / that is
m-commerce .............................................................................................. mobile commerce
n.d. ............................................................................................................... no date
Net ............................................................................................................... Internet
p. ..................................................................................................................... page
PC ............................................................................................................. personal computer
pp. ................................................................................................................ pages
URL ........................................................................................................... uniform resource locator
vs. .................................................................................................................. versus
Web ........................................................................................................... see WWW
WWW .................................................................................................... World Wide Web
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1. Introduction

It is easier for consumers to consummate transactions when they are aware of sellers and, moreover, when they have confidence that sellers will deliver as promised. The reputation of sellers – or the brand – is one means by which businesses have traditionally promoted buyer awareness and bonded their promises to deliver (Klein & Leffler, 1981). Brands as "a collection of perceptions in the mind of the consumer" (Bates, 2006) are relevant for many choice and purchase decisions (Meffert, 2000). Consumers link a range of associations to a brand, from associations that include characteristics which can be perceived by the senses (e.g., an engine’s horsepower, a product’s design, or a brand’s visual presence in visual or promotional campaigns) to characteristics associated with a brand’s identity (origin, reputation, and personality); and from perceived rational benefits (the product and its functions, the transaction process, or the relationship between the consumer and the brand/supplier) to emotional benefits which consumers perceive to be related to a brand (self-expression, image transfer, or self-realization) (Perrey et al., 2003; see also Aaker, 1996). By delivering all this information to consumers, brands can facilitate consumers' purchase decisions.

At the same time, information provided by sellers and by third parties can be an alternative mechanism for making consumers willing to undertake transactions. Through the Internet\(^1\), an ever-increasing amount of information from branded sellers, unbranded competitors, and third party information providers (“information intermediaries”) is provided to consumers. Consumers are now able to obtain objective, trustworthy information on retailers’ existence and reliability as well as products and services in real-time, at any time from virtually any place in the world – markets be-

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\(^1\) The Internet is the worldwide, publicly accessible network of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP). It is a network consisting of millions of smaller networks, which together carry various information and services, such as e-mail, online chat, file transfer, and the interlinked Web pages and other documents of the World Wide Web (synonymously: the Web). Contrary to some common usage, the Internet and the World Wide Web are not synonymous: the Internet is a collection of interconnected computer networks, linked by copper wires, fiber-optic cables, wireless connections, etc.; the Web is a collection of interconnected documents, linked by hyperlinks and URLs. The World Wide Web is accessible via the Internet, along with many other Internet services, such as e-mail, file sharing and others. (http://en.wikipedia.org/wiki/Internet) Despite these deflections in definition, the two terms will be used interchangeably throughout the present paper, because the WWW is the most commonly used user interface in the Internet.
come increasingly transparent and information asymmetries between sellers and buyers decrease. The so empowered consumers may, as a consequence, become willing to patronize lesser-known, rather than branded, retailers (Deregatu, Rangaswamy & Wu, 2001).

Both brands and the Internet play crucial roles in consumers’ purchase decision processes (Doubleclick, 2005; Meffert, 2000; Häubl & Trifts, 2000) with each having its strengths and weaknesses. While strengths of brands might be perceived differently by different consumers, a commonly agreed-on disadvantage of many brands is the relatively higher price that is charged for a branded product compared to a non-branded one. Moreover, as many products and services are becoming more and more equal from a technical-qualitative point of view, they become increasingly exchangeable.² Dramatically shorter product life cycles and constantly accelerating product aging are further challenges for companies that they must deal with (Gorchels, 2000; Kotler et al., 1996). And the combination of a growing multitude of brands and a homogenization of objective brand attributes leads to increasingly competitive communication. As a result, consumers are inundated with innovations, product concepts, information, and advertising messages. The Internet’s strength is its technology which – besides making this enormous amount of information available – even makes it possible to offer personalized goods to consumers, based on their past behavior (Smith & Brynjolfsson, 2001; Alba et al., 1997). Nonetheless, the Internet has also weaknesses. Many consumers are very skeptical about the credibility and reliability of both information provided and sellers providing products or services through the Internet (Ward & Lee, 1999). Foremost, they are afraid of privacy infringements and the non-fulfillment of non-contractible parts of an offering (such as service quality, delivery times, reliability, higher willingness to accept returns, etc.). Incidentally, strong brands reduce these risks, because they indicate reliability, trust, and recognition.

To recapitulate, on the one hand, both Internet technology and brands provide consumers with information in their purchase decision processes, which may weaken

² In the years 1987, 1993, 1999 and 2004, BBDO Consulting conducted a representative survey on German consumers’ perceptions of brand parity. The aim of the study was to find out how exchangeable brands are for consumers. In average, 62% of the German consumers perceive brands to be exchangeable. In some categories (energy suppliers, tissue handkerchiefs and gasoline brands) this value is as high as 80% (BBDO Consulting, 2004, pp. 5-6). However, this report does not examine the reasons for this exchangeability.
the position of brands. On the other hand, manufacturers and retailers are provided with several means to strengthen consumers’ identification with their brands (e.g., personalized offerings) by means of Internet technology (Klein-Bölting & Busch, 2000).³


³ Brand owners can for instance establish virtual communities as a central point of communication that enables actual and potential customers to discuss about the brand, its products, its competitors, and all topics and problems related to these (Klein-Bölting & Busch, 2000). Virtual communities can deliver word-of-mouth information – which is perceived to be a very authentic form of brand communication – to potential customers, and by the same token they enable the brand owner to gather detailed information about their customers and other market participants (Klein-Bölting & Busch, 2000; Hagel & Armstrong, 1997).
Some of these contributions marginally discuss the changing role of brands in the context of increasing availability of information (Lee & Lee, 2004; Brynjolfsson et al., 2001, 2003, and 2004; Kumar, 2000; Ward & Lee, 2000), however, research comparing the changing role of functions that both brands and Internet technology fulfill for consumers is yet lacking. Does the Internet empower consumers in a way that strengthens or weakens functions that brands have formerly performed? Can Internet technology actually lead to the substitution of functions of brands? Or are brands becoming even more important in the age of empowered consumers? Will this development have an impact on prices and product quality? And what are the possible implications for brand managers? These are the main questions that are discussed in the following paper.

The thesis is divided into three sections. First, the research area, namely the original role and functions of brands, functions and impacts of the Internet, and the changing role of brands in the age of empowered consumers are discussed. The second part deals with the five stages of the purchase decision process. Hereby, it is examined to what extent consumers orientate their purchase decisions on a brand promise, and to what extent information available in the Internet can obviate this brand promise. Furthermore, it is analyzed in this section, if online functions, such as for instance virtual communities, can strengthen the user’s bond with a brand. Third, the empirical study is introduced. Deriving from the respective findings, the effects of consumer empowerment on brands, on intermediaries and retailers, and on price and quality are described. This section concludes with implications for branding, derived from the empirical study and from secondary academic research. The paper completes with a brief discussion and suggestions for future research.

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4 Purchase decision behavior differs among administrations, businesses, and consumers acting as buyers. This paper will focus on B2C-markets. Furthermore, the present paper focuses on the western European market. It should be kept in mind that consumer behavior varies among countries according to their different cultural environments (Fournier, 1998; Solomon, 2003).
2. The research area – The changing role of brands in the age of empowered consumers

At a time when consumers are inundated with innovations, product concepts and advertising messages, it is important for companies to provide information and orientation (and possibly even experiences and feelings) to consumers in order to make them purchase and re-purchase their products and services.

Many markets have reached such a degree of saturation today that market potential is often virtually exhausted. Increasingly, growth can be achieved only at the expense of competitors. Hence, in order to make a company’s products stand out from the diverse range available, suppliers are attempting to hone competitive edge through increasing differentiation of their brands, emphasizing how they meet the specific needs and wants of their target customer groups and market segments – through brands that are unique in the market place (Lemon, Rust & Zeithaml, 2001).

Brands play a vital role in consumers’ purchase decisions. Brands can provide information in the purchase decision process, reduce risks related to a purchase, and they can even serve support to the buyer’s image and feeling. Brands can be built and established by means of advertising, providing information, sponsoring, etc. – usually, brand building includes a combination of several means.

The advent of the Internet in the past several years has given consumers the opportunity to access a huge amount of information – from companies, from other organizations, from other consumers, etc. As an effect, market places become more transparent and information asymmetry between different market actors decreases. Furthermore, consumers cannot only gather, exchange, and compare information online, they can even purchase products and service goods in the Internet.

However, the Internet does not only change markets for consumers, it changes markets for all market participants and will continue to do so. Due to certain factors of digital media, such as cost efficiency and interactivity, companies can now engage in ongoing dialogue with their customers and prospects (Deighton & Barwise, 2000; Peppers & Rogers 2004). Being in touch with consumers more frequently can be a basis to increase the level of personalization and interactivity at relatively low costs. The goal of personalization is to increase customer retention simply by making loyalty
more convenient for the customer than non-loyalty (Holland & Baker, 2001). Thus, this is a vital opportunity for brand owners, as spending time with a brand is a key factor in strengthening brand relationship and loyalty (Holland & Baker, 2001). Finally, customers who are in regular contact with a brand may even begin to perceive the brand as a person, a trusted friend who is part of their everyday life (Fournier, 1998; Aaker, 1997).

Obviously, the digital environment has many benefits for businesses and for consumers. At the same time, the continuous inundation with communication messages from a multitude of brands increasingly confuses consumers and makes it more difficult for brands to stand out from the mass and thus get enough attention in consumers' purchase decision processes. The information overflow in the Internet even exacerbates this situation (Lee & Lee, 2004).

Considering the focus of this paper on the changing role of brands in the context of Internet technology, chapter 2.1 explains the role of brands as a differentiator in markets. Then, chapter 2.2 describes the functions of the Internet in market places. Consequently, chapter 2.3 elaborates on the role that brands fulfill in the online environment, explaining in particular the relative importance of the Internet as a touchpoint with the brand, and the specialties of branding on the Internet. Finally, chapter 2.4 describes the changing role of brands and the empowerment of consumers in the age of the Internet.

2.1 Brands

Brands in the field of marketing originated in the 19th century with the advent of packaged goods. In times of industrialization the production of many household items, such as soap, moved from local communities to centralized factories. These factories, generating mass-produced goods, needed to sell their products to a wider market – to a customer base familiar only with local goods. It quickly became apparent that a generic package of soap had difficulties competing with familiar, local products. So, the packaged goods manufacturers needed to convince the market that the public could place just as much trust in the non-local product – the manufacturers wanted their products to appear and feel as familiar as the local farmers' products. From there, with the help of advertising, manufacturers quickly learned to associate
other kinds of brand values, such as youthfulness, fun or luxury, with their products. This kickstarted the practice we now know as branding.

From a today’s marketing point of view, a brand can be defined as the symbolic embodiment of all the information connected with a product or service, or as David Ogilvy put it, “the consumer’s idea of a product [or a service]“ (Ogilvy, 2004). A brand typically includes a name, a logo, and other visual elements such as images, fonts, color schemes, or symbols. Furthermore, it encompasses the set of expectations associated with a product or service which typically arise in the minds of people (Aaker & Joachimsthaler, 2000). Such people include employees of the brand owner, people involved with distribution, sale or supply of the product or service, and, ultimately, consumers.

Brands serve to differentiate products, services, and the companies providing these products and services (Aaker & Joachimsthaler, 2000). A successful differentiation strategy will move a product or service from competing based primarily on price to competing on non-price factors (such as product characteristics, distribution strategy, or promotional variables). The resource-based view of strategic management points to intangible resources as the main drivers of the sustainability of competitive advantages (Barney & Hansen, 1994; Mandelli, 2005). As Itami (1991: p. 1) observes:

“…intangible assets, such as a particular technology, accumulated consumer information, brand name, reputation and corporate culture, are invaluable to the firm’s competitive power. In fact, these invisible assets are often the only real source of competitive edge that can be sustained over time.”

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5 This definition does deliberately not distinguish between products and services, although there are a number of differences between products and services, such as the intangibility and the heterogeneity of service delivery systems (Ostrom, Iacobucci & Morgan, 2005). Brand building and brand management always need to refer to the specific characteristics of the particular brand. This makes clear that the basic concept of brands as “the consumer’s idea of a product” is independent of aspects such as tangibility.

6 Scientific literature provides many books and papers on the resource-based view of strategic management. For further reading see: Peteraf, 1993; Porter, 1980; Wernerfelt, 1984; Barney 2001.
2.1.1 The role of brands

Brands are gaining more and more in importance. Only the combination of convincing products and strong, authentic brands permits long-term differentiation from competitors. Consumers are steadily inundated with innovations, product concepts and advertising messages; here, strong brands supply useful orientation when coming to a purchase decision.

From the consumer’s point of view, branding is an important value added aspect of products or services, as it often serves to denote a certain attractive quality or characteristic (Anholt, 2003). In order to create distinguishable value for consumers, differentiation is crucial, as already mentioned earlier. The value must be unique, i.e. separate the company’s offer from the competition, and it must be sustainable over time (Aaker & Joachimsthaler, 2000). Increasingly, marketing managers realize that it is difficult to compete just on product or service differentiation (Schultz, 2003). In the end, it is not the product or service the customer has a relationship with – it is the brand, “the emotional tie the customer has with what he or she perceives to be the value, benefit, and, yes, even psychological comfort that a strong brand brings to the marketplace” (Schultz, 2003: p. xix). While mere products and services can more or less easily be imitated, this is incomparably more difficult – if not impossible – with brands (Aaker & Joachimsthaler, 2000).

Hence, in order to create strong brands that deliver meaningful and long-term value to consumers, the marketing view should not be too product-centric, because such a product position might be too similar to the positionings of competitive products. Marketing needs to be more basic. According to Calder and Malthouse (2003: p. 13) it “must conceive of an idea that could make the [corporate] strategy work in the mind of the consumer (customer)” – the brand concept. The brand concept drives consumer thinking (Calder & Malthouse, 2003). Calder and Malthouse (2003: p. 14) state that “the concept is not merely a positioning that highlights aspects of the product. In a sense, it is the product. It is the idea that defines how the consumer should experience the product. But for this to happen, we must manage contacts with

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7 In line with the scientific literature, the terms “brand concept” and “brand identity” are used synonymously in this paper.
the consumer so that these contacts in fact produce an experience that matches the concept.”

The corresponding value for the brand owning company might be profitable customers, valuable customer relationships, effective and efficient use of its resources, and in the end the ability to gain profits in order to survive or even to grow in the future (Aaker & Joachimsthaler, 2000; Kapferer, 1997). Brands can be a means to increase profits, because branded products or services usually enable brand owners to charge higher prices (Aaker & Joachimsthaler, 2000; Keller, 2003; Kotler et al., 1996). Where two products resemble each other, but one of the products has no associated branding (such as a generic, store-branded product), people may often select the more expensive branded product on the basis of the quality promise of the brand or the reputation of the brand owner – assets that the no-name product does not have, although it might in fact be of the same objective quality (Kalita, Jagpal & Lehmann, 2004). Brands can be seen as the primary competitive differentiator for products, services, and organizations that build on-going relationships with customers and consumers. As long as the benefits provided by a brand are not substitutable by any other benefit, it might be the brand, not the product or service, that a customer or consumer has a relationship with (Schultz, 2003). A brand is therefore one of the most valuable assets of a company, building a competitive advantage that will result in long-term profitability.8

The product includes characteristics such as product scope (BMW makes cars), product attributes (VOGUE has fashion news), uses (APPLE computers are great for graphical applications), quality/value (NESTLÉ delivers quality products), and functional benefits (WAL-MART provides extra value). Additionally to these characteristics, a brand includes also a user imagery (those who wear ARMANI clothes), country of origin (AUDI has German craftsmanship), organizational associations (3M is an innovative company), brand personality (CREDIT SUISSE is a banking brand expressing reliability and integrity), symbols (the bottle shape represents ABSOLUT VODKA), brand/customer relationships (HENKEL is a “brand like a friend”), and self-expressive

8 An amazing example for the financial pay off of strong brands is the case of Coca Cola. As of January 1998, Coca Cola had annual sales of $19 billions, assets of $17 billions, and profits of $4 billions, while General Motors had annual sales of $166 billions, assets of $229 billions and profits of $7 billions. Yet in January 1998, Coke had a market value more than four times that of GM, in part because the value of the Coke brand equity was over twice the value of the entire GM firm. (Aaker & Joachimsthaler, 2000)
(HARLEY-DAVIDSON is more than a motorcycle) and emotional (MASERATI makes its driver feel sporty and sophisticated) benefits (Aaker & Joachimsthaler, 2000). Figure 1 illustrates this distinction between a product (analogously: service) and a brand.

Thus, from an overall business point of view, the price premium that consumers may be willing to pay for strong brands generates added value for the firm in terms of higher contribution margins. Moreover, the price premium and other aspects of brands increase customer loyalty (Kotler et al., 1996; Aaker & Joachimsthaler, 2000; Keller, 2003). Thus, brand building and brand management can create assets that are necessary for the success of the company in the competition and that will pay off financially in the long run (Aaker & Joachimsthaler, 2000).

Figure 1: A brand is more than a product


Nonetheless, it cannot be assumed that brands are relevant in all markets or product categories, because brands do not always create value for consumers and

9 The benefits that brands offer to consumers and to companies are displayed in the appendix on pp. 96-97.
companies. Like all investments also expenditures on brand management must be financially accountable.\textsuperscript{10} Rust, Lemon and Zeithaml (2004) as well as Meffert, Perrey and Schröder (2002) emphasize that it does only make economic sense to spend money on branding, if this investment results in positive return on marketing investment, or in other words, if brands are relevant for consumer behavior in this specific market. Brands are relevant for the consumer, if they take over important functions in the consumer’s purchase decision process (Meffert, Perrey & Schröder, 2002; Fischer, Meffert & Perrey, 2004).

The following chapter describes the functions of brands.

2.1.2 Functions of brands

A brand’s identity compounds of psychological and experiential aspects. The experiential aspect is known as the “brand experience” and consists of the sum of all points of contact with the brand. The psychological aspect – also referred to as the “brand image” – is a symbolic construct created within the minds of people and consists of all the information and expectations associated with a product or service. The basis for the development of a brand identity is an in-depth understanding of the firm’s customers, competitors, and business strategy (Aaker & Joachimsthaler, 2000). To be effective, a brand needs to resonate with consumers, differentiate the brand from competitors, and represent what the organization can and will do over time (Aaker & Joachimsthaler, 2000).

In this context, marketers aspire to develop or align the expectations comprising the brand experience through building a new brand respectively managing an existing brand, so that the brand carries the promise that the good has a certain quality or characteristics which make it special or unique (Aaker & Joachimsthaler, 2000). A brand image may be developed by attributing a “personality” to or associating an “image” with a product or service, whereby the personality or image is “branded” into the consciousness of consumers by means of the marketing mix variables. Finally, it is a holistic brand identity that marketers seek to create.

Products and services have certain objective, functional characteristics. This is valid for branded products and services as well as for no-name – i.e. non-branded –

\textsuperscript{10} Rust, Lemon and Zeithaml present a broad framework on financial accountability of marketing investments in their paper “Return on Marketing”, 2004.
ones. These characteristics are one part of the “consumer’s idea of a product (or a service)”. In addition and supplementary to the functional attributes that can inherently be compared objectively, a brand offers also subjective, emotional or experiential benefits to its users. Altogether, a brand can offer one or more of three core values to its customers:\footnote{Contributors to marketing literature have developed many different theories concerning the functions of brands. Aaker (1992), Kapferer (1992) and Keller (1998) mention the identification of products due to branding. Bruhn (1994) and Koppelmann (1994) add functions such as recognition, distinction, and orientation. Many papers emphasize the brand’s function as a quality assurance that was brought up already in 1963 by Mellerowicz. Further functions that are mentioned refer to risk reduction (Aaker (1992); Dichtl (1992); Kapferer (1992); Keller (1998)), and to the psychological and sociological functions (Kapferer (1992); Koppelmann (1994); Meffert, Burmann & Koers (2002)). For this paper the described three core functions, proposed by Fischer, Meffert and Perrey (2004), summarize all these in three distinct brand benefits.}

- **Efficiency of information.** Brands facilitate the information process, because they provide information regarding the manufacturer and the origin of a product or service. Additionally, the recognition effect helps consumers to repeatedly find trusted brands quickly and easily. As a result, brands increase the efficiency of information processes in early stages of the purchase decision process (Fischer, Meffert & Perrey, 2004). The assumption that consumers strive to facilitate or accelerate proceedings is corroborated by various economic and psychological theories and models, such as transaction cost economics (Coase, 1937 and Williamson, 1975), the evaluation cost model of consideration sets (Hauser & Wernerfelt, 1990), or Sujan’s (1985) paper about the effects of consumer knowledge on the evaluation strategies mediating consumer judgements.

- **Reduction of risk.** Furthermore, brands help to reduce the consumer’s risk of making a wrong purchase decision. According to Solomon (2003) and Meffert (2000), risks – both real and perceived – of a wrong purchase decision can be a monetary risk (the product or service could be cheaper in another store), a functional risk (qualitative insufficiencies of the product or service), a physical risk (e.g., allergies resulting from the use of the product or service), a social risk (e.g., lacking acceptance in social groups due to the choice of wrong brands), and a psychological risk (dissatisfaction with the purchased product or service or potentially negative consequences for a person’s self image). Brands provide assurance regarding possible negative effects of the purchase. They create trust in the expected performance of the product and they bring on continuity by making
product or service benefits predictable (Fischer, Meffert & Perrey, 2004). Bases for this function can, for instance, be found in Schmalensee’s (1982) theory on consumer risk aversion or in the theory of perceived risk (Bauer, 1960; Cunningham, 1967).

Figure 2: The functions of brands

- **Image benefit creation.** Additionally, the value proposition can include emotional and self-expressive benefits (Aaker & Joachimsthaler, 2000; Fischer, Meffert & Perrey, 2004; for particularities of consumption with regard to the consumer’s self-concept also see Solomon, 2003: pp. 154-82). These two dimensions are usually very closely linked. When directed inward, the image benefit serves for the purpose of self-realization or identification with personal values and ideals. These emotional benefits exist for instance when the buyer or user of a brand feels something during the purchase process or use experience, such as for instance, the way a customer feels safe in a VOLVO, strong and rugged when wearing LEVI’S

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Jeans, or comfortable and “at home” when drinking a coffee at STARBUCK’S. The image benefit can also be directed outward to the public to allow consumers to use the brand to cultivate an image for themselves. Such a self-expressive benefit relates to the ability of a brand to provide a medium by which a person can proclaim a particular self image. Each of the multiple roles a person plays in life will have an associated self-concept that the person may want to express, for example, the self-concept of being adventurous and daring by owning ROSSIGNOL skis, hip by buying clothes from DIESEL, sophisticated by wearing RALPH LAUREN fashions, or successful and in control by driving a BMW. The purchase and use of a brand is a way to fulfill these emotional and self-expressive needs. Theoretical bases regarding the image benefit creation relate to the theory of utility (Vershofen, 1959), the means-end chains (Olson & Reynolds, 1983; Peter & Olson, 1999), and the theory of self-congruity (Sirgy, 1986).

However, these three brand functions do not necessarily have to be equally relevant to consumers. Empirical research by the Marketing Centrum Münster (Germany) and the consultancy McKinsey (Fischer, Meffert & Perrey, 2004) revealed that, for instance, designer sun glasses create self-expressive image benefits, because they help a person to express a particular self-concept in public. Meanwhile, fast-moving consumer goods, such as e.g. cigarettes and beer rank high on information efficiency in this study, as cigarette boxes are virtually built only of elements that display the brand. Brands in the field of high-value products and services (e.g., long-distance package holidays or washing machines) may reduce the risk of financial damage (Fischer, Meffert & Perrey, 2004).

All in all, the stronger a consumer’s decision behavior is guided by a brand compared to other relevant criteria, the stronger is the relevance of the brand (Fischer, Meffert & Perrey, 2004). Depending on individual characteristics of the buyer and the product category the importance of each function may be perceived differently. Thus, the relevance of a brand for the consumer’s purchase decision should be evaluated with regard to the particular three functions that underlie this decision (Fischer, Meffert & Perrey, 2004).

The Internet is a means that many consumers use for different purposes, ranging from business over information search to entertainment. As such, it fulfills certain functions on markets, which are described in chapter 2.2.
2.2 Functions of the Internet on markets

Originally, the Internet was designed for the exchange of data between decentralized computers, and has evolved into the World Wide Web. The ease of publishing on the Internet has facilitated the adoption of this technology both by consumers and producers of goods. With the help of search engines like Google and Fireball or portals like Yahoo! and AOL, consumers can obtain information about products and services, and make purchases with much less effort than through other distribution channels. Likewise, with the low cost of Web publishing, businesses can offer more product information through this medium than through most others. This results in more product information, on balance, being supplied to consumers than ever before. (Ward & Lee, 2000)

Increasingly, also the Internet fulfills certain functions during consumers’ purchase decision processes. Consumers can gather information about almost everything in the Internet, they can manage their investment portfolio, order pizza and interact with people from all over the world. Solomon (2003: p. xiv) states that “consumers and producers are brought together electronically in ways we have never before experienced.” For consumers, the Internet can reduce information asymmetry, i.e. deliver information that they would not have been able to obtain without the Internet or would have only been able to obtain at much larger cost in terms of time, effort, and money.

Increasing information transparency is the central function of the Internet for consumers. By use of the Internet they can significantly reduce time and costs spent on their search for information. They can compare a huge variety of offers online by means of search engines, shopping portals, price comparison services, online communities, etc. However, the availability of information differs in online and offline environments, as certain search attributes can only be experienced – as opposed to those attributes that can be objectively compared. It is difficult or impossible for many products to be experienced by mere use of the Internet. Accordingly, search costs for obtaining information about the non-sensory characteristics listed in online markets are lower online than offline, and vice versa, search costs for obtaining information about sensory attributes are assumed to be higher online than offline (Degeratu, 12

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12 For a good and authentic history of the World Wide Web, visit CERN, which is the “birthplace” of the Internet (at www.w3.org).
Rangaswamy & Wu, 2000). As to the distinction between sensory and non-sensory product attributes, Deregatu, Rangaswamy and Wu (2001: p. 61-2) define sensory attributes as “those attributes that can be directly determined through our senses, particularly, touch, smell, or sound, before we purchase the product”. By non-sensory attributes, they mean “those attributes that can be conveyed reasonably well in words (e.g., nutritional information)”, excluding brand name. They point out that for product categories with a large number of sensory attributes (such as fruits and vegetables), the offline environment provides more information, while for product categories with a large number of non-sensory attributes (such as cars, consumer electronics, and industrial products), more information is offered in the online environment (Degeratu, Rangaswamy & Wu, 2000). Hence, the total amount of available information in a shopping environment varies by product category.

Nevertheless, purchasing online involves various risks that consumers perceive. Depending on the type of product, it might not be possible to evaluate its performance solely in the Internet. Due to the relative anonymity that is inherent in the Internet, other risks may be that consumers may not feel secure whether the company will really carry out its orders of products and services as it claims, whether there are product guarantees, or whether the company will allow the return of products. Furthermore, many consumers hesitate to buy items over the Internet because they may not feel secure that their personal information (e.g., credit card information, name and address) will remain private. To counter this risk, many companies publish privacy statements on their Websites. However, in the anonymity of the Internet, the risk of privacy infringements remains.

On the other hand, the Internet can also reduce risks for consumers. The monetary risk may, for instance, be reduced by means of price comparison Websites. Functional, physical, and even social risks may be reduced by better information. Simple objective product-specific data may help consumers to reduce functional and physical risks. In the case of perceived social risk, virtual communities or other related information may help consumers feel safer in making their purchase decisions.

As the Internet enables consumers to spend more time with their brands, it can also help to create image benefits. Consumers may use the Internet “to sharpen their consumption knowledge, to socialize, to organize, and to play” (Kozinets, 1999: p. 262). Company Websites offer new ways to consumers to spend time with their
brands, such as playing games, participating in online-activities, or learning interactively about the product, service and brand they are using. Virtual communities are online platforms on which consumers can exchange their experiences and other information related to specific products, services, companies, brands, or any other issue (for detailed information on virtual communities see chapter 3.2.4). Besides creating interactive ways to come and stay in touch with a brand, which is a key factor in strengthening the bond with a brand, marketers can create more personal brand communication in the Internet, based on consumers’ behaviors and preferences based on traditional market research findings and on monitoring their online behavior (which is called clickstream analysis). This can in turn increase communication effectiveness by making consumers perceive communication as more relevant and interesting (Simonson, 2005).

As has already been described, a Website has various characteristics, such as around-the-clock communication, access from people with a purpose, fulfillment from awareness to consumption, transmission of global information, and interactive characteristics that are difficult to achieve with other media. It is possible to change a Website according to the purposes and actions of the users. For instance, with the financial industry, it is possible to transfer, make payments, and to check account balances online. In the travel industry, flights and hotel reservations can be booked online. One-to-one correspondence is accomplished by displaying the name of a registered user on the Website. None of the various purposes that a Website can achieve can be done with other media types. Thus, for marketers, a Website as a pull medium opens different opportunities compared with push media, such as television commercials or outdoor advertisements, where information is sent in a one-way direction from the source. The tools for brand building shifted from a unidirectional persuasion logic to a more collaborative approach to brand-consumer relationships – introducing a crucial opportunity for a new brand management logic (Mandelli, 2005; see also Reinartz, Thomas & Kumar, 2005). Prahalad and Ramaswamy (2004) state that this interactivity has actually changed the role of customers in some markets from mere receivers of products or services to co-producers of value.

Finally, coming back to the issue of availability of information, there is also another type of information asymmetry. Compared to those companies that sell products, individual consumers have a lot more information about their own tastes and pur-
chasing behaviors (Kumar, 2000). To include the Internet into strategic brand management enables a company to take advantage of Internet-specific interactive elements (Reinartz, Thomas & Kumar, 2005). By analyzing the history of how a person surfs the web, sellers are becoming more knowledgeable about the individual consumer. Internet technology enables companies to communicate to consumers on an individualized level and to generate customer profiles that can be refined continuously after each customer contact. Consequently, they can proactively suggest products to their customers and prospects. As a result, consumers might even contingently reward the vendor for an accurate and timely “push” of appropriate products and services, instead of embarking on a price search (Kumar, 2000: p. 4). All of these opportunities might be a basis for intense brand-consumer relationships.

2.3 Brands in the online environment

A prerequisite for building a strong brand is the understanding of consumers’ wants, needs and desires (Aaker & Joachimsthaler, 2000). The Internet as a new medium did not change this fundamental idea. The challenge for organizations is rather to master marketing on this new platform. Theories that were valid in the offline world are not dispensable, they only need to be adjusted to the new environment. Particularly, the integration of online and offline communication is still difficult for many businesses. The Internet channels should not be treated independently from other communication channels. In order to communicate clearly defined brand identities and homogenous brand images, companies need to create consistency between the Internet – as one touchpoint for consumers with a brand – and the other touchpoints such as advertisements, mailings, or stores. This topic is described in the first part of this chapter.

In the early years of the Internet, there was considerable discussion about branding in the new environment. Apart from those companies that were created as mere Internet brands, the question was basically, whether to create new brands for the new environment or to rely on established brand names. These particularities of branding in the Internet will be explained in the second part of this chapter.

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13 For instance, Amazon.com recommends books that the consumer may be interested in, based on previous purchases, and alerts him or her about the release of a new book by their favourite author.
2.3.1 The relative importance of the Internet as a touchpoint with the brand

For consumers, a brand is an experience; they experience brands in many different ways. Every marketing message they see or hear creates an impression of what the brand stands for – the brand image. And every interaction with a product or its maker provides tangible proof of the real value the brand delivers – its action. The sum of all these impressions and interactions adds up to the brand experience. (Manning, 2005; Aaker & Joachimsthaler, 2000; Meyer & Pagoda, 2000)

Figure 3: Elements of the consumer brand experience

<table>
<thead>
<tr>
<th>Business strategy: the overall plan for achieving company goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission: what we do</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business positioning statement: how the company wants customers to perceive the brand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits: the value we offer</td>
</tr>
</tbody>
</table>
| Examples:
  Saves time
  Saves money
  Keeps me healthy |
| Examples:
  Sincere
  Competent
  Smart |
| Examples:
  Conduct
  Performance
  Practices |

<table>
<thead>
<tr>
<th>Touchpoints: where customers experience the brand and form their actual perceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV ad</td>
</tr>
</tbody>
</table>

Note. From: How brands succeed online (p. 4) by Harley Manning (2005), Cambridge, Massachusetts, USA: Forrester: Business View Best Practices.

The brand image was a previous topic in the present paper. In order to show the relative importance of the Internet as a touchpoint with the brand, the main focus of this section is the action part. In line with the brand logic described earlier in this paper, Manning (2005) states in his Forrester Research paper that companies define the experience they want to deliver for their brand through a process that goes along three stages (see Figure 3):
• The company’s business strategy (mission, vision and values) creates a context for the brand. For instance, Virgin, with businesses as diverse as airlines and mobile phones, shows that it is even possible to form the basis of a masterbrand transcending product lines with a powerful sense of corporate purpose.¹⁴

• The brand positioning statement describes how the company wants its customers to perceive the brand. The typical characteristics (intended benefits, personality, and expected behavior) “become the game plan against which the company executes”.

• Finally, consumers experience the brand and form their actual perceptions on each touchpoint with the brand. To be successful, the brand must deliver consistently on the plan defined by the positioning statement.

According to Manning (2005), touchpoints with a brand have two roles for consumers in support of the brand positioning statement. They have to communicate the image specified by the positioning statement, and they have to deliver the value promised by it. The relative importance of these two roles varies depending on the inherent capabilities of each touchpoint (see Figure 4). For instance, a television commercial can promise that Coca Cola will taste refreshing, but the spot can actually not quench a person’s thirst. This role must be fulfilled by the product itself. The drink must finally deliver a refreshing taste, as the advertisement has promised.

Compared with a 30-second television spot for a beverage, the Website’s role is far more complex (Reinartz, Thomas & Kumar, 2005; Manning, 2005). On the one hand, a company’s online appearance is a communication medium that conveys image. This means that in order to take advantage of the inherent strengths of the Internet (e.g., endless depth and two-way communication) Websites must provide content and function that support brand image. For instance, to deliver on its claim to “lead the industry in innovation”, APPLE’s Website must describe the innovative aspects of APPLE products and provide standout function like a best-in-class configurator. Furthermore, elements like language, imagery, typography, and layout must be consistent with regard to positioning and style over different media in order to reinforce multichannel marketing campaigns. On the other hand, the company’s online

¹⁴ see Virgin’s brand positioning at http://www.virgin.com/aboutvirgin/allaboutvirgin/whatwereabout/default.asp
appearance is a delivery channel that enables action. Television advertisements just appear before a consumer. But if a consumer enters a homepage, he typed a URL or clicked a link, which means that he has a clear goal in mind such as finding specific information, making a purchase or getting service. To avoid a frustrating or even annoying experience the Website must supply the content and function the customer needs in order to achieve his or her goal. To support the brand experience, Websites must both communicate a consistent image and actively deliver value. Figure 4 illustrates the relative importance of both of these functions by consumer touchpoints with a brand.

Figure 4: The relative importance of communicating image and delivering value by touchpoint

<table>
<thead>
<tr>
<th>TV ad</th>
<th>Radio ad</th>
<th>Print ad</th>
<th>Paper mail</th>
<th>Email</th>
<th>Website</th>
<th>Store</th>
<th>Kiosk</th>
<th>IVR</th>
<th>Call Center</th>
<th>Product</th>
</tr>
</thead>
</table>

**Communicate image**
- Make the brand promise
- Bring emotional and experiential aspects of the brand to life
- Convey a brand image

**Deliver value**
- Fulfill the brand promise
- Provide the tangible benefits of the brand
- Let customers take action

_Note. From: How brands succeed online (p. 5) by Harley Manning (2005), Cambridge, Massachusetts, USA: Forrester: Business View Best Practices._

While, on the one extreme of the scale, traditional communication media mainly communicate image, on the other end of the scale products primarily deliver value. Basically, the more interactive a channel becomes, the more value it delivers to consumers.

As a general rule, it is important for a business to deliver consistent appearance and performance over all touchpoints of a consumer with a brand.
2.3.2 Particularities of branding in the Internet

In the early years of Internet technology, scientists and practitioners distinguished between Internet brands\textsuperscript{15} and brands of the offline world. The belief was that traditional, established brands were not suitable for the new online environment. Hence, new online brands have been created at considerable expenditures, such as e.g., MYWORLD created by the German KARSTADT or the ADVANCE BANK created by HYPOVEREINSBANK. Along with the new economy’s crash, companies realized that it is not only very expensive to build up new brands (and correspondingly trust in the new brands), they also became aware of the fact that existing brands were already established in the minds of many consumers (Porter, 2001). There were existing relationships that just needed to be expanded to the online environment. Smith and Brynjolfsson (2001) state that consumers use brand names as a signal of reliability and credibility, especially regarding non-contractible aspects of a product bundle, such as shipping or promised delivery times. Consumers are more willing to engage in e-commerce with known brands than with brands they do not know (Smith & Brynjolfsson, 2001). Hence, established brands initiated hybrid forms of marketing – so called “click-and-brick-strategies”\textsuperscript{16} – working both in the online and the offline environment (also referred to as enabled e-brands). At the same time, also brands that have been created in the Internet (so-called generated e-brands), such as for instance AMAZON, YAHOO! or GOOGLE, were able to gain trust among consumers over time.

Basically, brand management is rather similar for brands that have been created in the Internet and brands that have been created in the real world (Chiagouris & Wansley, 2000). The scientific literature offers various books and papers on the ways and extents to which enabled e-brands can be transformed for their online appearance (Porter, 2001; Kumar, 2000; Bakos, 1998; Reinartz, Thomas & Kumar, 2005; Ward & Lee, 1999). As both generated and enabled brands accomplish the same functions for consumers, this issue is not essential for the present paper. The topic of this paper is to examine, whether features of Internet technology strengthen or weaken

\textsuperscript{15} Different contributors to the branding literature have used different terms, such as “virtual brands”, “online brands”, “e-brands” or “electronic generated brands”, to refer to brands in online environments. These terms can be used synonymously (see Carpenter, 2000; Baumgarth, 2001).

\textsuperscript{16} “Click-and-brick” refers to the connection of online (“mouse-clicks”) and offline (“bricks-and-mortar”) elements (Gulati & Garino, 2000: pp. 107-109.)
these functions – for all brands. In order to fulfill this objective, it is useful to successively go along the different steps of the consumer’s purchase decision process, which are presented in chapter 3.

Nevertheless, the Internet is a very powerful brand-building tool, because it can be tailored to the needs of the brand and the relationship between the customer and the brand; it can transmit information, impart experiential associations, and leverage other brand-building programs. And all these experiences and associations can be largely controlled. (Aaker & Joachimsthaler, 2000)

### 2.4 The changing role of brands and the empowerment of consumers

Basically, markets (electronic or otherwise) have three main functions: (1) matching buyers and sellers; (2) facilitating the exchange of information, goods, services, and payments associated with market transactions; and (3) providing an institutional infrastructure, such as a legal and regulatory framework, that enables the efficient functioning of the market (Bakos, 1998). This mechanism works best in the case of a perfect market, which is influenced by high (perfect) market transparency and low (no) product differentiation (Porter, 2001). However, consumers used to be disadvantaged in markets due to two facts: there are only few homogenous products, and prices for comparable goods can only be compared spending considerable amounts of time, efforts, and money (Bakos, 1998). Based on this information-asymmetry, companies were able to achieve higher margins with inferior goods (Kumar, 2000). Moreover, manufacturers and retailers have always been better organized than consumers. They work on a global scale, while consumers were restricted to local offers. Manufacturers and retailers were able to arrange mutual price agreements. And traders could purchase larger quantities and in this way realize economic prices compared to consumers. On many markets, rivalry among existing firms was low due to lacking information compared to the present situation. Consumers were not able to keep track of markets and they did not have sufficient market potential to be able to achieve market equilibrium (Kumar, 2000).

The opportunity for almost everybody to gather information online increasingly changes this situation. Lower search costs and greater availability of information can
improve the extent of searching done and the amount of information gathered, allowing the online consumer to consider a lot more alternatives. Hence, markets become more transparent and bargaining power of buyers grows (Porter, 2001). Consumers can now compare products and prices and interact with other consumers easily and independently of time and place (Bakos, 1998). Even information on attributes that can only be experienced during or after consumption (e.g., the taste of food, the usage of products, or a company’s customer service) might be obtained through the Internet through trusted third party sources, such as for instance virtual communities or forums. This kind of information is of crucial importance to consumers’ purchase decisions. In the age of the Internet, consumers can concretize their needs and wants in precise ways and search for that specific company offering their ideal bundle of products and services. In this way, they can make better purchase decisions (Peterson & Merino, 2003), not necessarily needing to rely on value promises of brands anymore. Likewise Ward and Lee (2000: p. 10) state that “brands are only one source of information; most consumers also conduct some form of product search.” In the end, information might substitute functions that also brands accomplish in the eyes of consumers (chapter 4.1 will give answers to this question).

Furthermore, in the age of e-commerce, prices are not fixed anymore (Varian, 1999). In contrast, prices can be adapted flexibly to the demand of consumers. Websites can be updated more quickly than catalogues, where prices are fixed for a certain period of time (Varian, 1999). Shankar, Rangaswamy and Pusateri (1999) elaborate on the fact that online marketing can have significant impact on the nature and degree of customer price sensitivity. According to them, companies’ pricing decisions, which are central to a brand’s marketing strategy, should depend on consumers’ price sensitivity towards that specific brand. On the one hand, online markets are likely to increase price competition between sellers and lead to lower prices, because of reduced customer search costs – even for differentiated products (Bakos, 1998). On the other hand, online markets can also dampen price sensitivity by enabling customers to find products that best fit their needs (Bakos, 1998). For instance, e-commerce could lead to lower price sensitivity when quality-related information is important to customers and brands are differentiated. Consumers may become less price-sensitive and even willing to pay a price premium for higher service levels, customized offerings, recognized brands, etc. This might be an explanation for the ongoing success of AMZON, which is not necessarily the cheapest vendor of books
(In chapter 4.2, the changing role of intermediaries and retailers in online markets is elaborated). A considerable amount of research has been conducted on the effects that the Internet has on prices (Bakos, 1997 & 1998; Shankar, Rangaswamy & Pusateri, 1999; Varian, 1999; Alba et al., 1997; Brynjolfsson, Dick & Smith, 2004; Ailawadi, Lehmann & Neslin, 2003). The effects of consumer empowerment on prices and on quality are discussed in chapter 4.3.

Altogether, the ability to shop world-wide in relative anonymity at any time from virtually any location, combined with the availability of real-time information about products, services, companies, brands, and prices can serve to increase consumers’ sense of freedom and power. In combination with the interactivity that is inherent in the Internet, this empowerment allows consumers to more effectively fulfill their desires and fantasies. The changing role of brands in online contexts and the empowerment of consumers through the Internet have decisive implications for brand management, which are discussed in detail in chapter 4.4.

To sum up, the Internet significantly increases market transparency and thus empowers consumers to consider and compare a lot more options during their purchase decision processes. Functions that brands used to fulfill, such as increasing information transparency, risk reduction, and even image benefit creation, may be endangered to be replaced by functions of the Internet. The Internet primarily delivers information about non-sensory product attributes. But it also offers means by which consumers can obtain information about sensory or experiential characteristics of a good. Whether consumers perceive this information to be reliable or not depends on several aspects that are explained in the section dealing with the research that was conducted as part of this work. While, on the one hand the Internet may weaken brands by making competitive offerings comparable on a global scale, it may on the other hand provide a platform for brands to be promoted and experienced in new ways, as the Internet is not used to obtain information, but also for fun and entertainment (Mathwick & Rigdon, 2004; Wolfinbarger & Gilly, 2001). Besides, shopping does not only serve utilitarian needs of consumers, but also hedonic needs (Holbrook & Hirschman, 1982). This means, that to many consumers, shopping is often not simply a task but also a form of entertainment and social interaction. It is not unreasonable to assume that consumers may as well have similar expectations of online shopping – especially those consumers who already use the Internet for entertain-
ment and interaction (Wolfinbarger & Gilly, 2001). And last but not least, brands may deliver values that cannot be simply displaced, such as feelings and emotions.
3. Purchase decision process

Brands fulfill important functions for consumers during the purchase and consumption process: prior to a purchase decision, the existence of brands increases the consumer’s efficiency of perception, processing, and storage of information; risk reduction influences the actual decision-making activity; and in the subsequent phase of consumption, the image benefits of brands emerge, i.e. the brand provides benefits to the consumer that an unbranded offering could not fulfill. In order to be able to understand the role of brands and of the Internet during the purchase decision process, all potential steps of this process are discussed in the current chapter.¹⁷

Consumers are faced with purchase decisions almost every day. But these decisions can be very different – from situation to situation, from purchase item to purchase item and from consumer to consumer. Some decisions entail great efforts, while others are made on a virtually automatic basis (Solomon, 2003; Häubl & Trifts, 2000).

In order to be able to understand the behavior of consumers from the problem recognition to the actual choice of a product or service or a brand various models have been developed.¹⁸ These models try to explain the purchase decision process, and at the same time they try to predict future behavior (Foxall & Goldsmith, 1994). As to that, the purchase decision is not considered as a single purchase action, but as a process. One of the most popular and most recognized models is the five-stages-model by Engel, Blackwell and Miniard (1986: p. 25). This is the model that is applied to the study in the present paper as discussed in a later section.

According to this model, the consumer typically passes through five stages (see Figure 5):

- Initially, the consumer recognizes that he is not satisfied and wants to improve his situation. Depending on his internal drive (motivation) to satisfy the need, want or desire, the process will continue to the next step.

¹⁷ As this paper focuses on the particularities of brands and the Internet as influencing factors of consumers’ decision making, this chapter will point out and explain only the relevant aspects of consumer behavior with regard to this perspective.

¹⁸ Marketing scientists have developed various models on the consumer’s purchase process. The most well-known may be the ones by Howard and Sheth (1969) Theory of Buyer Behavior; Nicosia (1966) Consumer Decision Processes; and Engel, Blackwell and Miniard (1986) Consumer Behavior.
• Assuming the consumer is motivated to improve his situation, he will next search for information on possible solutions. Depending on such factors as the importance of satisfying the need, familiarity with available solutions, and the amount of time available for search, the sources used to acquire this information may be as simple as remembering information from past experience (i.e., memory), or the consumer may expend considerable effort to locate information from outside sources (e.g., Internet search, talk with others, etc.).

Figure 5: The five-stages-model of the purchase decision process


• If the consumer engaged in search, probably, his search efforts result in a set of options from which he can make a choice. At this stage, the consumer will evaluate options on two levels. At level one he may create a set of possible solutions to his needs (i.e., product or service types), while at the next level the consumer may evaluate particular products (i.e., brands) within each solution.

• In many cases the consumer may chose to purchase that product or service, whose evaluation is the highest. However, when it is actually time to make the purchase, the choice may change. At the time of purchase the intended purchase may be altered for many reasons such as: the product is out-of-stock, a competitor offers an incentive at the point-of-purchase (e.g., a price comparison Website
shows that a competitor’s offer is much cheaper; a store salesperson mentions a competitor’s offer), the customer lacks the necessary funds (e.g., credit card does not work), or members of the consumer’s reference group take a negative view of the purchase (e.g., friend or virtual community member is critical of purchase).

- After the purchase the consumer is faced with an evaluation of the decision. He may re-evaluate satisfaction with the decision, if the product performs below his expectation. This, at its extreme may result in the consumer returning the product, while in less extreme situations the consumer will retain the purchased item, but may take a negative view of the product. Such evaluations are more likely to occur in cases of expensive or important purchases.

Typically, the decision process involves all of the five steps. However, research in the field of behavioral economics unveiled that decision making does not necessarily always comprise all five steps.

Whether the consumer will actually carry out each step depends on the type of purchase decision that is faced. Solomon (2003) summarizes consumer researchers’ results on types of consumer decisions in terms of a continuum, which is anchored on the one extreme by habitual decision making and at the other end by extended problem solving. Depending on what kind of decision has to be made, consumers may only scan their memory to determine how they resolved the problem in the past; they may simply rely on mental shortcuts, such as brand names or price; they may imitate other people; they may respond impulsively to an offering; or they may engage in a search process, comprising one to many sources to obtain new information that they can use in their evaluation and their purchase decision stages.

The extended problem solving process is usually initiated by a motive that is rather important for the consumer’s self-concept (i.e., the beliefs a person holds about his own attributes, and how he evaluates these qualities), and a wrong decision is perceived to have considerable effects (risks) for the consumer. The degree of cognitive control is high. Accordingly, brands might in this case reduce risks that are related to an important purchase decision, and they might create image benefits.

Habitual decision making comprises choices made with little to no conscious effort. In this case, the purchase decision may be habitualized or the result of an emotive
impulse. Cognitive involvement in the decision process is low and an intensive information search and evaluation of alternatives do not take place. Consumers may then skip several steps in the purchasing process since they know exactly what they want. This allows them to move quickly through the steps. Accordingly, brands might here increase information efficiency for consumers, who can consequently rely on a trusted brand instead of having to engage in an extensive search process. In this case, brands might also limit the risk of a wrong decision for a non-branded product or a brand that the consumer does not yet know.

Decisions that fall in between of these two extremes are characterized by limited problem solving efforts. Buyers are not as motivated to search for information or to evaluate each alternative rigorously as they are in the case of extended problem solving. Instead, they use simple decision rules to choose among alternatives. It can also be a decision rule to rely on a particular brand. Brands might here fulfill the functions of increased information efficiency and potentially also risk reduction.

Figure 6: A continuum of buying decision behavior

For consumers, the development of habitual, repetitive behavior allows to minimize the time and energy spent on many purchase decisions (Solomon, 2003). This may be positive for the chosen brands. On the other hand, habitual decision making presents marketers with a problem. They must convince those consumers, who are not customers of their own brand, to change their habits and preferably replace them with new ones (Solomon, 2003).


However, this approach cannot explain all purchase decisions. Therefore, Holbrook and Hirschman (1982) propose to supplement and enrich this view with an “admixture” of the experiential perspective. According to the described behavioristic approach, consumers evaluate the effort required to make a particular decision (consciously or unconsciously), and then they choose a strategy best suited to the level of effort required, when a well-thought-out, rational approach is required, while otherwise, they use shortcuts or fall back on learned responses that “automate” these choices (Solomon, 2003: p. 293; see also Simon, 1955). According to the experiential approach, the choices of consumers who are involved in a purchase decision may be elicited by the totality of the purchase and consumption experiences (Holbrook & Hirschman, 1982; Solomon, 2003; Wolfinbarger & Gilly, 2000; Mathwick & Rigdon, 2004).\(^{20}\) In line with this view, shopping and the consumption can also involve “playful leisure activities, sensory pleasures, daydreams, esthetic enjoyment, and emotional responses” (Holbrook & Hirschman, 1982: p. 132; see also Csikszentmihalyi, 1990). If these experiences are memorable or extraordinary, they produce emotions, which increase the consumer’s involvement and create subjective benefits that may finally affect choices between instrumental alternatives that are functionally equivalent in other respects (Havlena & Holbrook, 1986). In this case, brands create inward directed emotional benefits for customers. Considering also a learning effect as a response to such experiences in the sense that consumers know more about the products they have tried than about the products they have not tried, brands may later increase information efficiency for consumers and even exhibit brand loyalty (Wernerfelt, 1991; Huffman & Houston, 1993). Basically, the experiential perspective emphasizes the importance of hedonic response (Hirschman & Holbrook, 1982), and broadens the perspective on how consumers make decisions (Holbrook & Hirschman, 1982) and consequently also on how consumers’ decisions can be influenced.

Consumers have limited processing capacity, i.e. they generally cannot process all of the available information in a particular situation (Bettman, Luce & Payne, 1998), and not all consumers are similarly able to gather information. As to this, Schwartz (2005) states that consumers can be partitioned in two ways. The first groups comprises of the naïve consumers, i.e. those who make cognitive errors without realizing

\(^{20}\) The distinction between rational versus experiential consumer behavior can analogously be found in the distinction between directed search (for goal-oriented reasons) and general search (for experiential reasons) (Hoffman & Novak, 1996), which will be described in more detail in chapter 3.2.
they do so. The second group are the sophisticated consumers, i.e. those who do not make errors or are self aware. Thus, consumers' capabilities to search and find relevant and credible information useful for the purchase decision differ (Ward & Lee, 2000). Accordingly, naïve consumers need more time for information search, resulting in higher search costs in terms of time and efforts. Ward and Lee (2000: p. 10) argue that navigating and evaluating information found in the Internet are “skills developed with use”. Proficiency in searching the Internet increases with experience or over time. Increased proficiency then decreases the cost of gathering and evaluating information (Ward & Lee, 2000). Consequently, search costs decrease over time with increasing experience in online search. Nonetheless, there may always be information that not all Internet users can understand, such as specific expert know-how. Information processing is generally limited by the consumer’s education and cognitive capabilities. Depending on the particular consumer’s cognitive capabilities and opportunity costs, he or she may rely on brands as an “expensive source of information” (Ward & Lee, 2000: p. 11).

To sum up, in the case of low cognitive control of a purchase decision, one function of brands is to increase information efficiency. On the other end of the scale, brands rather fulfill the functions of risk reduction and even image benefit creation. Brands can also serve as simple decision rules for limited problem solving. In this case, the customer might, for example, already know about the low risks that are connected (or better: are not connected) to the purchase of a particular brand; for this customer, elements of the brand (e.g., shape, color) or the brand itself serve as key signals increasing information efficiency.

In the case of higher cognitive control, brands may not be the only source of information that consumers rely on during a purchase decision process. They may often search for information from additional sources. The Internet is such a source that has tremendously grown in the past years and still continues to grow. Due to its ability to deliver information from any place at any time, the Internet is a very popular source of information. Consequently, the influence of the Internet is particularly high in the case of high cognitive control. Also for the case of limited problem solving, the Internet can play a vital role, as it can support consumers in coming to quick decisions. And the Internet provides many opportunities for consumers to make experiences. Experiential behavior is especially likely in categories where shoppers have
an ongoing, hobby-type interest (Wolfinbarger & Gilly, 2001). Furthermore, having
time available and desiring stimulation result in more experiential shopping behavior
online. Apparently, the higher playfulness associated with experiential behavior re-
sults in a more positive mood, greater shopping satisfaction, and a higher likelihood
of impulse purchasing compared to goal-oriented shopping (Hoffman & Novak, 1996;
Wolfinbarger & Gilly, 2001).

The following chapter describes the five steps of the purchase decision process
with particular regard to the functions that both brands and the Internet fulfill for con-
sumers in each of the five stages.

3.1 Problem recognition

“Problem recognition occurs whenever the consumer sees a significant difference
between his or her current state of affairs and some desired or ideal state.” (Sol-
omon, 2003: p. 296)

This problem can arise in one of two ways. There is no problem, if the actual state
and the ideal state are in line. However, if the actual state moves below the ideal
state, need recognition occurs, i.e. the consumer lacks of a product or service that
has run out, or he has bought a product or service that turns out not to adequately
satisfy his needs, or new needs may be created. On the other hand, the consumer’s
ideal state can move upward. The gulf between his new ideal state and the actual
state is called opportunity recognition. This may occur when the person’s frame of
reference shifts, i.e. the consumer’s circumstances have somehow changed and the
new purchases are to be made to adapt to the new environment (Solomon, 2003).

Problem recognition occurs naturally. However, it is often stimulated by marketing
activities, i.e. marketers attempt to create a demand for products or brands. The
ways of doing this are different for the traditional marketing channels and the online
channels – basically because in the online channels consumers are more actively
involved. Many Internet users surf the Internet in order to gather information about
their specific fields of interest. Plenty of them arrive at their desired information by
using search engines. During this surf and search processes, consumers are sub-
ject ed to a variety of stimuli that can trigger a need or a want (McGaughey & Mason,
1998). This need or want can be triggered by objective information as well as by
advertising (Peterson & Merino, 2003). Advertisements can be located exactly at those places where consumers search for related information. A publisher of guidebooks could, for example, advertise on Websites dealing with travel. And the search engine GOOGLE displays content-related advertisements next to its independent search results. The arising brand owner’s benefit is the opportunity to link his offerings with those places where his potential customers search for related information. A major benefit for consumers is the possibility to access and compare a huge variety of information world-wide, in real-time, regardless of opening hours.

Increasingly, contents and services of Websites can only be seen and utilized after the consumer has registered and signed in. In doing so, Website operators try to collect personal information about users, such as data on their age and fields of interest. This information in turn enables them to place individualized advertisements and to send newsletters to registered users in order to trigger needs and wants by means of personalized, directed stimuli (Simonson, 2005).

When the consumer realizes that there is a significant difference between his ideal state and his actual state, he will – depending on the type of purchase decision – either directly switch to the purchase decision step or engage in information search.

### 3.2 Information search

Once a problem has been recognized, the consumer needs adequate information to resolve it. In the information search process the consumer surveys his environment for appropriate data to make a reasonable decision (Solomon, 2003).

Therefore, the consumer first needs meta-information, i.e. information or knowledge about where he can find adequate information. Every person has a certain degree of knowledge about many products already in memory. When confronted with a need, this person may then engage in *internal search* by scanning his own memory to collect information about different alternatives (Solomon, 2003). Trusted brands can be such alternatives that the consumer has already in memory. Usually, though, even well-informed people need to supplement their knowledge with *external search*, by which information is assembled from advertisements, other people, or from the
Internet. Sources for the external search process can be impersonal and marketer-dominated sources (such as catalogues, retailers’ homepages, manufacturers’ homepages), unbiased third parties (such as consumer reports, experts’ Websites, online comparison shopping services, intelligent agents), and friends and family members (online equivalents might be online consumer-to-consumer communities, portals, or hubs). (Solomon, 2003)

Figure 7: Value and availability of information relevant for purchase decisions


While there is a wide range of possible information sources, consumers assign different value to these sources. As to this, Wasmuth and Kalkowski (2000) explain that this value finally depends on each source’s goal of communication. This means, the less biased and commerce-oriented the communication is, the higher is the value of a source and the more likely it is that this source influences consumers’ purchase decisions (see Figure 7). Consumers can, for example, obtain information most easily directly from manufacturers. This information however is of low value for them, because it is intended to promote and sell the manufacturers’ products. The increasing impartiality of the information provider and the increasing number of third parties’

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21 According to Nielsen//Net Ratings, 94% of all German households with Internet connection use the Internet for purchase decisions. Price comparisons are most important to 81% of users, 68% search for product information and test reports. Four of five interviewees stated that their search efforts for product and price information were successful. (Nielsen//Netratings, 2004)
evaluations finally result in overall higher value of information. Although it might seem reasonable to assume that from an objective point of view test reports (e.g., the U.S. CONSUMER REPORTS or the German STIFTUNG WARENTEST) are the most profound and comprehensible sources of information, empirical research surprisingly showed that consumers do not necessarily act rationally and in fact call on different sources of information than the ones they rate highly (Meyer, 2004). Hence, the importance of the sources that consumers call on for information may most strongly depend on the resources that they actually use. One can assume that these sources correspond to those of the offline world where personal communication is the most important source of information (Meyer, 2004). Thus this information is rated even higher than experts' reports. This is valid for both the offline environment and the online environment – aside from the fact that through the Internet far more sources are available for information search than in the traditional environment (Brynjolfsson & Smith, 2000).

**Figure 8: The relationship between amount of information search and product knowledge**

![Graph showing the relationship between amount of information search and product knowledge](image)


As Figure 8 shows, the external search effort depends strongly on the consumer’s present knowledge. Consumers with moderate knowledge about the product or service tend to conduct extensive search, while novices and experts conduct fairly limited search (Solomon, 2003). The reason therefore is that people with very limited expertise may not be capable of searching extensively, because they may not know where to start and which product attributes to pay attention to. To distinguish among alternatives, novices are likely to rely on opinions of other people and non-functional
attributes, such as brand name and price. In contrast, experts may know where to search and they may have better sense of what information is relevant to the purchase decision. As an effect of their more selective search, their efforts are more focused and efficient, and they may rely more on information resulting from their search than on brands. (Solomon, 2003)

Generally, search activity is higher when the purchase is important, when there is a need to learn more about the purchase, or when the relevant information is easily obtained and utilized (Solomon, 2003). The amount of search a consumer undertakes varies regardless of the product category in question. Ceteris paribus, younger and better-educated people tend to conduct more information search, because they enjoy the shopping and fact-finding process. With particular regard to the Internet, Peterson and Merino (2003) state that the Internet is not only used for the purpose of information search, but also for entertainment (see also Wolfinbarger & Gilly, 2001; Hoffman & Novak, 1996; Häubl & Trifts, 2000). As to this, they distinguish between the search for specific product or service information in anticipation of a purchase and general information about a brand or product or service category. The directed search (also: goal-oriented search) for specific information has already been described. However, even more interesting is the impact of the Internet on what they call general searching (also: experiential search). Due to decreased efforts to obtain information and the manifold ways to display them, some consumers search even more extensively. The Internet search process becomes a way of entertainment, substituting time spent in front of television or other spare time activities (Peterson & Merino, 2003). As consumers also learn during general search, the time and efforts spent on directed search do not dramatically increase. General search increases users’ proficiency in searching and at the same time facilitates their directed search (Peterson & Merino, 2003). It is up to marketers to understand this behavior and to design Websites that meet the needs of consumers with respect to both groups (Holland & Baker, 2001).

After having talked about consumers’ motivation to search, the value of different information sources, different kinds of search, and the extent of search activity, the boundaries of information search are discussed subsequently. Boundaries to the information search are the costs caused by the consumer’s search process. These costs can be caused by efforts and time spent on the search as well as by the mone-
tary costs incurred for the usage of the Internet or – in the offline world – for a bus-ride, a taxi-ride, a parking space, etc. connected to the search. A rational consumer expects economics of information, i.e. the consumer might gather as much information as needed to make an informed decision as long as the costs of search do not exceed the utility (Solomon, 2003). Thus, one could assume that the consumer will search until the marginal benefits from doing so equal the marginal costs (Peterson & Merino, 2003).

However, consumers do not necessarily act rationally (Solomon, 2003). Regarding the economics of information, analytical research and empirical research findings suggest that consumers rather stop searching when they reach some reference price (which might change as search progresses) or stop on the basis of total cost, not marginal cost (Peterson & Merino, 2003). Furthermore, consumers with lower income, who have more to lose by making a wrong purchase decision, actually search less prior to buying than more prosperous people (Solomon, 2003). Another example for irrational consumer behavior is that consumers often visit only one or two stores and rarely seek out unbiased information sources prior to making a purchase – this pattern mainly occurs in the case of products that represent significant investments, such as appliances or cars. On the other hand, when consumers consider the purchase of symbolic items (such as clothing), they tend to engage in much more extensive external search, because these self-expressive decisions may be seen as having considerable social consequences in the case of a bad purchase, although financial stakes may be lower than in the former case. Furthermore, many consumers switch brands even if they are satisfied with their current brand. Consumers may have a repertoire of some favorite brands, instead of sticking to only one. And in addition, they may sometimes be interested in variety seeking, i.e. they may seek to vary their product experiences or just try to reduce boredom. (Solomon, 2003)

Figure 7 has shown that not all information sources are equally valuable to consumers. The role and impact of different online information sources and the respective role and impact of brands are explained in chapters 3.2.1 to 3.2.4.

3.2.1 Manufacturers’ and dealers’ homepages and online shops

Websites of producers of products or services usually provide detailed information on product or service characteristics. Price information usually confines to recom-
mended retail prices, which are in most cases not identical with actual market prices. However, recommended retail prices can serve consumers as benchmarks.

Due to the manufacturer’s objective to sell his products or services, his Website cannot be rated as an objective source of information. Normally, he may not unveil product deficiencies. On the contrary, he may praise his own products, in order to differentiate them from competitive offers and to stimulate purchase. As a tool to display complex products, various Websites offer product configurators (e.g., BMW’s Car Configurator\textsuperscript{22}) that provide the opportunity to individually assemble the desired product. Hereby, also price information for a complex product can be obtained rather easily.

Additionally, product information can be gathered through dealers’ homepages. Often, the displayed information is just a copy of the producers’ published data. Sometimes, dealers offer also complementary data in terms of pros and contras. Further information offered by retailers may be consumers’ valuations on the dealer’s homepage. Many retailers’ homepages also offer the possibility to view a comparative presentation of different products. That way, consumers can easily compare alternatives with regard to their particular characteristics. However, also dealers’ homepages may be biased, as dealers’ margins on different products they sell may usually vary.

Online shops work similar as dealers’ Websites. Attention should here be paid to the fact that online shops offer a limited range of products that does not represent all products on the market, but only those products that are sold in this particular shop. Hence, also online shops are no unbiased source of information.

The central problem of these information sources is that they are biased – or at least perceived to be biased – and consequently are not suited to deliver a reliable overview or reliable comparative information. As a consequence, consumers are not likely to rely on manufacturers’ or retailers’ homepages for the purpose of information search. Nonetheless, they may finally rely on a branded retailer for the purchase. Brynjolfsson and Smith (2001) found out that although branded retailers are substantially weakened due to increased information transparency in the Internet, brand

\textsuperscript{22} See http://www.bmwusa.com/vehicles/byo_landing for the U.S. version. Other countries’ versions can be accessed through http://www.bmw.com and then selecting the specific national Website.
name and retailer loyalty strongly influence consumers’ online purchase behavior giving such retailers a significant price advantage over their competitors.

### 3.2.2 Experts’ homepages

In many countries there are independent, non-profit testing and information organizations serving only consumers, such as for instance the U.S. CONSUMERS UNION or the German STIFTUNG WARENTEST. These organizations give unbiased advice about products and services, and other consumer concerns. The mission of these organizations is to test products and services, inform the public, and protect consumers. They are financed solely by selling their consumer reports, other services, non-commercial contributions, grants, and fees. They buy any products they test on the open market and they do not earn money with advertisements in their publications in order to remain impartial (Consumers Union, n.d./2006; Stiftung Warentest, n.d./2006). This kind of experts’ services provides consumers with manifold information that would otherwise not be available on markets.

Also other organizations publish test reports rating products, both in magazines and on the Web, such as for instance car magazines or other special interest publications. However, if these services are financed also by advertising revenues, their impartiality cannot be guaranteed. Unlike the former experts, these information providers may be beholden to commercial interests.

There is only little scientific research on the influence of experts’ ratings on consumers’ purchase decisions. However, regarding the findings of Wasmuth and Kalkowski (2000) it can be assumed that these information sources are perceived to be very reliable and mostly do not only provide overall ratings for tested products, but also comparative overviews of competitive offerings. Accordingly, these services can either affirm characteristics that companies promise to be related to their brand (e.g., high quality, or a particularly good cost-benefit-ratio), or they can make consumers aware of other offerings that might fit their needs even better. However, experts’ test reports are usually limited to only a certain number of offerings on a market. Thus, information from test reports might rather not be a threat respectively might not be appropriate to obviate brands; it only helps to increase information efficiency for consumers.
3.2.3 Cybermediaries

Intermediaries are market brokers, facilitating market transactions by providing inter-
mediation services (Bailey & Bakos, 1997). Likewise, cybermediaries are interme-
diaries that help to “filter and organize online market information so that customers
can identify and evaluate alternatives more efficiently” (Solomon, 2003: p. 310).23 There are different kinds of cybermediaries (Solomon, 2003):

- **Directories and portals** that supply general services connecting a large variety of
different Websites (e.g., YAHOO!). These are reviewed in chapter 3.2.4 (discussing
consumer-to-consumer communities), because they rather provide a platform for
consumers to exchange information than actually mediate information between
businesses and consumers.

- **Forums, fan clubs, and user groups** provide product-related discussions, helping
consumers to come to decisions by connecting them to other people whom they
can interact with (e.g., STA TRAVEL). These virtual communities are discussed in
detail in chapter 3.2.4 for the same reasons as mentioned above.

- **Financial intermediaries** authorize online payments (e.g., PAYPAL). This kind of
intermediaries is not relevant for consumers’ search behavior and is therefore not
discussed in the present paper.

- **Intelligent agents** (analogously: shopping robots, or shopbots24) are sophisticated
software programs using collaborative filtering technologies either to learn from
past user behavior in order to recommend new purchases or to simply recom-
mend products or services based on consumers’ prior input. Intelligent agents are
discussed subsequently in more detail.

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23 Hagel and Singer (1999) refer to “cybermediation” as “infomediation”, which they define as services
provided by intermediaries, enabling Internet users to use the information that is available in online
environments in effective ways. Typically, infomediaries are search engines, virtual agents, online
portals, online dictionaries, electronic libraries, etc. Accordingly, both terms can be used inter-
changeably. Throughout the present paper the term “cybermediary” will be used.

24 The term “bot” originates from “robot”. A bot is an autonomous software that operates as an agent
for a user or a program or simulates human activity. On the Internet, the most popular bots are pro-
grams (called spiders or crawlers) used for searching. They access Websites, retrieve documents and
follow all the hyperlinks in them; then they generate catalogs that are accessed by search engines. A
shopbot searches the Internet to find the best price for a product. By the way, users entering
www.shop bot.com in their browser’s address field are directly forwarded to www.amazon.com.
Intelligent agents provide, for instance, shopping comparison services that display prices and other product or service attributes (e.g., shipping costs and times). In some cases, even vendor reliability information from a variety of sellers is displayed on these sites in order to impart the quality of the displayed shops. Additionally, shoppers’ reports about their previous experience with the product in search and results of experts’ tests can be displayed if they are available.

Typically, online comparison shopping service providers comb the Internet with automated “bots” to find the prices and other characteristics of items on offer. Consumers can view the information in different modes. They can, for instance, search for the cheapest shop for a specific item, or they can sort the items of different brands of one group of products according to price. Different cybermediaries include different vendors, and some of them accept compensation to present particular vendors’ information favorably (Jones, n.d./2006). Usually, shopping comparison sites provide solely information services and therewith enable the initiation of transactions on their platform. The purchase follows afterwards via the vendor’s Website. A service that cybermediaries provide to companies is to sell them information, such as for instance customer profiles or market analyses they were able to compile based on their research on their own Websites. Examples of shopping comparison sites are BIZRATE, PRICESCAN, PRICERUNNER, DEALTIME, and FROOGLE.

While branding is often considered an aid to consumer search that helps customers find a vendor for a given product, this rationale is largely eliminated in the shopbot setting (Smith & Brynjolfsson, 2001), because shopbots enable consumers to improve the quality and the efficiency of their purchase decisions (Häubl & Trifts, 2000). Nonetheless, there are many possible reasons why branding still remains important to consumers’ choices even when better prices and delivery times are plainly listed and just a mouse click away at competing retailers. One possible explanation might be that customers care not only about the product they are buying, but also about so-called non-contractible items, such as service quality, delivery times, reliability, higher willingness to accept returns, etc (Deregatu, Rangaswamy & Wu, 2001). To stand out from other competitors, retailers may promise to deliver such services, and consumers might reasonably pay a premium for such services that are not easy to enforce. This promise can become a brand that then can serve as a signal, or bond, that consumers can use to identify retailers with higher service quality.
(Smith & Brynjolfsson, 2001). Consumers may pay a price premium therefor (Brynjolfsson & Smith, 2001).

Brynjolfsson, Smith and Hu (2003) mention the fact that e-commerce in general, and especially intelligent agents, increase available product variety tremendously. “While some of these products may be available from specialty stores or special ordered through brick-and-mortar stores, the search and transaction costs to locate specialty stores or place special orders are prohibitive for most consumers. In addition, the enhanced search features and personalized recommendation tools offered by Internet retailers allow consumers to locate products that would have remained undiscovered in brick-and-mortar stores“ (Brynjolfsson, Smith & Hu, 2003: p. 1581). Accordingly, the emergence of online retailers places "a specialty store and a personalized shopping assistant at every shopper’s desktop“ (Brynjolfsson, Smith & Hu, 2003: p. 1581).

3.2.4 Consumer-to-consumer communities

Virtual communities are “social aggregations that emerge from the net when enough people carry on public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (Rheingold, 2000: p. 5).

The term virtual communities refers to online groups of people who “communicate social information and create and codify group-specific meanings, socially negotiate group-specific identities, form relationships which span from the playfully antagonistic to the deeply romantic and which move between the network and face-to-face interaction, and create norms which serve to organize interaction and to maintain desirable social climates“ (Clerc, 1996: pp. 45-6). As online interactions are becoming an important supplement to social and consumption behavior – although they are not likely to replace physical encounters or information from traditional media (Kozinets, 1999) – virtual communities are becoming increasingly important for both consumers and companies.

Mostly, users have to register before they can actively use the community homepage. Virtual communities deliver word-of-mouth information (i.e. information that is shared among consumers), which consumers perceive to be very reliable (compare Figure 7). The value of virtual communities is to provide a platform for consumers (or people with similar interests) to exchange opinions about companies, products, ser-
vices, brands, or other issues. This way, consumers can obtain information even about sensory attributes and experiences, which they can neither get from manufacturers’, dealers’, or experts’ Websites nor from shopping in the real world.

There are several subgroups of virtual communities. For instance, Armstrong and Hagel (1996) have termed groups of consumers united by a common interest communities of interest. Solomon (2003: p. 384) describes virtual communities of consumption as “a collection of people whose online interactions are based upon shared enthusiasm for and knowledge of a specific consumption activity”. All definitions have in common that the members of these communities meet virtually, i.e. in the Internet. Some virtual communities, though, organize “real” meetings for their members occasionally.

Another community-related definition is the one by Muñiz and O’Guinn (2001), who define brand communities. Accordingly, a brand community is a “specialized, non-geographically bound community, based on a structural set of social relations among admirers of a brand” (Muñiz & O’Guinn, 2001: p. 412). Members of brand communities, in contrast to members of virtual communities of interest or consumption, usually meet in person regularly. These meetings, called brandfests, are often organized or at least sponsored by the concerned brand, such as e.g. the “MINI United” festival in Misano (Italy) in 2005, or the many HARLEY-DAVIDSON Events 25. Also TUPPERWARE created a very well-known brand community. Crucial relationships in brand communities include those between the customer and the brand, between the customer and the firm, between the customer and the product in use, and among fellow customers (McAlexander, Schouten & Koenig, 2002; Muñiz & O’Guinn, 2001). Basically, brand communities are a concept to enhance customer attraction, loyalty, and retention. Being a member of a brand community can have a significant positive effect on a member’s brand loyalty. Brand loyalty does not simply result from a positively perceived relationship quality with the brand alone, but it is also significantly influenced by the quality of the social experience that a customer has with other customers involving the brand. Muñiz and O’Guinn’s (2001: p. 427) conjecture that “developing a strong brand community could be a critical step in truly actualizing the

25 On its European Websites, Harley-Davidson emphasizes the experience and community dimension of its brand by letting consumers directly navigate to its “upcoming events” calendar with one click (e.g., for the Italian part of Switzerland, the direct link is: http://www.harley-davidson.com/EX/HTR/ECAL/events/ComingEvents.asp?locale=it_CH&bmLocale=it_CH).
concept of relationship marketing. A strong brand community can lead to a socially embedded and entrenched loyalty, brand commitment [...] even hyperloyalty". This relationship aspect is what also Mandelli (2005) and Lemon, Rust and Zeithaml (2001) refer to as a crucial driver of customer value for brand owners.

There are commercial and non-commercial communities. Members of non-commercial communities do not have the intention to make money on these Websites. Here, communication is stimulated only by common interests. Thus, information from non-commercial community sites can be rated as very authentic and reliable. However, also commercial communities are attended during consumers’ search for information. Here, communication is stimulated by commercial aims rather than common interests. Commercial virtual communities give the opportunity to choose the product category that the particular consumer is interested in from a range of product categories. As many of the information intermediaries described in chapter 3.2.3 do not only offer product information and price comparison on their Websites, but also ratings by users (community members), they likewise fall under the definition of virtual communities with commercial aims.

Other examples of commercial virtual communities are AMAZON and EBAY. In contrast, GEOCITIES, YAHOO!-GROUPS, ICQ, and THE WELL are non-commercial virtual communities. Many brand owners have established online brand communities, such as the DUCATI community on DUCATI.COM, or the APPLE community on APPLE.COM. Besides the described effects of brand communities, these platforms enable brand owners to gather information about the behavior of their customers and of prospects on their Website. At the same time, there are non-commercial brand communities that are independent from brand owners, such as the forum of BMW fans (http://www.bimmerforums.com) or THE UNOFFICIAL APPLE WEBLOG (www.tuaw.com).

Credibility and reliability of the information provided on community Websites depend on the community’s commercial interests. If the community is non-commercial, the information provided may be perceived to be unbiased. A variance of function may be predicted for directed as opposed to general search in the Internet. In terms of increasing efficiency in the attainment of goals, virtual communities can provide access to information not available by any other means (Holland & Baker, 2001). Just as people usually value personal recommendations above all other information sources, online consumers may obtain the same types of experience based evalua-
tions from the virtual community. For this reason, the word-of-mouth information shared among consumers in virtual communities may by many users be perceived to be very reliable (Holland & Baker, 2001). Hence, consumer-to-consumer communities can serve to reduce risks and increase information efficiency – especially with regard to sensory attributes (e.g., taste or smell) of an offering, which other information sources cannot provide and brands can only promise.

Those consumers who participate in a virtual community with an experiential orientation, i.e. during general search, reap additional benefits (Holland & Baker, 2001). While they gain functional benefits from the provision of useful information, the social aspects of participating in a community produce both emotional and self-expressive benefits (Holland & Baker, 2001). Hence, depending on the user’s orientation, virtual communities can even create image benefits and build stronger relationships with consumers (Holland & Baker, 2001; Kozinets, 1999).

### 3.3 Evaluation of alternatives

The result of the information search is a set of alternative products or services (see Figure 9). In some cases, this set comprises hundreds of different brands (as in cigarettes) or different variations of the same brand (as in shades of lipstick). The sample of alternatives that may be considered during a consumer’s choice process is his or her consideration set26 (Solomon, 2003).

The consideration set includes those alternatives that the consumer indeed actively considers (accept set) and those options that he does not consider (reject set). Usually, the consideration set comprises products that are already in memory, and products that are prominent in the retail environment (Solomon, 2003); it is an intersection of the total set and the available set.

The number of products or services considered as alternatives to be evaluated depends on the type of decision-making. A consumer engaged in extended problem solving may, for instance, carefully evaluate several offerings. Likewise, someone making a habitual decision may not consider any alternatives to his or her normal brand (Solomon, 2003).

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26 The term “evoked set” is used synonymously.
Basically, consumers evaluate alternatives with regard to many factors. First, they may evaluate the product or service attributes. These can, for instance, be quality, price, functions and other technical characteristics (such as color or size), or the time that is needed to perform a service. Coming back to the distinction between sensory and non-sensory product attributes (Degeratu, Rangaswamy & Wu, 2000), Alba et al. (1997) propose a distinction of product characteristics with regard to the purchase decision process: they distinguish search and experience goods (see also Ward & Lee, 2000). Hereby, the quality of a search good is verifiable upon inspection. An experience good’s quality, in contrast, can be revealed only upon the purchase and experience of this good, i.e. an experience good delivers the experience not before consumption, and it is difficult to judge its quality upon inspection. Accordingly, a company advertising a search good can easily inform consumers of the product’s quality, whereas information regarding the benefits of experience characteristics may not seem credible to consumers, because it is inherently unverifiable before usage. Manufacturers of experience goods can seek credibility from third party sources, such as word-of-mouth or independent and unbiased experts. Such information may be hard to find for new products and services (Ward & Lee, 2000). While services are inherently experiential, all goods have some combination of search and experience attributes (Alba et al., 1997). For a search good the consumption benefits that are most important to consumers are predicted reliably by attribute information available.
to them before purchase. This reasoning implies that the same product can be a search or an experience good, depending on the benefits that are important to consumers and the inferences that consumers make about how well those benefits are predicted by information available prior to buying (Alba et al., 1997). To sum up, certain product characteristics – apart from brand name and price – can be compared objectively (non-sensory attributes, search goods), while others can only be compared after experience (sensory attributes, experience goods).

Nonetheless, marketing (not only brand management) can create or emphasize experiential aspects – of both search and experience goods – during the decision-making stage (from giving away samples to true worlds of experience like NIKETOWN) in order to increase consumers’ involvement and therewith make the decision more relevant for them (Havlena & Holbrook, 1986).

A consumer may attach different levels of importance to each the different attributes of a good, depending on what creates value for him or her. Additionally to the functional attributes of a product or service, consumers probably have certain beliefs about the brands that they are confronted with in their purchase decision processes (Holbrook & Hirschman, 1982). These beliefs refer to both the product or service brand, and the retailer’s brand. They may be influenced by individual personal factors (e.g., preferences, taste, image benefits, perceived risk), but also by attitudes of others and unanticipated situational factors. The brand beliefs control whether a brand will be considered as an acceptable alternative in the consumer’s consideration set. Finally, the consumer may evaluate, if the product will satisfy his or her needs, based on what he or she is looking for (Solomon, 2003) – however only if the purchase decision process actually comprises the stage of alternative evaluation, which might, e.g., not be the case for impulse or habitual purchases.

However, decision-making is not always strictly rational, as has been described previously. Decisions can be influenced by the way a problem is posed (called framing) and whether the problem is put in terms of gains or losses. Consumers may use decision rules to make a product choice from among alternatives. Contributors to scientific literature have developed manifold models on consumer choice behavior, such as, for instance, the Theory of Reasoned Action (Ajzen & Fishbein, 1977), and other compensatory and non-compensatory evaluation rules. Compensatory decision rules, which are more likely to be applied in high-involvement situations, are charac-
terized by the fact that the consumer considers each alternative’s good and bad points carefully to arrive at the overall best choice. Non-compensatory decision rules eliminate those alternatives that are insufficient on any of the criteria the consumer has chosen to use. And, to simplify decision making, consumers often use heuristics, which — although leading to a quick decision — may not always be in consumers’ best interests (Solomon, 2003). Heuristics may, for instance, be the belief that products are better if they cost more (Kalita, Jagpal & Lehmann, 2004), the country-of-origin as a product signal, such as Germany quality, Swedish design, French fashion, or the familiarity of certain brand names.

The Internet and all other media can be used to disseminate or make available information about a product, a service, a brand, or any other issue. This information can be general, it can increase awareness or perceived importance of specific aspects or characteristics, and it can also influence basic consumer attitudes (Solomon, 2003). At the same time, the size of consideration sets is affected by Internet-based information search (Peterson & Merino, 2003; Häubl & Trifts, 2000). According to Peterson and Merino (2003: p. 114), “the consideration sets of consumers who use the Internet when searching for information will tend, over time, to become more stimulus driven than memory driven” due to the continuously changing and increasing number of competing offerings. This means, consumers who use the Internet for information search are likely not to base repeat purchases on their consideration sets, but on a repeated evaluation of product alternatives (see also Häubl & Trifts, 2000). This in turn impacts customer retention.

To sum up, consumers usually focus on certain product or service dimensions to judge the merits of competing options (also called evaluative criteria). These criteria range from very functional attributes to very experiential ones. Consumers put more weight on criteria on which products differ from one another than on those where the alternatives are similar (Solomon, 2003). Finally, the attributes actually used to differentiate among alternative choices are determinant attributes. Depending on the kind of choice to be made, consumers may undergo a procedural learning process, resulting from a series of cognitive steps (e.g., identifying important attributes, remembering whether competing brands differ on those attributes, etc.), before making a choice (Solomon, 2003). The choice process comprises decisions on product, service, brand, vendor, channel, quantity, timing, payment-method, etc.
The evaluation stage and the actual purchase decision are very strongly related. In the evaluation stage, the consumer chooses that product or service out of all alternatives that he – consciously or unconsciously – perceives to deliver the highest value to him (Rust et al., 1999). His decision to buy the one alternative usually also includes the decision not to buy the other alternatives (Bettman, Luce & Payne, 1998). Which brand the consumer decides to purchase depends on the product or service, on prior experience with this or a similar product or brand, on information present at the time of purchase, on beliefs about the brand that have been created by advertising, and on the characteristics of the individual person (Rust et al., 1999).

3.4 Purchase

Of the five steps of the purchase decision process, only two steps require considerable action of the consumer – the information search and the purchase. These seem to be the important steps in which the Internet can provide more efficiency and effectiveness to consumers than traditional marketing channels. Accordingly, this chapter discusses the impacts of brands and the Internet on actual purchase decision-making.

Consumers always make decisions on consumption related information search, brand choice, and product usage (Moon, 2004). Sometimes, these decisions are difficult because there are too many alternatives or limited time (Moon, 2004). The degree to which information is useful to consumers in terms of facilitating or speeding up their purchase decision depends on the nature of the information provided and on its reliability (Alba et al., 1997). Alba et al. (1997: p. 43) state that “the quality or usefulness of information is determined by the degree to which consumers (or their agents) can use the information obtained prior to purchase to predict their satisfaction from subsequent consumption, which in turn depends intimately on consumers’ inference rules and consumers’ confidence in the reliability of these rules.” Accordingly, for experience goods, there seems to be at first a low subjective correlation between product attributes observable prior to purchase and benefits at the time of consumption. At the same time, brand names enable highly reliable inferences about consumption benefits for an experience good already after one purchase and use. As retail formats differ greatly in their capability to provide information about attributes
linked to consumption benefits, search attributes in one format might be experience attributes in another (Alba et al., 1997).

Alba et al. (1997: p. 43) illustrate this statement with an interesting example: “If the key attributes of ice cream relate to experienced flavor, BEN & JERRY’S CHERRY GARCIA might be a search good at BEN & JERRY’S store, which allows a consumer to taste the ice cream prior to purchase. It would be an experience good at first if a person were buying at a supermarket that sells ice cream only in cartons and does not allow tasting prior to purchase. Consequently, the BEN & JERRY’S store initially would have an informational advantage over the supermarket. However, when the consumer learns that CHERRY GARCIA on the carton label reliably predicts experienced flavor, the supermarket no longer would be a disadvantage.” The same principles regarding the relative advantages or disadvantages of store-based retailers apply also for non-store retailers such as online sellers (Alba et al., 1997).

Hence, consumers make inferences about the attractiveness of a good based on information provided by online and offline information providers (manufacturers, retailers, experts, cybermediaries, friends, etc.), and different information provider formats compete on the information they provide as cues for these inferences (Alba et al., 1997). Furthermore, different consumers possess different decision rules, which in the end affects the extent to which the information provided by any particular format leads to competitive advantage over other formats. Consequently, the cues that are considered to provide a reliable basis for inferences are likely to change with experience with the brand (Alba et al., 1997).

A brand is a search attribute assuring consumers of a consistent level of product or service quality or other dimension of differentiation (Alba et al., 1997). If a brand will be included in the consumer’s consideration set during the information search stage, this part of the decision making process presents a brand with a unique opportunity to act as an influencer by providing relevant, informative, and reassuring communication that the consumer may use when evaluating alternatives. However, one and the same brand can be compared easily across different sellers by means of cybermediaries. This may have different outcomes. Price might become more important for stores offering one and the same brand (Alba et al., 1997). An alternative decisive evaluative criterion to price may be the seller’s brand, as different online
offerers may be perceived to be differently reliable or may deliver different levels of service quality with respect to the non-contractible aspect.

The Internet makes a huge amount of information available for consumers and provides the efficient mechanisms for identifying, retrieving, and organizing that information (Peterson & Merino, 2003). As a consequence, consumers learn about a lot of offerings that they may not have known before. If these offerings can be compared on search attributes and if brands provide no additional value to consumers, then other (better) offerings may obviate brands that customers used before.

Consumers do not only have to make a decision on where to search, but also on where to buy. They have to decide whether they will search information through offline channels or the Internet, whether they will search information through the Internet and then buy in a non-Internet store, whether they will search information through offline channels and then buy online, or whether to use the Web for both information search and product purchase (Moon, 2004). If the purchase takes place in the Internet, they have to decide in which particular shop to buy. Apart from trusted branded online sellers, multi-channel retailers may have certain advantages compared to single-channel retailers regarding the consumer’s perceived risk in online environments. Consumers can, for instance, pick up bulky products in the non-Internet store, and they can have a close look on high-priced products and pay in the offline store without having to send payment-information through the Internet. In addition, after the purchase, consumers can directly go to the retail store in case they have questions or want to return a product. In this way, multi-channel retailers can reduce the consumer’s perceived risks (Levin, Levin & Heath, 2003). However, multi-channel retailers face the challenge to deliver consistency over all channels in order to provide a seamless shopping experience across all channels. This may be difficult especially with regard to the problem of explaining price differences between the online and the offline channel.

Basically, the consumer’s decision which channel to choose depends on the total risk the consumer perceives to be connected to this decision. This risk is influenced by person-related and product-related factors, such as prior experience in e-commerce, Internet-affinity, self-confidence and socio-demographics, financial and functional aspects, and the risk to lose time if the product is deficient and has to be returned (Bauer, Mäder & Fischer, 2003). The consumer’s prior experience in e-
commerce results from the frequency and satisfaction with prior online purchases. The higher this frequency is, the more secure the consumer may feel in e-commerce, which in turn leads to higher self-confidence in online environments (Bauer, Mäder & Fischer, 2003). This may finally decrease the total perceived risk and increase the probability of further online purchases (Shankar, Smith & Rangaswamy, 2002; Chiagouris & Wansley, 2000). While perceived benefits of the online channel are time saving and convenience, the risks of an online purchase such as product reliability, delivery or refund related uncertainty reduce consumers’ intention to purchase through the internet (Moon, 2004). These findings suggest that if consumers perceive these risks to be related to online buying, they may avoid the Internet and choose offline channels for product purchase – even after they have searched information through the Internet. In other words, the more convenient the procedure regarding non-contractible aspects of the purchase is, the higher is the consumer’s intention to buy through the channel (Smith & Brynjolfsson, 2001; Moon, 2004).

The purchase decision actually closes the purchase decision process. Whether consumers consider the same brand for a re-purchase depends – among other aspects – on their subsequent evaluation.

3.5 After-purchase evaluation

After the purchase, the consumer feels satisfied or dissatisfied with the purchased product or service. As has been described in chapter 3.1, the purchase decision process begins when a consumer recognizes a significant difference between his or her current state of affairs and some desired or ideal state. Accordingly, the consumer’s (dis)satisfaction results from the difference between the expected and the perceived product performance. If customers feel satisfied they may purchase the same product or brand again and tell other people about their positive experience. If they do not feel satisfied they may not purchase again and tell even more people about their dissatisfaction (Kotler & Bliemel, 2001). A common rule of thumb is that dissatisfied customers tell up to ten times as many people about their experience as satisfied customers do (Kotler & Bliemel, 2001). This number may increase significantly due to the Internet, as consumers can now post their opinion in online portals that are accessible for thousands of other consumers.
Ideally, consumers should first talk to the manufacturer of the purchased product or service in the case of dissatisfaction. Nonetheless, only around five percent of all dissatisfied customers complain at all (Stauss & Seidel, 2005). All other customers feel that complaining is not worth the effort or do not even know where to complain (Kotler & Bliemel, 2001). The Internet is one possible means to resolve this problem. To complain through a manufacturer’s or vendor’s homepage, or by e-mail could be a more comfortable way to complain than having to walk to the postbox or having to talk on the phone (Stauss & Seidel, 2005).

To sum up, both brands and the Internet fulfill important functions during the purchase decision process: increase of information efficiency, reduction of risks, and creation of image benefits. While the Internet increases information transparency – especially during the stage of information search – it also entails certain risks due to its relative anonymity. As opposed to this, the main objective of brands is to differentiate competing offerings. Brands are cues in consumers’ consideration sets to known or even trusted solutions to problems. And brands can even create image benefits for customers. The Internet offers several means to businesses to weaken competing brands and to enforce their own brands. A crucial option made available through Internet technology is the personalization of offerings. Holland and Baker (2001: p. 39) state:

"Personalization, as the ultimate form of customization, is the final result of understanding and meeting the unique needs of the customer. One-to-one marketing is a fundamental concept of interactive marketing and is key to customer retention and creating brand loyalty. … Personalization can be thought of as a specialized form of product differentiation."

This personalization can either take the form of product modification incorporating features designed to more fully meet individual needs, or it may take the form of an extension to the consumer’s search and evaluation capabilities through choice assistance technology (e.g., product recommendations at AMERICAN.COM). Personalization not only provides functional benefits by meeting the needs of customers more fully, but also is traditionally a sign of status (providing emotional benefits) and uniqueness (providing self-expressive benefits) (Holland & Baker, 2001).

Depending on the degree of cognitive involvement in the purchase decision, the type of good (search good versus experience good), and the risks and benefits of an
online purchase, of certain functions of the Internet and of brands might be more important than others. This is explored in the following chapter.
4. Effects of consumer empowerment

“Consumers generally suffer from a condition referred to as information asymmetry, which exists when sellers have valuable information about price and quality differences that is not readily available to their customers. For example, manufacturers often know which outlets and countries offer the lowest prices for their products. Because search costs – the time and effort required – are relatively high, most consumers pay the seller’s asking price. Not surprisingly, customer ignorance is often the biggest profit center in many companies.“ (Kumar, 2000: p. 1)

As price transparency increases, it becomes increasingly difficult for companies to conceal margins behind what Kumar calls “customer ignorance”. This development reveals the need for many businesses to overhaul their global pricing strategies and to reduce costs in any kind of business processes (Kumar, 2000).

Global sourcing, with all its associated cost savings and quality enhancements, which was previously only an option for corporate buyers, is now put within the clicks of individual consumers (Kumar, 2000). The Internet decreases information asymmetry by giving power to obtain information about price and quality differences to consumers. Besides obtaining information from traditional independent information media, such as consumer protection organizations’ publications, and word-of-mouth from acquaintances, consumers can now use shopping robots to compare offerings on their own, and they can spread and receive a far larger quantity of word-of-mouth. Shopping robots dramatically reduce search costs for consumers and give them an unprecedented level of price and quality information (Kumar, 2000).

Furthermore, there is considerable discussion about the Internet’s impact on the balance of power in the distribution chain (Porter, 2001; Kumar, 2000). As to that, an impact on manufacturers may be that transparency in price and quality could possibly lead to decreasing value of brands – maybe even turning brands into commodities. An impact on distributors could be that manufacturers might bypass them and deliver their products directly to their customers by means of online channels.
All in all, the empowerment of consumers has considerable effects on markets:

“The Internet is a nearly perfect market because information is instantaneously and buyers can compare the offerings of sellers worldwide. The result is fierce price competition, dwindling product differentiation, and vanishing brand loyalty.” (Robert Kuttner in Business Week, May 11, 1998)

Market structures have changed and are still changing. And market actors have to adapt to those changes. The effects of consumer empowerment on brands – namely the ability of information to obviate brands – are described in chapter 4.1, based on an empirical study. The two subsequent chapters then deal with the effects of the observations from the empirical study and secondary academic research on intermediaries, online retailers, price, and quality. Hereafter, chapter 4.4 will discuss how brand management should adapt to this development.

4.1 Information as a substitute for functions of the brand

This chapter will analyze, which functions of brands are vulnerable due to the increased information transparency. The underlying idea is that information can probably substitute brands that provide mainly functional benefits, while brands that provide mainly emotional or self-expressive benefits can rather not be obviated easily.

On the one hand, the Internet provoked an information overload. Some scientists argue that brands are becoming increasingly important because of this overload (e.g., Lee & Lee, 2004; Deregatu, Rangaswamy & Wu, 2001). Intelligent agents, price comparison services, shopping portals, search engines, blogs, virtual communities, etc. continuously increase the number of information sources – and therewith the amount of available information – for consumers. Accordingly, being able to gather additional information and having to digest this vast amount of data may increase the consumer’s feeling of uncertainty, which might result in cognitive dissonances – i.e., already before purchase, the consumer might feel even less certain of choosing to buy a product or service because of the apprehension to choose the wrong product or service. On the other hand, the adaption of new technologies, increasing proficiency in using these technologies, and therewith the capability to focus (almost) only on useful information increases efficiency and effectiveness of search
for many consumers. Those consumers who increase their proficiency in using the Internet and already gather a lot of information during their general search might notably reduce the time actually needed for search and enhance the quality of search results (Ward & Lee, 2000). As a result, one could assume that consumers could now base their purchase decisions on price and quality, and consequently would not have to rely on brand promises anymore. As to this, Ward and Lee (2000: p. 11) argue that “as the ‘price’ of searching, relative to using brands, falls with increasing Internet experience, and if there are more substitutes, more experienced consumers should rely on brands less.” Thus, in an information overloaded environment, brands may become more important only for those consumers who are not able to effectively select information in order to make it valuable to their decision-making process (Peterson & Merino, 2003). In other words, a basic requirement to be able to obviate brands through information is the particular consumer’s proficiency in using the Net.

Generally, brand names become less valuable, when more total information about product attributes is available online (Deregatu, Rangaswamy & Wu, 2001; Häubl & Trifts, 2000). This is particularly likely for products for which online stores can give detailed attribute information, as well as comparative information, and it is very likely if the product category contains few sensory attributes (search goods). Brand names become more important in product categories that are differentiated on brand image and other attributes that do not lend themselves to be easily summarized by an online store (experience goods) (Deregatu, Rangaswamy & Wu, 2001). However, though objective information strongly promotes rational choice, objective information does not eliminate suboptimal choices, which might be due to uncertainty, experiential influences, or other intrinsic or extrinsic factors (Tellis & Gaeth, 1990; Häubl & Trifts, 2000).

It appears to be more difficult to substitute brands, when consumers use products or services to cultivate a particular image, or for self-realization or identification purposes (Deregatu, Rangaswamy & Wu, 2001). If the function of the brand is to create a self-expressive image benefit, functional characteristics or prices may in many cases only supplement or limit the consumer’s purchase decision (a common example for this kind of brand benefits are clothes). For this kind of goods, increased market transparency may probably not result in a decision for or against a certain brand; it might rather lead to search for the lowest possible price for the chosen brand (Ba-
However, as the survey and secondary research results show, many consumers prefer to purchase image benefit creating goods offline, which is often not the cheapest option.

The first part of this chapter sets a frame of reference for products and services. Then, the empirical study and its research results are discussed. This will be followed by a synopsis of the primary and secondary research results.

4.1.1 The frame of reference

As has been described, the increased availability of information has shifted a considerable amount of power from firms to consumers. Consumers can receive and disseminate an enormous quantity of information by means of the Internet. They do not necessarily have to rely on information gathered from local retail stores, friends, unidirectional media (such as television, magazines, or radio), own product trial, or brands; now, they can get information about product trials from a wide range of people from all over the world, additionally engage in (real-time) dialogue with businesses, and obtain data from manufacturers, retailers, and third party sources on a global scale.

Yet, can information substitute brands? There is considerable debate about this topic (e.g., Brynjolfsson et al., 2001, 2003, 2004; Bakos, 1998; Deregatu, Rangaswamy & Wu, 2001; Shankar, Smith & Rangaswamy, 2003; Alba et al., 1997), albeit not leading to a common and general answer. In order to facilitate understanding, the following explanation and graphical presentation will set a frame of reference, before recent scientific research results will be explained.

- **Involvement** is one of the dimensions that guide the way a purchase decision is approached by consumers. Gilles and Kapferer (1985: pp. 41-53) distinguish five components determining consumer involvement: (1) personal interest in a product category; (2) perceived risk associated with a poor choice of the product; (3) probability of making a bad purchase; (4) pleasure value of the product category; and (5) sign value of the product category. These components correspond to the described brand functions. One can assume that the higher the weight of one of these involvement dimensions (i.e., the higher the consumer’s involvement in the purchase decision), the more extensive – or at least intensive – will be the purchase decision process (Solomon, 2003). For instance, if a consumer needs to
buy tooth paste, which probably might neither create high pleasure value nor have a any sign value, involvement may be low, as also the perceived risk of making a wrong choice is not high respectively can easily be coped with. The same consumer may on the other hand place much higher value on the purchase of a durable product, such as consumer electronics or a computer, because here the risk of poor choice is much higher. The purchase of clothes or designer accessories creates high sign value (Fischer, Meffert & Perrey, 2004); thus these products are likely to be high involvement products. Furthermore, experiential aspects during the purchase or usage process appeal to the pleasure value and are likely to increase consumer involvement (Holbrook & Hirschman, 1982; Csikszentmihalyi, 1990).

- On the other hand, the level of homogeneity (respectively differentiation) of products influences the extent of research a consumer needs to conduct in order to achieve a status of knowledge that enables him to come to a prudent purchase decision. The more homogenous a product or service is, the easier it can be compared to other products or services of the same or a substitutive category; the same logic applies for differentiated products and services. For instance, consumers who want to search for a book “must first choose the specific book they are interested in buying, which reduces their selection to a unique and physically homogenous product, leaving item variation solely in terms of the retailer’s conditions for price, shipping and product availability” (Brynjolfsson, Dick & Smith, 2004: p. 6). On the other hand, flights or clothing are rather differentiated services and products that can be compared only at higher cost in terms of effort, time, and possibly money.

Hence, the higher the consumer’s involvement in the purchase decision, the higher the importance of the three (or at least one of the three) brand functions (on the abscissa in Figure 10), and consequently, the more intensive and extensive the information search. The degree of differentiation depicts the degree of knowledge that a consumer must have or achieve in order to be able to rather objectively assess a product’s or service’s cost-benefit-ratio as compared to the competition (on the ordinate in Figure 10). However, in the case of low involvement consumers might not be likely to engage in extensive search because of the low(er) importance of the purchase decision. Low involvement decisions rather rely on habitual or impulse
buying behavior. It is reasonable to assume that in the case of high involvement decisions regarding homogenous goods, price sensitivity will be higher than for differentiated high involvement goods (Smith & Brynjolfsson, 2001). Nonetheless, it must be acknowledged that, according to recent studies, there may be systematic differences in customer attitudes and behavior regarding products chosen online versus offline – for example with regard to price sensitivity, brand name impact on the purchase intention, or the impacts of the Internet on customer satisfaction and loyalty (Shankar, Smith & Rangaswamy, 2003; Deregatu, Rangaswamy & Wu, 2001). Thus, future research should explore whether these attained research results are true for online, offline, or both market environments.

**Figure 10: Clustering of products and services**

The previous explanations already lead to first resulting propositions regarding the present paper’s research question.

To sum up, the lower the involvement in the purchase decision, the lower will be the extent of information search, i.e. the less important is information; and the higher the degree of differentiation, the greater will be the importance of brands. Hence, in the field of rather differentiated low involvement goods information is not likely to obviate brands.
Meffert, Perrey and Schröder (2002) claim that in the case of rather homogenous low involvement products brands mainly fulfill the function of increased information efficiency; reduction of risks and the creation of image benefits are not important here. Consequently, it is reasonable to assume that, if the brand serves to increase information efficiency, information could possibly substitute this function. However, also other factors such as habits, prices, or for some goods a low general relevance of brands might influence the purchase decision. Future research should explore this field.

Brynjolfsson and Smith (2000, 2001, and together with Hu, 2003) have scrutinized the field of homogenous high involvement products, namely the online book market. Their research findings suggest that in this market consumers are rather price sensitive; nonetheless, they found some possible reasons why branding would remain important to consumers’ choices even when products are homogenous. One possibility is that consumers do not only care about the product they are buying, but also about non-contractible aspects of the purchase (Smith & Brynjolfsson, 2001). That leads them to the conclusion that consumers may use retailers’ brands as a signal for reliability in service quality for non-contractible aspects of the product bundle (Smith & Brynjolfsson, 2001). The authors say, “while books are a relatively well-specified, homogenous commodity, the fact that branding is important even here suggests that the branding will be even more important in Internet markets for less homogenous goods and services, especially when they have important non-contractible characteristics” (Smith & Brynjolfsson, 2001: p. 556). Thus, in the field of rather homogenous high involvement goods neither information nor the product’s brand seem to be crucial regarding the purchase decision. Rather, the retailer’s brand seems to be a determinant factor.

Neither of the hitherto described research results covers the field of differentiated products and services including high involvement in the purchase decision process. The empirical study will analyze this combination. Furthermore, it would be interesting to know, whether the outcomes are generally true or if they are true only for a very specific product or service category fulfilling very specific functions. It might be beneficial to manufacturers as well as to sellers to know which particular functions a certain brand fulfills (or could possibly fulfill) for consumers in order to either apply a more effective focus to marketing communication or to know if information could
indeed possibly obviate brands in the particular field of goods. Thus, the present paper will also give general recommendations.

4.1.2 The empirical study

In order to explain which brand functions are crucial regarding the possibility that information might obviate brands, an empirical study has been conducted among the students of the Università della Svizzera italiana (USI)27 in July 2006. The study focuses on rather differentiated goods including rather high involvement. 122 respondents have completed the online-questionnaire (see Appendix 3, pp. 98-111) asking them about the importance they assign to each of the brand functions in two product markets (consumer electronics and clothes) and one service market (flights). Accordingly, the empirical study evaluates perceived information efficiency, perceived risk reduction, and perceived image benefit creation of brands in each of the three markets. Referring to a study by Fischer, Meffert and Perrey (2004)28 and its preliminary findings regarding the design of such a survey, each of the three dimensions is measured through two items (as the function of image benefit creation represents two directions of orientation – inward and outward – this function is here split into two). Using only two items is advantageous regarding research economics and is in line with the procedure of other present studies on brands (e.g., Fischer et al., 2004). As long as specific thresholds are exceeded, a reduced set of indicators has no significant effects on reliability. Cronbach’s Alpha is an established threshold, which is for this case set to 0.7 (Fischer et al., 2004). All of the three functions exceed this threshold, except one item out of the subdimensions of image benefit creation, which thus had to be eliminated. Consequently, the image benefits are measured with three indicators (Fischer et al., 2004).

All of the three markets are assumed to be rather differentiated and to include high involvement in the purchase decision process. Consumer electronics are search goods, because their quality and value to the consumer can be assessed easily prior to purchase. Clothes are experience goods; it is difficult to assess their quality prior to purchase and usage. Flights could be both; it is difficult to assess the quality prior to

27 The Università della Svizzera italiana, which is the university of the Italian speaking part of Switzerland, is located in Lugano in Southern Switzerland.
28 In 2002, Fischer, Meffert and Perrey conducted a representative survey among 2,252 persons that provides empirical evidence on the relevance of brand management in 45 product and service markets.
the flight; however, flights could also be search goods, if the main objective to achieve with the flight is to move from one place to another, regardless of any experiential aspects of the flight.

Furthermore, the survey briefly asked the respondents about their purchase decision behavior in both the online and the offline environment for each of the three markets.

Assuming that information efficiency and risk reduction display rather rational aspects of a purchase decision (referring also to the category of search goods) and image benefit creation displays rather emotional aspects (referring to the category of experience goods), the function of risk reduction and the function of information efficiency are together put in contrast to the function of image benefit creation in the statistical model.\(^{29}\)

According to the presented basis, the following hypotheses will be analyzed by means of the empirical study and relevant secondary research:

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\(^{29}\) Basically, the image benefit creation function is purely emotional, the information efficiency function is rational, and the risk reduction function is trust-based. However, the general thesis of this paper suggests that only emotionally loaded brands are strong enough to stand against the increased information transparency, while information could possibly substitute brands that are rationally loaded. That means emotion is confronted with rationality. Consequently, the three brand functions have to be grouped according to this logic. Previous academic research (e.g., Kapferer, 1992; Keller, 1998) confirms the thesis that – while trust is partly rational and partly emotional (inward directed) – the risk reduction function is rather (not merely) rational than emotional, interpreting the risk reduction function in terms of a sign of quality or guarantee. A factor analysis (see Appendix 4, pp. 112-116) provides proof of this reasoning.

Regarding the consumer electronics market, an exploratory factor analysis (with Varimax rotation and Eigenvalues over 1 considered significant) revealed that the answers to the questions concerning the functions of information efficiency and risk reduction load on one factor (the loads below 0.5 have throughout the analysis not been considered significant), and the answers regarding the questions concerning the function of image benefit creation load on a second factor. Also the factor analysis regarding the airline market produced two factors with an equal result as before. As the exploratory factor analysis regarding the clothes market brought up only one factor, a confirmatory factor analysis has been conducted. This analysis revealed that also here the functions of information efficiency and risk reduction load on the first factor and the function of image benefit creation loads on the second factor. Thus all factors give good measurements of the latent variables. As before, also here Cronbach's Alpha has been computed for each factor in order to analyze the reliability of the measurements. Coefficient Alpha is greater than 0.7 for all factors which indicates that the measurements are reliable (see Appendix 4, pp. 112-116).

Hence, conceptually, the factor loads show that the functions of information efficiency and risk reduction can be put together as the first factor, which represents the rather rational aspects of a purchase decision. The variables regarding the function of image benefit creation correlate with each other and, as the second factor, represent the rather emotional aspects of the purchase decision.
• H1: Consumers, who place high value on mainly the functions of information efficiency and risk reduction while searching for a specific product or service, tend to rely more on information obtained from search than on brands.

• H2: Consumers, who place high value on mainly the function of image benefit creation while searching for a specific product or service, tend to rely more on brands than on information obtained from search.

The following model depicts the coherency between the relevance of the brand in general for a purchase decision in a specific product or service market and the factors influencing this relevance:

\[ BR_{ij} = \beta_1 IE_{ij} + \beta_2 RR_{ij} + \beta_3 IB_{ij}, \text{ with } i = 1, \ldots, N \text{ and } j = 1, \ldots, K, \]

and

\[ BR_{ij} \] – brand relevance judgement by consumer \( i \) for product or service market \( j \)

\[ IE_{ij} \] – increased information efficiency perceived by consumer \( i \) for product or service market \( j \)

\[ RR_{ij} \] – risk reduction perceived by consumer \( i \) for product or service market \( j \)

\[ IB_{ij} \] – image benefit creation perceived by consumer \( i \) for product or service market \( j \)

\( \beta_{1,3} \) – parameters of the brand functions to be estimated

\( N \) – number of interviewees who completed the questionnaire (= 122)

\( K \) – number of product markets (= 3)

This model comprises the three functions of brands. Each of these three functions has a particular weight representing the relative importance of each function (Fischer, Meffert & Perrey, 2004). In line with a calculation proposed by Fischer et al. (2004: pp. 19-23) that bases on a likelihood-ratio-test\(^{31}\), the relative weight of image benefit creation (ca. 42%) is significantly higher than the relative weights of information efficiency (ca. 37%) and risk reduction (ca. 21%). This supports the common assump-

\(^{30}\) Fischer, Meffert and Perrey (2004) use a similar regression model in order to estimate consumers’ perceptions of the general relevance of brands based on the perceived importance of the three brand functions.

\(^{31}\) A likelihood-ratio test is a statistical test relying on a test statistic computed by taking the ratio of the maximum value of the likelihood function under the constraint of the null hypothesis to the maximum with that constraint relaxed. If that ratio is \( \lambda \) (lambda) and the null hypothesis holds, then for commonly occurring families of probability distributions, \(-2 \log \lambda\) has a particularly handy asymptotic distribution. Many common test statistics such as the Z-test, the F-test, Pearson’s chi-square test and the G-test can be phrased as log-likelihood ratios or approximations thereof. (Lehmann, 2005)
tion that image benefit creation is the strongest leverage for the importance of a brand. However, also the information efficiency of brands is considerably important in a society with a supersaturation of offerings. This means that

\[ \beta_1 = 0.37, \]
\[ \beta_2 = 0.21, \]
\[ \beta_3 = 0.42. \]

Considering the hypotheses, the objective of this work is to estimate the importance of information efficiency and risk reduction relative to the importance of image benefits in the purchase decision process. The two hypotheses can thus be expressed in statistical terms as follows:

- **H1:** If \((\beta_1 IE_{ij} + \beta_2 RR_{ij}) / 2 > \beta_3 IB_{ij}\), then \(TI_{ij} > TB_{ij}\),

  with \(i = 1, \ldots, N\) and \(j = 1, \ldots, K\)

- **H2:** If \((\beta_1 IE_{ij} + \beta_2 RR_{ij}) / 2 < \beta_3 IB_{ij}\), then \(TB_{ij} > TI_{ij}\),

  with \(i = 1, \ldots, N\) and \(j = 1, \ldots, K\)

and for both H1 and H2:

- \(TI_{ij}\) – attitudinal tendency of consumer \(i\) to rely more on information obtained from search than on brands in product or service market \(j\)
- \(TB_{ij}\) – attitudinal tendency of consumer \(i\) to rely more on brands than on information obtained from search in product or service market \(j\)
- \(IE_{ij}\) – information efficiency perceived by consumer \(i\) for product or service market \(j\)
- \(RR_{ij}\) – risk reduction perceived by consumer \(i\) for product or service market \(j\)
- \(IB_{ij}\) – image benefits perceived by consumer \(i\) for product or service market \(j\)
- \(\beta_{1,3}\) – parameters of the brand functions to be estimated
- \(N\) – number of interviewees who completed the questionnaire (= 122)
- \(K\) – number of product markets (= 3)

\[ \text{32} \quad TI_{ij} \text{ and } TB_{ij} \text{ represent perceptive self-reported measures – or in other words: attitudes – of the respondents. It is not clear whether these attitudes will result in likely behavior or not. It might be interesting to examine this in further research entailing experimental research methodology.} \]
The equations now include a condition. If both propositions are true, then the respective hypothesis is true. Thus, both components of the condition will be discussed separately for each hypothesis, starting with the first part (the "if"-part).

Regarding the relative importance of each brand function on the three distinct markets, the study revealed the following key findings:

- **Consumer electronics**: On a five-point-scale, the respondents of the questionnaire rank consumer electronics high on information efficiency (average: 3.3) and risk reduction (average: 4.0). Meanwhile, the function of image benefit creation ranks relatively low (average: 2.1).

- **Flights**: Flights rank relatively low on information efficiency (average: 2.6), higher on risk reduction (average: 3.1), and low on image benefit creation (average: 1.8).

- **Clothes**: Clothes rank high on information efficiency (average: 3.3) and risk reduction (average: 3.3). The average score regarding the function of image benefit creation is significantly higher than for the two other items that have been surveilled (average: 2.5).

Applying the specific weights to each brand function ($\beta_1 = 0.37; \beta_2 = 0.21; \text{ and } \beta_3 = 0.42$) reveals the following results with regard to the two research hypotheses:

- **H1**: If $\left( \frac{\beta_1 IE_{ij} + \beta_2 RR_{ij}}{2} \right) > \beta_3 IB_{ij}$, then $TI_{ij} > TB_{ij}$.

- **H2**: If $\left( \frac{\beta_1 IE_{ij} + \beta_2 RR_{ij}}{2} \right) < \beta_3 IB_{ij}$, then $TB_{ij} > TI_{ij}$.

with $i = 1, \ldots, N$ and $j = 1, \ldots, K$ for both H1 and H2.

Regarding exclusively the first part of the equation, this is on average over all consumers and markets ...

... for consumer electronics:

$(0.37 \times 3.3_{ij} + 0.21 \times 4.0_{ij}) / 2 > 0.42 \times 2.1_{ij}$

$\Leftrightarrow (1.22 + 0.84) / 2 > 0.88$

$\Leftrightarrow 1.03 > 0.88$

... for flights:

$(0.37 \times 2.6_{ij} + 0.21 \times 3.1_{ij}) / 2 > 0.42 \times 1.8_{ij}$

$\Leftrightarrow (0.96 + 0.65) / 2 > 0.76$

$\Leftrightarrow 0.81 > 0.76$
... for clothes:

\[(0.37 \times 3.3_i + 0.21 \times 3.3_j) / 2 < 0.42 \times 2.5_i\]
\[\iff (1.22 + 0.69) / 2 < 1.05\]
\[\iff 0.96 < 1.05\]

**Figure 11: Weighted importance of the three brand functions for three markets**

Comparing these findings, it becomes apparent that for the respondents of this survey the brand functions are differently important, depending on the kind of product or service. For both consumer electronics and flights, brands mainly fulfill the function of increased information efficiency. Taking increased information efficiency and risk reduction together as the rather rational brand functions as opposed to image benefit creation, also the average of those two functions overweights the function of image benefit creation. The results are different for clothes. This is not surprising, because clothes fulfill emotional functions – they can make people feel comfortable, and moreover, clothes are visible to everybody in public, in contrast to consumer electronics and flights. Based on the hypotheses, it must be assumed that \( T_{I_j} \) is greater than \( TB_{i_j} \) for consumer electronics and flights, and that \( TB_{i_j} \) is greater than \( T_{I_j} \) for clothes. This will be examined subsequently.

Regarding the purchase decision behavior in both the online and the offline environment the survey revealed the following key findings for the three markets (see also Figure 12):

- 35% of the respondents have never bought consumer electronics through the Internet, and only 9% have never bought consumer electronics in a non-internet
store. 32% of the online shoppers and 24% of the offline shoppers prefer brands over no-name products or retail brands (vs. 53% of the online shoppers and 54% of the offline shoppers who do not prefer brands over no-name products or retail brands, and 15% of the online shoppers and 22% of the offline shoppers who answered that they were neutral in this case).

- 23% of the respondents have never booked a flight through the Internet, and 16% have never booked a flight in a non-internet store. 38% of the online shoppers and 41% of the offline shoppers prefer brands over other offers (vs. 47% of the online shoppers and 45% of the offline shoppers who do not prefer brands over no-name airlines or rather unknown airlines, and 15% of the online shoppers and 14% of the offline shoppers who answered that they were neutral in this case).

Figure 12: Likelihood of offline purchases and online purchases

- 62% of the respondents have never bought clothes through the Internet, and 2% have never bought clothes in a non-internet store.\(^{33}\) 44% of the online shoppers and 40% of the offline shoppers prefer brands over no-name clothes or retail brands (vs. 33% of the online shoppers and 31% of the offline shoppers who do not prefer brands over no-name products or retail brands, and 24% of the online shoppers and 29% of the offline shoppers who answered that they were neutral in this case).

\(^{33}\) There might be a reason to doubt that there are respondents who have never bought clothes in a non-internet retail store (namely 2%). However, this value is very low and does not impact the overall percentages. Therefore, further computations in order to eliminate improbable answers are considered to be not necessary.
Obviously, the respondents’ likeliness to purchase offline is rather high for all of the three goods. Nonetheless, both consumer electronics and flights also show relatively high rates of online purchases, while the percentage of online purchases is very low for clothes. This implies that consumers are rather willing to purchase consumer electronics and flights through the Internet channel, while they definitely prefer the offline channel for the purpose of buying clothes.

The probability is high that consumers who purchase online also search for information online prior to purchase (Moon, 2004) and that the consumers who search for information online are able to base their purchase decision on information rather than on brands (Brynjolfsson & Smith, 2000; Häubl & Trifts, 2000); it can be assumed that the buyers of consumer electronics and flights (if search good) base their purchase decision on information rather than on brands. On the other hand, the same logic implies that the buyers of clothes and flights (if experience good) base their purchase decision rather on brands than on information. Accordingly, the empirical study reveals that, on average, the respondents’ tendency to prefer brands over no-name products or retail brands is significantly higher for clothes (online: 43% prefer brands vs. 33% do not prefer brands; offline: 40% vs. 31%) than for consumer electronics (online: 32% vs. 53%; offline: 24% vs. 54%) and flights (online: 38% vs. 47%; offline: 41% vs. 45%) (see Figure 13).

Figure 13: Priority of branded over non-branded goods in offline and online purchases

<table>
<thead>
<tr>
<th></th>
<th>Offline</th>
<th>Online</th>
<th>Offline</th>
<th>Online</th>
<th>Offline</th>
<th>Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer electronics</td>
<td>24%</td>
<td>32%</td>
<td>41%</td>
<td>38%</td>
<td>40%</td>
<td>43%</td>
</tr>
<tr>
<td>Flights</td>
<td>54%</td>
<td>53%</td>
<td>45%</td>
<td>47%</td>
<td>31%</td>
<td>33%</td>
</tr>
<tr>
<td>Clothes</td>
<td>22%</td>
<td>15%</td>
<td>14%</td>
<td>15%</td>
<td>29%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Note. The findings from the five-point-scale have been transformed into a three-point-scale for reasons of easier presentability, as only the tendency is important here. The answers "agree very much" and "agree somewhat" have been transformed into "agree", and the answers "agree less" and "do not agree" have been transformed into "do not agree".
Hence, $Tl_{ij}$ (i.e., the attitudinal tendency of consumer $i$ to rely more on information obtained from search than on brands in product or service market $j$) can be expressed as the average percentage (online and offline) of consumers who do not prefer brands regarding the particular good. Accordingly, $TB_{ij}$ (i.e., the attitudinal tendency of consumer $i$ to rely more on brands than on information obtained from search in product or service market $j$) is the average percentage of consumers who prefer brands regarding the particular good. Accordingly, the values are:

- for consumer electronics,
  
  $Tl_{i1} = (0.53 + 0.54) / 2 = 0.535$
  
  $TB_{i1} = (0.32 + 0.24) / 2 = 0.28$

- for flights,
  
  $Tl_{i2} = (0.47 + 0.45) / 2 = 0.46$
  
  $TB_{i2} = (0.38 + 0.41) / 2 = 0.395$

- for clothes,
  
  $Tl_{i3} = (0.33 + 0.31) / 2 = 0.32$
  
  $TB_{i3} = (0.43 + 0.40) / 2 = 0.415$

Thus, coming back to the two hypotheses:

- **H1:** If \((\beta_1 lE_{ij} + \beta_2 RR_{ij}) / 2 > \beta_3 lB_{ij}\), then $Tl_{ij} > TB_{ij}$,

  with $i = 1, \ldots, N$ and $j = 1, 2$

  For consumer electronics:
  
  If $1.03 > 0.88$, then $0.535 > 0.28$ (true)

  For flights:
  
  If $0.81 > 0.76$, then $0.46 > 0.395$ (true)

- **H2:** If \((\beta_1 lE_{ij} + \beta_2 RR_{ij}) / 2 < \beta_3 lB_{ij}\), then $TB_{ij} > Tl_{ij}$,

  with $i = 1, \ldots, N$ and $j = 3$

  For clothes:
  
  If $0.96 < 1.05$, then $0.415 > 0.32$ (true)

$\Rightarrow$ Both hypotheses prove to be true.
It appears that consumers tend to rely significantly more on information than on brands when buying consumer electronics. This might be due to the fact that consumer electronics can be easily compared, especially by means of comparison services available through the Internet. When booking flights, people prefer information over brands on average; however the ratio is not as high as for consumer electronics. There are two possible explanations for this outcome: (1) consumers prefer to choose for brands, because they believe that then the risk of technical problems during a flight might be relatively lower; (2) there are relatively few no-name or rather unknown airlines, thus there are few options to choose against brands. When buying clothes, consumers rely more on brands than on an active search for comparative information. This might be due to the fact that clothes are experience goods. First of all, it is difficult to assess their quality prior to purchase and usage. Second, many clothing brands create emotional or self-expressive benefits for those who wear them. These image benefits might be perceived to be more important than other characteristics.

Also other scientific research findings suggesting that the relevance of brands and consumers’ search behavior differ over different product and service markets (Fischer, Meffert & Perrey, 2004; Ward & Lee, 2000; Smith & Brynjolfsson, 2001; Andrews & Currim, 2004; Levin, Levin & Heath, 2003) support the validity of the two hypotheses. Those consumers who place relatively high value on mainly the functions of information efficiency and risk reduction in the field of differentiated high involvement goods (e.g., consumer electronics and flights), tend to rely less on brands than on other information, while those consumers who place relatively high value on mainly the function of image benefit creation regarding this type of goods (e.g., clothes) tend to rely more on brands than on other information.

The present empirical study is, of course, limited by the sample that has been used. The study represents only students of the Università della Svizzera italiana (the University of the Italian-speaking part of Switzerland) in Lugano, i.e. it is restricted to students approximately between the ages of 18 and 30 years who mostly live and study in or close to Lugano. As the survey has been conducted online, it is furthermore reasonable to assume that the respondents are Internet-affine. Future research should aim to incorporate other consumer segments and product and service mar-
kets in order to better conceptualize the changing role of brands in the age of empowered consumers and to validate the described results on a broader basis.

4.1.3 Synopsis of primary and secondary research results

A useful frame of reference has been set by clustering goods according to their degree of differentiation (or homogeneity) and the typical degree of involvement in the corresponding purchase decision. Accordingly, the higher the degree of differentiation, the more information consumers need in order to come to a prudent decision. This information can be either delivered through brands or obtained through a search process. However, if the purchase decision is perceived to be not very important to the consumer, the consumer may not be likely to engage in extensive search. Decisions might then be based on habits (possibly relying on brands that guarantee a constant level of quality) or impulses. The higher the consumer’s involvement in decision-making, the higher is the probability of an active search process. The results of a search process might finally help the consumer to increase information efficiency and to reduce risks – functions that also brands can fulfill. In this case, information may obviate brands. Figure 14 brings together the primary and secondary research results and shows, in which fields of products or services – according to the used clustering-model – the likelihood of consumers to rely more on information obtained from search than on brands tends to be smaller or greater than the likelihood of consumers to rely more on brands than on information obtained from search.

However, these findings are only true, if brands are generally relevant for purchase decisions concerning a particular kind of goods. If brands are generally not relevant, purchase decisions are likely to be based either on pure information and prices (in the case of high involvement decisions), or on prices alone or habits / repeat purchases (in the case of low involvement decisions). Habits or repeat purchases can also be the result of branding.

Research results imply – especially with regard to the increased information transparency through Internet technology – that if brands significantly influence purchase decisions in a particular market and the functional brand functions are more important than the emotional ones, the importance of brands depends on the availability of objective information. The more reliable and unbiased information is available about a good, and the easier it is to summarize this good’s attributes, the less important
become brands. If it is easy to summarize a goods attributes, but not much objective information is available, then brands increase information efficiency for this good and possibly reduce risks that might be related to a purchase. Hence, in this case, information could substitute brands, if enough reliable information was available; then, brands are in danger. If it is difficult to summarize a good’s attributes objectively, it is unlikely that much objective and credible information is available or could be made available. In this case, information can probably not substitute brands.

Figure 14: Tendential impact of brands and information on purchase decisions

![Diagram](image)

The extent of search done during a purchase decision depends on the degree of involvement in this decision (Solomon, 2003). Based on secondary research, it can thus be assumed that the primary research results are true also for rather homogeneous high involvement goods. Due to the high involvement in the purchase decision, consumers are also here likely to include directed search for information. However, this assumption should be validated in future research and is therefore not included in the scheme in Figure 14.

Low involvement purchase decision processes do inherently not include as much efforts as high involvement decision-making. Therefore, consumers may probably not engage in considerable search processes. Instead, they may rather rely on known brands or on price. If goods are differentiated, brands may be rather important attribu-
utes as they elicit certain associations, such as for example, a superior product concept or creative advertising presence. Brands may also be differentiating factors in the field of homogenous low involvement goods, but it must be assumed that factors such as price, habits, or impulses have also considerable impact on purchase decisions here. It is therefore not clear whether the research results are true also for the left two clusters.

Due to internet technology, an enormously greater amount of information is available for consumers, today, than until some years ago. For consumers, it can be difficult to retrieve relevant and credible information. STANFORD UNIVERSITY, CONSUMER WEBWATCH (a project of the independent CONSUMERS UNION), and SLICED BREAD DESIGN (an Internet marketing consultancy) have conducted a survey regarding the issue of credibility and reliability of online offerings. Their findings suggest that people usually assess an e-commerce Website’s credibility mainly based on name recognition and reputation, and customer service. In general, consumers approached e-commerce sites with more suspicion than other Websites (Fogg et al., 2002). Accordingly, well-known brand names can serve as a guarantee for service quality, reliability, and credibility of an online offerer (see also: Smith & Brynjolfsson, 2001; Ward & Lee, 2000). The role of online retailers and other intermediaries will be described in the following chapter.

4.2 The changing role of intermediaries and online retailers

It has already been mentioned previously, that besides the product’s and the manufacturer’s brand also the retailer brand may influence purchase decisions – this is particularly important for online markets, because here the non-contractible aspects of an offering appear to be more important than in the offline market environment (Smith & Brynjolfsson, 2001). In line with the definitions in chapter 3.2.3, the task of intermediaries is to offer intermediation services between two trading parties. Going more into detail, Bakos (1998: p. 13) describes the role of intermediaries as “matching buyers and sellers, providing product information to buyers and marketing information to sellers, aggregating information goods, integrating the components of consumer processes, managing physical deliveries and payments, providing trust relationships and ensuring the integrity of the markets”. Besides offering some added value to a transaction that may not be possible to offer by direct trading, intermediar-
ies were long in a position to take advantage of information asymmetries and greater bargaining power than individual consumers (Kumar, 2000).

In the age of the Internet, this is becoming more difficult. Which effects electronic markets will have on the organization of value chains is heavily discussed among researchers (Malone et al., 1987; Chircu & Kauffman, 1999; Bakos & Bailey, 1997; Bakos, 1998). On the one hand, information technology enables suppliers to pass over intermediaries, and this way to establish direct contact to their customers, because "with information flowing freely there will be no need for middlemen in those industries where the primary role of the middleman is providing information and establishing contacts" (Kumar, 2000: p. 4). This could reduce coordination costs in a transaction. Chircu and Kauffman (1999: p. 2) have termed this effect "disintermediation". On the other hand, the online environment promotes the growth of new types of electronic intermediaries (Bakos, 1998), namely cybermediaries. Evolving from the lacking information transparency on online markets, cybermediaries enable Internet users to use the information that is available in online environments in effective ways and thus help consumers to facilitate orientation in the Web and facilitate decision-making. Accordingly, Bakos (1998) states that intermediaries compete in online environments by adding value for buyers and sellers rather than by exploiting information asymmetries.

In the Internet, the role of intermediaries has evolved into two main scopes of function: (1) cybermediaries that offer information intermediation services; and (2) online shops that offer intermediation services regarding the exchange of goods. While online shops are inherently retailers, also cybermediaries may actually act as retailers.

Due to the problem of verifiability of reliability and credibility that is inherent in the Internet, branding of e-commerce retailers becomes an important issue. The brand of an online retailer – be it an intermediary or an online shop – influences the consumers’ likeliness to purchase. According to a study by Smith and Brynjolfsson (2001), even consumers who are fully informed of product prices and characteristics from other competing retailers strongly prefer offers from well-known online retailers. This is even more remarkable considering that shopbot customers are likely to be among the most price sensitive consumers in the Internet. A possible explanation is that “consumers use brand name as a signal of reliability in service quality for non-
contractible aspects of the product bundle such as shipping. These results may derive from service quality differentiation, asymmetric market information regarding quality, or cognitive lock-in among consumers” (Smith & Brynjolfsson, 2001: p. 556). These two authors state that branding of online retailers might be particularly important in markets that have important non-contractible, sensory, and/or experiential characteristics.

The following excursion shows an interesting approach of a company to enhance trustworthiness and credibility of its advertisements and offerings by combining advertising and a very reliable online source.

**Excursus:**

On its homepage, Google says that its “mission is to organize the world’s information and make it universally accessible and useful” (Google, n.d./2006). Google founders Larry Page and Sergey Brin have developed the world’s largest search engine, which is also one of the world’s best known brands. This status has been reached almost entirely through word-of-mouth from satisfied users (Google, n.d./2006). Google users can find information in many different languages, check stock quotes, maps, and news headlines, look up phonebook listings for every city in the United States, search billions of images, and peruse the world’s largest archive of Usenet messages for free. Google provides advertisers with the opportunity to deliver online advertising (called AdWords) that is relevant to the information displayed. This service enables marketers to count how many Internet users click from a text advertisement to the company’s Website. Advertisements are always distinguished from (the non-commercial) search results on the Google homepage.

In January 2006, General Motors started an advertising campaign including a Google mention and a screenshot of someone entering the word Pontiac into the Google search box with a voice over saying: “Don’t take our word for it, Google ‘Pontiac’ to find out!”34 The idea behind this advertisement is explained by GM sales and marketing chief Mark LaNeve: “We’re touting Google, frankly, because it stands for credibility and consumer empowerment, and we like the association.” (Kiley, 2006)

34 The television spot can be seen on: http://www.youtube.com/w/Google-Pontiac-Commercial?v=gE2DXLfrFD4&search=google%20pontiac.
While the manufacturer’s brand can fulfill any of the three functions for consumers, the retailer’s brand probably only provides the reduction of risks connected to an online purchase. Those consumers who already gained experience in doing business with a specific online retailer may be more likely to buy also products by other brands from this retailer. Also consumers without experience with a particular retailer may rely rather on well-known retailers for reasons of credibility and reliability. Hence, by virtue of increasing information efficiency and reducing risks for consumers, online retailers increasingly take over functions of brands for consumers. This way, intermediaries become trusted online brands that enable them to charge a price premium on their offerings (Smith & Brynjolfsson, 2001).

### 4.3 Impacts on price and quality

This chapter describes the effects of the Internet on price and quality of products and services.

> “Internet technology provides buyers with easier access to information about products and suppliers, thus bolstering buyer bargaining power. The Internet mitigates the need for such things as an established sales force or access to existing channels, reducing barriers to entry. By enabling new approaches to meeting needs and performing functions, it creates new substitutes. Because it is an open system, companies have more difficulty maintaining proprietary offerings, thus intensifying the rivalry among competitors. The use of the Internet also tends to expand the geographic market, bringing many more companies into competition with one another. And Internet technologies tend to reduce variable costs and tilt cost structures toward fixed cost, creating significantly greater pressure for companies to engage in destructive price competition.” (Porter, 2001: p. 66)

Thus, due to lower costs for online shops, as opposed to the costs to open a store in the real world, entry barriers to online markets are relatively low for many companies. The increasing number of online vendors leads to increasing competition, which in turn results in pressure on prices – especially for homogenous products. Furthermore, increasing information transparency enables consumers to consider and compare a tremendously larger number of offerings. This again puts pressure on prices.
Consumers on highly transparent markets facing lower search costs become increasingly demanding and are less willing to make compromises concerning their ideal product (Bakos, 1997). Therefore, Bakos (1997) argues that if search costs are low enough, consumers have an overview of all offerings and are able to purchase the one that best fits their needs. In this market system, consumers enjoy lower prices due to increased competition among sellers; they enjoy allocational efficiencies, because they are better informed about all available products, thus being able to make better purchase decisions; and, even though they increase their number of inquiries, they incur lower total search costs (Bakos, 1997).

When prices and functional aspects of offerings become transparent, the challenge for companies is to be perceived as having fair pricing policies, i.e. providing, or at least having, a reasonable business explanation for any price differences\(^{35}\) (Kumar, 2000), because consumers are willing to pay only the expected value of the products or services offered for sale (Ward & Lee, 2000). Considering the distinction between search and experience goods, the value for customers (namely the relation of costs and benefits) can be communicated more or less easily solely through the Internet. Information symmetry is high for search goods, thus manufacturers of search goods can make the value their products provide comparable to the value that competitors’ products provide. If the characteristics of a product can be compared objectively, the Internet increases the amount of comparable information, which increases competition among sellers on online markets and finally leads to lower prices (Bakos, 1997).

The same is more difficult for experience goods. While the brand of a search good may serve to increase information efficiency during the search process and reduce the risks of a wrong purchase, manufacturers of experience goods provide emotional or self-expressive values to their customers (Ward & Lee, 2000). The information promised through the brand remains hidden or subjective until the customer has finally experienced it, and thereafter evaluated the good’s value for himself (Wernerfelt, 1991). Consequently, if the characteristics of a product or service cannot be compared easily, the Internet may not remarkably influence prices of these goods.

\(^{35}\) An explanation could be different points of time for booking a flight (a person booking a flight two months in advance will receive a better price than a person booking only two days before the date of flight) or different dates of a flight (prices for flights on weekends will be higher than those for flights on weekdays).
Brynjolfsson, Smith and Hu (2003) argue that lower prices are not the only positive effect of online markets for consumers. They state that the value of increased product variety (i.e., the increased online availability of previously hard-to-find products) represents a positive on consumer welfare that is even “seven to ten times larger” (Brynjolfsson, Smith & Hu, 2003: p. 1592). They assume that “ultimately the most important benefits of Internet retailing are not fully reflected in lower prices, but rather are due to the new goods and services made readily available to consumers”, which does not only increase the quality of search results, but might even increase prices for differentiated goods (Brynjolfsson, Smith & Hu, 2003: p. 1593).

Increasing information transparency, on average, affects product quality in two ways. On the one hand, pressure on companies grows to enhance the quality of products or services they offer because of the increased number of equal or substitutive offerings. Intensified rivalry among existing firms and the growing number of new competitors due to the expansion of global markets and new substitutes through the Internet thus foster quality improvements (Ward & Lee, 2000). On the other hand, decreasing prices force companies to reduce costs in order to remain competitive. In fact, this is a vicious circle, in which only those firms can survive that perform efficiently (Ward & Lee, 2000).

Furthermore, higher market transparency does not only impact online markets, it has also impacts on traditional markets in the real world (Deregatu, Rangaswamy & Wu, 2001; Bakos, 1997). As has been described, many consumers may search for information in the Internet and finally purchase in a non-Internet retail store. This way, consumers can evaluate an amount of information retrieved online that they would not have been able to find offline – at least not at equal cost and effort. And they may purchase in a regular retail store in order to avoid possible risks and disadvantages inherent in the Internet, such as, for example, having to submit credit card data or having to pay shipping costs. In real world shops, consumers expect to find products at equal prices as in online shops. Consequently, price pressure evolving from the Internet is transferred into the real world (Shankar, Rangaswamy & Pusateri, 1999). Assumingly, this behavior might be predominant for search goods and products with important non-sensory attributes – i.e., products that consumers can easily compare without necessarily having to physically see or experience them. Price differences for differentiated goods can be justified more easily.
Vice versa, many consumers search for information – namely advice from sellers – in non-Internet shops and then purchase online at a lower price. This is ineconomic for traditional non-Internet sellers, because they do not generate sales this way. This behavior might be predominant for experience goods and products with important sensory attributes. In this case, it is difficult for consumers to retrieve adequate or sufficient information in the Internet. However, the concerned products are available in online shops at lower cost. Seeking to maximize their own welfare, many consumers change channels during their purchase decision processes (Bakos, 1997; Anfuso, 2004).

Last but not least, the decreasing information asymmetry is not only beneficial to consumers, but can also create value for businesses. First, companies can, of course, use the information they receive about consumers to differentiate their offerings from those of competitors with regard to tangible and intangible aspects by either underlining advantages of their own offerings, or changing their offerings, or putting emphasis on their low prices compared to competition. Furthermore, they can make personalized offers to consumers (Smith & Brynjolfsson, 2001). Finally, lower search costs for consumers make them capable of retrieving more efficient and less expensive alternatives, leading to a “weeding out” of inefficient firms (Ward & Lee, 2000: p. 18).

As has been described, the purchase decision process of consumers depends on many variables, such as the product category, price and additional costs, objective information about qualitative aspects, brands, prior experience with the same or similar goods or brands, other consumers’ opinions, situational variables, etc. While this multitude of influencing factors might appear confusing, the presented research results suggest that a clear categorization of products and services according to their general brand relevance, the particular relevance of each brand function, the type of a good, and the degree of differentiation and involvement can help brand managers to develop successful brand strategies. Consequently, the following chapter will describe the implications for brand management that evolve from these insights.

4.4 Implications for brand management

Internet technology empowers both consumers and businesses. In order to efficiently meet the inherent new challenges and chances of the Internet and to remain
meaningful to consumers, brands need to be adapted to the online environment. The current chapter recapitulates the key findings of the primary and secondary research and provides recommendations on brand management aspects.\footnote{36 See also Appendix 5 (p. 117) for an overview of the influencing factors of consumer information search and buying behaviour through the Internet.}

With regard to the topic of this paper, a crucial objective of brand managers should be to find out, whether their brands impact consumers' decision making at all. If brands are generally not relevant for purchase decisions in the respective market, investments in brand building should be carefully scrutinized (Meffert, Perrey & Schröder, 2002; Rust, Lemon & Zeithaml, 2004). Only if brand relevance is high, high advertising intensity can be justified. Yet, if brands are generally relevant in a particular market, the importance of each of the three brand functions should be determined, i.e. it should be analyzed which brand function is most important for consumers in this particular market. This might depend on the type of good (search good versus experience good), on the degree of differentiation or homogeneity of offerings on the particular market, on the degree of cognitive involvement in the purchase decision, and on the availability of comparable information. For example, it is rather easy to communicate a search good's attributes through the Internet, while it is far more difficult to deliver meaningful communication about an experience good's attributes through this channel. This observation leads to different strategic frameworks for both types of goods. Figure 15 displays the factors to be evaluated in order to come to a consistent brand management. Combining the previous considerations leads to the following general implications for brand managers:

- If \textit{brands are generally relevant} for the purchase decisions of consumers on a particular market, companies should invest in brand building, accentuating the particular important brand functions (Fischer, Meffert & Perrey, 2004). In case of low brand relevance, other marketing mix variables (e.g., pricing, placement, product features) should be taken into consideration in order to differentiate the own offering from competitors' offerings and to reach the company's goals (Fischer, Meffert & Perrey, 2004).

- The \textit{brand of an experience good} should try to make the experience experience-able already before the purchase decision, as the inherent problem of an experien-
ence good is that its quality can be evaluated only upon usage or consumption (Alba et al., 1997). In order to make the consumption experience appealing already before a possible purchase decision and to deliver a consistent experience, brand management should aim to develop means that support the experiential characteristic of the good both in the online and the offline environment (Mathwick & Rigdon, 2004; Hoffman & Novak, 1996). This can for instance be supplementary information and supplementary experiences (games, short sound clips, virtual communities, etc.) (Wolfinbarger & Gilly, 2001; Aaker & Joachimsthaler, 2000). It might be beneficial to emphasize the emotional side (emotional brand functions) of the offering in marketing communication. And if the experience goods that the company offers are of relatively high quality, then also the technical-qualitative superiority (rational brand functions) should be accentuated in communication (Fischer, Meffert & Perrey, 2004).

Figure 15: Evaluative factors for consistent brand management

As still many people are wary regarding online sellers (Smith & Brynjolfsson, 2001; Fischer, Meffert & Perrey, 2004), companies offering experience goods with a brand that is not represented through offline channels or with a brand that is not (yet) a strong online brand should focus on communicating the reduction of risks connected to a mispurchase. An experience good’s quality cannot be tested be-
fore purchase (if the consumer sticks to the online channel, and in many cases even if the consumer supplementary uses the offline channel), and thus the consumer has to rely on third persons’ experiences or on brand names (Alba et al., 1997; Smith & Brynjolfsson, 2001). Hence, it might be useful to communicate that the brand stands for both the experience good and the non-contractible product attributes, like relatively better service quality and a money-back guarantee.

- The increased information transparency is a threat for brands of search goods, because the quality of a search good is verifiable upon inspection, and thus it can be easily compared to substitutive offerings (or at least to other equal products). If a search good does not deliver emotional values to its consumers, it is likely that only the rational brand functions are relevant for this good. As explained previously for the case of experience goods, the risk reduction function can be a crucial brand function in the online environment, as it could here provide continuity in the predictability of the product benefits or non-contractible benefits (Fischer, Meffert & Perrey, 2004). If the information efficiency function is dominant, the brand name can facilitate search in the enormous thicket of information in the Internet, as bundling information about the manufacturer and, for instance, the origin of a product in the form of a brand helps consumers find their way in a new or confusing product environment (Aaker & Joachimsthaler, 2000). Moreover, brands can help consumers repeatedly find trusted brands quickly and easily (Aaker, 1996). In this case, it might be useful to appear on high ranks on homepages of comparison service providers (Brynjolfsson & Smith, 2001). However, also a search good can deliver emotional benefits, and thus it might be useful to emphasize also the emotional component in brand management in order to build or strengthen consumers’ bonds with the brand (Smith & Brynjolfsson, 2001).

- In industries, in which the rather rational brand functions are dominant from a customer perspective, information can possibly substitute brands. Brand management has to find ways to overcome this problem and keep its brands valuable to consumers. One way could be to add experiences to the brand in order to make the purchase decision or even the consumption or usage situation more appealing, memorable, or extraordinary, and to create subjective benefits that may finally affect choices between instrumental alternatives that are functionally equivalent in other respects (Havlena & Holbrook, 1986; Csikszentmihalyi, 1990).
• In industries in which emotional brand functions dominate consumers’ purchase decisions it is unlikely that information obviates brands. The experience should however be consistent over the different touchpoints with consumers (Manning, 2005), as has been shown in chapter 2.3.1.

• In today’s network world, it is useful for businesses to connect the online and the offline environments – both for communication and for delivery purposes – and to use each channel according to the features it provides (Porter, 2001). Chapter 2.3.1 provides a general framework therefor. Furthermore, the potential benefits of multi-channel providers have been discussed in chapter 3.4. What is important for brand management is to transform brands to both the online and the offline environment in a way that is coherent with their inherent values and characteristics (Aaker & Joachimsthaler, 2000). It is commonly agreed on that also brand names should be coherent online and offline (Aaker & Joachimsthaler, 2000). Particularly well-known and approved brands can use their competitive edge regarding trust and confidence, which are critical aspects in the anonymity of the Internet (Porter, 2001). This can reduce the specific risks of online purchasing for consumers.

• Depending on the pricing strategy, it might be useful to actively increase information transparency. That is to say that price comparison services could be used to win new customers, as in the Internet consumers become very quickly aware of low prices (Shankar, Rangaswamy & Pusateri, 1999). Referring to the frame of reference (Figure 10), the pricing strategy should basically correspond to the degree of differentiation – i.e., the more differentiated a good is, the more differentiated should be the price, not only because it is more difficult for consumers to compare prices for differentiated goods due to inherent product- or brand-related benefits, but also because offerings can be differentiated on prices (Kalita, Jagpal & Lehmann, 2004). A high price could, for example, implicate high quality for many consumers (Kalita, Jagpal & Lehmann, 2004).

• Although the Internet decreases search costs for consumers, searching for information still entails efforts with respect to time and money. These costs vary among consumers. Considering opportunity costs as one factor of these costs, Ward and Lee (2000) state that advertising of brand owners should consequently be directed toward consumers with higher search costs, or those without Internet
access, because for those consumers brands reduce search costs. For them, brands are a time-saving way to purchase quality. Likewise, “advertising on the Internet, where consumers have relatively low search costs, may not reach levels comparable to other media, e.g., television, newspapers, magazines” (Ward & Lee, 2000: p. 18).

- Regarding **online advertising**, companies can focus advertisements to target groups more easily through relevant Websites presenting special interests or by displaying relevant advertisements on search engine sites (e.g., Google’s AdWords). Businesses can furthermore use the Internet to maximize their benefits by using information obtained from tracking consumers’ online behavior (e.g., in virtual communities or from other activities requiring consumers’ registrations, such as online-competitions, forums, etc.), and information bought from third party sources (e.g., cybermediaries), in order to analyze consumers’ needs, wants, and desires (Kumar, 2000; Smith & Brynjolfsson, 2001). They can use all this information in order to communicate with consumers on individualized levels and this way (further) differentiate their offerings (Totz, 2005).

- Moreover, not only marketing communication can be personalized, also **product development and product assembly can be lifted to an individualized level**. By means of product configurators, companies can offer individualized products, and thereby increase consumer benefits (Smith & Brynjolfsson, 2001). Usually, individualized products cause higher production costs than standardized products. However, they can also protect companies from information transparency. Because individualized offerings become less comparable, companies personalizing their offerings can charge higher prices for their products and services.

- Businesses can additionally use the Internet as a more **comfortable communication channel for complaints**. The easier it is for a consumer to get in contact with a business, and the more satisfactory this communication and the subsequent solution are likely to be, the more likely the consumer will be to get in touch with this business. This in turn can on the one hand strengthen the consumer’s bond with the brand; on the other hand, the company can use the information gathered through complaint management in order to improve its products and services (Stauss & Seidel, 2005).
To sum up, there is no universal strategy for brands in the context of high information transparency. Which strategy is appropriate for a brand depends on the benefits the particular brand can provide to consumers. What can be said is that if brands do not create value for consumers, they become less important for consumers’ purchase decisions – especially in the age of the Internet (Porter, 2001). And here it has to be mentioned that the question for businesses is not whether to use Internet technology or not; the question is how to use the Internet, in order to take advantage of its inherent opportunities and leverage existing strengths of a business (Porter, 2001).

A crucial opportunity provided through the Internet that manufacturers and sellers of products and services should take advantage of is the possibility to establish bidirectional, collaborative relationships with consumers. These can be beneficial for both consumers and businesses (Mandelli, 2005). This way, companies can differentiate their offerings from other competing offerings on a reliable and long-term basis (Mandelli, 2005). As to this, Mandelli (2005: p. 101) states that “network technologies change not only the media platforms that we use for building and transferring the meaning of brands, but also the brand relationship logic”.

Thus, coming back to the elements of the consumer brand experience (Figure 3), the starting point of the brand positioning is the definition of the brand’s promise to deliver certain specific values. In the context of the Internet, the goal is to develop a brand positioning that is consistent over all channels and that delivers Internet-specific customer benefits. These benefits can be ascribed to functional, processual, and relationship-oriented aspects (see Figure 16) (Totz, 2005).

*Functional benefits* of usage are based on the superior technical-qualitative design of services provided through the Web. However, these benefits rest upon standardized software solutions that can hassle-freely be used or imitated by competitors, and thus are not viable for the purpose of differentiation (Totz, 2005).

*Processual benefits* evolve from a simpler, quicker, lower-priced, and more comfortable handling of transactions and information exchanges between the brand owner and users of the brand (Totz, 2005; Porter, 2001). Benefits are the independence from time and place regarding the request for information and transactions inherent in the Internet, and the support of specific business processes through the Internet. The provision of information and transactions can be performed in real-time, appealing to consumers’ desire for convenience. Processual benefits can differenti-
ate a company from competitors that are not represented in the Internet. Differentiation from competitors in the Web can be achieved only through better performance in terms of simpleness, speed, convenience, reliability, etc. of processes. However, both functional and processual benefits evolving from using the Internet are not practicable for building long-term, sustainable competitive advantages (Totz, 2005). Porter (2001: p. 78) argues that “as all companies come to embrace Internet technology, [...] the Internet itself will be neutralized as a source of advantage. Basic Internet applications will become table stakes – companies will not be able to survive without them, but they will not gain any advantage from them. The more robust competitive advantages will arise instead from traditional strengths such as unique products, proprietary content, distinctive physical activities, superior product knowledge, and strong personal service and relationships.”

**Figure 16: Dimensions of Internet-specific customer benefits**

<table>
<thead>
<tr>
<th>Functional benefits ...</th>
<th>Processual benefits ...</th>
<th>Relationship-oriented benefits ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>...are based on technical-qualitative design of services provided through the Internet (functioning and security)</td>
<td>...evolve from simpler, quicker, lower-priced, and more comfortable handling of transactions etc.</td>
<td>...is the (re-)personalization: instrumental advantages of the relationship based on obtained individual data for personalization of offerings</td>
</tr>
<tr>
<td>...usually rest upon standardized software solutions respectively Internet-technology</td>
<td>...are the independency of the medium, support of specific business-processes, availability of information in real-time</td>
<td>brand as an active, “quasi-social” partner and as a basis for the establishment of personalized relationships</td>
</tr>
</tbody>
</table>

*easy to imitate → very low potential for protection and for building competitive advantages (no long-term sustainability)*

*hard to imitate → high potential for protection and for building lasting and sustainable competitive advantages*

**Note.** From: *Interaktionsorientierte Markenführung* [Interaction-based brand management] (p. 74) by Totz, Carsten (2005), Göttingen, Germany: Cuvillier Verlag.

**Relationship-oriented customer benefits** are those aspects of the Internet that can be turned into lasting and sustainable competitive advantages. On the one hand, businesses can establish personalized relationships to their customers, on the other hand, the interactivity and personalization of offerings involves the potential to create instrumental relationship benefits, i.e. to obtain data about customers which can in turn be used to improve processes and offerings (Totz, 2005; Alba et al. 1997). This way, the brand can in the Internet attain a “quasi-social” role (Totz, 2005: p. 76) that
enables the establishment of personalized relationships (Fournier, 1998; Aaker, 1997).

The establishment and existence of robust and long-lasting relationships to customers differentiates and protects the brand in competition, because the relationship advantages are based on repeated interactions that competitors cannot simply imitate (Totz, 2005).

It has been shown that testing the general relevance of brands is important in order to not invest in brand management if these investments are not likely to pay off financially. It has furthermore been shown that testing the relative relevance of the three brand functions leads to results that can serve as a guide for consistent brand management. Whether goods in the particular market are search or experience goods, low or high involvement goods, or rather homogenous or rather differentiated goods, and whether comparable information is available are additional indications for the development of consistent branding strategies. The Internet appears to be a threat only to goods that deliver rather rational benefits to consumers. The increased information transparency does not significantly affect products and services that provide rather emotional benefits to consumers. Rather, Internet technology can serve as a means to strengthen the emotional values that consumers perceive to be related to those brands.
5. Conclusions

5.1 Summary and key findings

The general goal of the present paper was to analyze and describe the effects of the Internet on the functions of brands.

The Internet makes an enormous amount of information available to Internet users. This information is provided to consumers in convenient ways (e.g., through information intermediaries), so that consumers can actually compare many kinds of products and services based on individual attributes and prices. Furthermore, Internet technology provides means to create additional value for brands through offering platforms for consumers to engage in brand-related behavior for fun and entertainment during their free time and through offering businesses the opportunity to personalize offerings for their customers – either by physical product modifications or by extending consumers’ search and evaluation capabilities through choice assistance technology. Thus, on the one hand, the Internet increases information transparency, which might be a threat for brands; on the other hand, the Internet provides opportunities to companies to strengthen consumers' bonds with their brands. At the same time, a fundamental problem of e-commerce is that many people are still skeptical about the credibility and reliability of information, products, and services provided through the Internet. They are mainly afraid of privacy infringements, and the non-fulfillment of non-contractible parts of an offering, such as the service quality of Internet retailers or online information providers (see also Appendix 5, p. 117).

In this context the virtue of brands becomes apparent: strong brands reduce the adduced risks, because they indicate reliability, trust, and recognition, and often serve as a sort of quality warranty. Further benefits that brands provide to consumers are increasing information efficiency and the creation of inward and outward directed image benefits. While part of these brand functions can be characterized as offering rather rational benefits (increased information efficiency and risk reduction), another part (image benefit creation) can be characterized as delivering rather emotional and self-expressive benefits. Putting this in context to the matter of information, two hypotheses have been examined by means of an empirical study. The first hypothesis states that consumers, who place high value on mainly the functions of information
efficiency and risk reduction while searching for a specific product or service, tend to rely more on information obtained from search than on brands. Opposed to this, the second hypothesis states that consumers, who place high value on mainly the image benefit creation function, tend to rely more on brands than on information obtained from search. Empirical research substantiated that both hypotheses prove to be true. Thus, depending on the relative importance of each brand function, information can obviate brands.

As a general rule, it is important for a business to keep its promises and to deliver consistent appearance and performance over all touchpoints of a consumer with a brand. The more emotional, sensory, and experiential aspects are related to the purchase and usage and are linked to the brand, the more these aspects are appropriate to differentiate the respective offerings from those of competitors – without necessarily having to differentiate on technical-qualitative attributes. After all, memorable or extraordinary experiences during the purchase decision process and consumption produce emotions, which increase the consumer’s involvement and create subjective benefits that may finally affect choices between instrumental alternatives that are functionally equivalent in other respects.

These key findings of the present master's thesis bring about the following general implications:

- When consumers place high value on mainly the functions of information efficiency and risk reduction while searching for a specific product or service, tend to rely more on information obtained from search than on brands (hypothesis 1). Hence, manufacturers and sellers of products and services whose brands mainly fulfill the functions of information efficiency and risk reduction have to be aware of the fact that information can substitute their brands. For those businesses, increasing information transparency is a threat to their brands. Thus, they should either be better (with regard to quality, performance, or price) than their competitors and emphasize these particular aspects in marketing promotion, or they should create image benefits that differentiate their offerings from those of competitors. However, they should always keep in mind that investments in their brands are only justifiable, if brands are generally relevant to consumers in the respective market.
• When consumers place high value on mainly the function of image benefit creation while searching for a specific product or service, tend to rely more on brands than on information obtained from search (hypothesis 2). Hence, information cannot substitute image benefits for these brands. For businesses offering brands that create image benefits, the Internet is rather another channel to promote these image benefits and make them experienceable. They should focus their marketing efforts on emphasizing the image benefits that their brands (can) create. Investments in brand management might be very beneficial in this case.

• Nonetheless, increasing information transparency and decreasing information asymmetry might erode image benefits of some brands that are comparable on functional attributes. The iPod, for example, is a strong brand delivering image benefits to its customers. However, there are many MP3-players available on the market delivering the same functions with an equally high quality and performance at vastly better prices. Basically, information makes these products comparable on a technical-qualitative level, and as a consequence, image benefits of such product categories might lose value over time.\(^{37}\) The more complex and diversified markets (or market segments) are, the less this is likely to be the case. Consequently, when more total information about product attributes is available online, brand names become less valuable. Thus, when product categories are differentiated on brand image and other attributes that cannot be easily summarized by an online store, then brand names will be more important online; and when product categories are differentiated on functional aspects for which online stores can give detailed attribute information and comparative information, then brand names will be less important online (see also Deregatu, Rangaswamy & Wu, 2001).

Hence, when brands are generally important for purchase decisions in a particular market, the availability of objective information and the degree of sensory, emotional, and experiential aspects related to the purchase and usage of a product or service determine whether information can substitute brands or not. In order to remain competitive in fields in which information can substitute brands, companies should either

\(^{37}\) The same happened to IBM that offered the first personal computers in 1981. Originally, the brand stood for PCs. After the advent of numerous manufacturers offering computers of equal quality levels at better prices, the benefits offered through the brand IBM – and thus the brand itself – tremendously lost in attractiveness and value.
not focus on a branding strategy or deliver additional benefits that increase the offering’s value for consumers and differentiates them from competition.

Generally, all companies should adapt to Internet technology to make traditional activities better and find and implement new combinations of virtual and physical activities that were not previously possible (Porter, 2001). Those companies that were generated in the Internet need to create and maintain strategies that involve new hybrid value chains encompassing other activities besides those conducted over the Internet, and to bring together virtual and physical activities in unique configurations (Porter, 2001).

“While a new means of conducting business has become available, the fundamentals of competition remain unchanged. … Only by integrating the Internet into overall strategy will this powerful new technology become an equally powerful force for competitive advantage.” (Porter, 2001: p. 78)

5.2 Limitations and future research issues

The present paper has some limitations. First of all, it is restricted to B2C-markets, i.e. consumer behavior in this paper focuses on individual consumers, not businesses. As search, choice, and purchase behavior is different for institutional buyers, it might be interesting to conduct similar research also for B2B-markets. A second limitation regards the results of the empirical study, which queried only a very narrow group of people, namely the students of the USI. Besides, the survey was conducted using an online questionnaire, which limits the results to rather online-affine respondents. Although the study is not representative, it led to useful results that prove to be consistent and reliable for the examined set of people. The limitations regarding the empirical study are due to time limitation in its realization. In order to obtain more representative results the same study could be conducted among a representative set of people in future research.

A third limitation is that the empirical study tested only attitudes, not likely behavior. It might be interesting to test also likely behavior in future research, using experimental research methodology, and to integrate the attitudinal and the behavioral components in a holistic concept.
Although numerous articles, books, and working papers have been published that examine and try to describe the effects of Internet technology on consumer behavior with regard to consumer attitudes, consumer search behavior, evolving opportunities for businesses, and other issues that have been discussed in the present master’s thesis, this field is still not sufficiently explored.

According to the current paper’s logic, an important field of future research should be to explore the impact of the three brand functions also in other product and service categories in order to bring about a valid general systematic to support brand managers.

While the present paper researches the impact of Internet technology on brand functions, it does not answer the question, in which situations consumers prefer the Internet as a shopping channel and in which situations they prefer non-Internet retail stores. This might be dependent on the functions and characteristics of the particular good or brand. However, also other factors might influence this decision. It might be interesting to explore the issue of channel choice according to the systematic applied in the present paper.

In this context, it might also be interesting to research whether the pure availability of information changes the type of purchase decision. It might for instance be the case that – as a result of the availability of much information – some consumers might engage in extensive search processes related to a purchase decision that was formerly based on limited problem solving or even habits.

Furthermore, future research could examine, in how far mobile Internet communication at the point-of-purchase impacts consumer behavior, and which impacts mobile commerce (m-commerce) will have on consumers’ purchase decision processes. Mobile devices might enable consumers to connect the online and the offline world, and search for relevant information in the Web in non-Internet retail stores. Maybe companies could even provide personalized prices to consumers then.

It might also be interesting to analyze, if online sellers should apply personalized prices for individual consumers based on these consumers’ socio-demographics, attitudes, behaviors, and other relevant data. This way, businesses might be able to (re-)diversify markets and reduce transparency.
Another issue to be addressed in future research could deal with the effects of the described development of markets due to Internet technology on brand equity. Depending on the functions that a brand fulfills for consumers, its brand equity might significantly increase or decrease.

Also customer equity might be influenced by consumer empowerment. As customers become more volatile, their long-term value might significantly decrease for companies offering goods that are easily comparable on their attributes. Businesses that offer reliable services in the (anonymous!) online environment might at the same time be able to increase retention rates and customer long-term value (CLV).

Last but not least, future research should continue to explore the differences in consumer attitudes and behavior regarding choice in the online versus the offline environment, and further idiosyncrasies of online and offline consumer behavior.
Appendix

Appendix 1

Benefits brands offer to companies

Keller (2003: pp. 9 & 46) provides a comprehensive list of benefits that brands offer to companies. He points out that brands

- serve as a means of identification to simplify handling or tracing,
- legally protect unique features of a product or service, and they
- can endow products with unique associations,

leading to

- increased customer loyalty,
- less vulnerability to competitive marketing measures or crises,
- larger margins,
- a more elastic response to price decreases,
- a more inelastic response to price increases,
- greater trade co-operation and support,
- increased marketing communication efficiency and effectiveness,
- possible licensing opportunities, and
- a more favorable evaluation of brand extensions.
Appendix 2

Benefits brands offer to consumers

Kapferer (1997: p. 30) highlights that from a consumer perspective brands

- permit the quick identification of sought-after products,
- allow savings of time and energy through identical repurchasing and loyalty,
- guarantee finding the same quality no matter where or when a product or service is bought,
- ensure the consumer that the best product in its category or the best performer for a particular purpose is bought,
- confirm the self-image of the user and the image that is presented to others,
- bring contentment through the familiarity and intimacy with a brand that has been consumed for years,
- convey satisfaction linked to the attractiveness of the brand, to its logo, to its communication, and possibly
- bring appreciation linked to the responsible behaviour of the brand in its relationship with society (ecology, employment, citizenship, advertising which does not shock).

Anholt (2003: p. 3) adds that brands

- represent a promise to deliver the expected quality,
- are an open invitation to complain if expectations are not met,
- generally ensure that dissatisfaction will be remedied, and they
- provide a means of assessing product quality in fields where the consumer lacks the knowledge on which to base an objective judgement.
Appendix 3

The empirical study

Subsequently, all questions from the survey conducted among the students of the USI are displayed, including the possible answers and the respective total number and percentage of responses.

The first eleven questions deal with the purchase of consumer electronics; questions twelve to twenty-two analyze the interviewee's behavior regarding booking flights; and the last eleven questions concern the purchase of clothes.

Introduction:

Hi,
presently, I am writing my master's thesis. I analyze the role of brands in purchase decisions. Therefore, I would like to ask you some questions about which role brands play in your purchase decisions - online and in the "real world" (non-internet stores).

You would be a great support, if you would answer the following questions. You will need about 5-7 minutes for the whole survey.

Thank you very much!!! ;-)

Text 1:

First, I will ask you some questions about consumer electronics (e.g., laptop, MP3-player, iPod, DVD-player, etc.). Please indicate, which answer you most strongly agree with.

Question 1:

On average, how often do you buy consumer electronics in a period of one year?

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<td>Mean</td>
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<td>StdDev</td>
<td>2</td>
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Question 2:
When I buy consumer electronics, the brand is not as important to me as other things.

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<tr>
<td>Agree very much</td>
<td>11</td>
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<tr>
<td>Agree somewhat</td>
<td>43</td>
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<tr>
<td>Neutral</td>
<td>9</td>
</tr>
<tr>
<td>Agree less</td>
<td>38</td>
</tr>
<tr>
<td>Do not agree</td>
<td>21</td>
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Question 3:
Searching for my favored brand facilitates the purchase of consumer electronics for me.

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<tr>
<td>Agree very much</td>
<td>20</td>
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<tr>
<td>Agree somewhat</td>
<td>56</td>
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<tr>
<td>Neutral</td>
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<td>Agree less</td>
<td>12</td>
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<tr>
<td>Do not agree</td>
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Question 4:
When I buy consumer electronics, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the product that I am searching for.

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<td>Agree very much</td>
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<td>Agree somewhat</td>
<td>46</td>
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<tr>
<td>Neutral</td>
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Question 5:
When I buy consumer electronics, I prefer brands, because brands reduce the risk to be displeased afterwards.

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<tr>
<th>Base</th>
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<tbody>
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<td>Agree somewhat</td>
<td>52%</td>
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<tr>
<td>Neutral</td>
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</tr>
<tr>
<td>Agree less</td>
<td>8</td>
</tr>
<tr>
<td>Agree less</td>
<td>7%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>6</td>
</tr>
<tr>
<td>Do not agree</td>
<td>5%</td>
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</tbody>
</table>

Question 6:
When I buy consumer electronics, I prefer brands, because I know that I buy good quality when I choose for a brand.

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</thead>
<tbody>
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</tr>
<tr>
<td>Agree very much</td>
<td>40</td>
</tr>
<tr>
<td>Agree very much</td>
<td>33%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>61</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>50%</td>
</tr>
<tr>
<td>Neutral</td>
<td>8</td>
</tr>
<tr>
<td>Neutral</td>
<td>7%</td>
</tr>
<tr>
<td>Agree less</td>
<td>6</td>
</tr>
<tr>
<td>Agree less</td>
<td>5%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>7</td>
</tr>
<tr>
<td>Do not agree</td>
<td>6%</td>
</tr>
</tbody>
</table>

Question 7:
Regarding consumer electronics, I care about the brand, because it has to fit well with myself.
Question 8:
Regarding consumer electronics, the brand is important to me, because I think that other people judge me by the brands I use.

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<tr>
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<tr>
<td>Agree somewhat</td>
<td>12</td>
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<tr>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>18</td>
</tr>
<tr>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Agree less</td>
<td>27</td>
</tr>
<tr>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>Do not agree</td>
<td>61</td>
</tr>
<tr>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>

Question 9:
When I buy consumer electronics, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.

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<tbody>
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<tr>
<td>0%</td>
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</tr>
<tr>
<td>Agree somewhat</td>
<td>8</td>
</tr>
<tr>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td>18</td>
</tr>
<tr>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Agree less</td>
<td>35</td>
</tr>
<tr>
<td>29%</td>
<td></td>
</tr>
<tr>
<td>Do not agree</td>
<td>61</td>
</tr>
<tr>
<td>50%</td>
<td></td>
</tr>
</tbody>
</table>
Question 10:
When I buy consumer electronics in an internet shop, I prefer brands over no-name products or retail brands.

<table>
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<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>18%</td>
</tr>
<tr>
<td>Neutral</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>Agree less</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>I never bought consumer electronics in an internet shop</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>35%</td>
</tr>
</tbody>
</table>

Question 11:
When I buy consumer electronics in a non-internet retail store, I prefer brands over no-name products or retail brands.

<table>
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<tr>
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<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>15%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>34%</td>
</tr>
<tr>
<td>Neutral</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>20%</td>
</tr>
<tr>
<td>Agree less</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>9%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>I never bought consumer electronics in a non-internet shop</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

Text 2:
Second, I will ask you some questions about flights.
Same procedure as before. Please indicate, which answer you most strongly agree with.
Question 12:
On average, how often do you book flights in a period of one year?

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Max</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>StdDev</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Question 13:
When I book a flight, the airline brand is not as important to me as other things.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree very much</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>32</td>
<td>26%</td>
</tr>
<tr>
<td>Neutral</td>
<td>17</td>
<td>14%</td>
</tr>
<tr>
<td>Agree less</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>19</td>
<td>16%</td>
</tr>
</tbody>
</table>

Question 14:
Searching for my favored brand facilitates the purchase/booking of flights for me.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree very much</td>
<td>13</td>
<td>11%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>34</td>
<td>28%</td>
</tr>
<tr>
<td>Neutral</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>Agree less</td>
<td>23</td>
<td>19%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>25</td>
<td>20%</td>
</tr>
</tbody>
</table>
**Question 15:**
When I book a flight, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the airline brand that I am searching for.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>8%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>Neutral</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>18%</td>
</tr>
<tr>
<td>Agree less</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>35%</td>
</tr>
</tbody>
</table>

**Question 16:**
When I book a flight, I prefer brands, because brands reduce the risk to be dissatisfied afterwards.

<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
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<tr>
<td>Agree very much</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>33%</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>Agree less</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>19%</td>
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</tbody>
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**Question 17:**
When I book a flight, I prefer brands, because I know that I buy good quality when I choose for a brand.

<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
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</tr>
<tr>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>28%</td>
</tr>
<tr>
<td>Neutral</td>
<td>24</td>
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<tr>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>
**Question 18:**

Regarding flights, I care about the brand, because it has to fit well with myself.

<table>
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</thead>
<tbody>
<tr>
<td></td>
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</tr>
<tr>
<td>Agree very much</td>
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<tr>
<td>Agree somewhat</td>
<td>13</td>
</tr>
<tr>
<td>Neutral</td>
<td>29</td>
</tr>
<tr>
<td>Agree less</td>
<td>30</td>
</tr>
<tr>
<td>Do not agree</td>
<td>45</td>
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</table>

**Question 19:**

Regarding flights, the brand is important to me, because I think that other people judge me by the brands I use (i.e. the airline I fly with).

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<tbody>
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<tr>
<td>Agree very much</td>
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<tr>
<td>Agree somewhat</td>
<td>6</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
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<tr>
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<td>18</td>
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<tr>
<td>Do not agree</td>
<td>82</td>
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**Question 20:**

When I book a flight, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.

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</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>0</td>
</tr>
</tbody>
</table>
Question 21:

When I book a flight in an internet shop, I prefer brands over no-name airlines or rather unknown airlines.

<table>
<thead>
<tr>
<th>Agree somewhat</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neutral</td>
<td>16</td>
</tr>
<tr>
<td>Agree less</td>
<td>20</td>
</tr>
<tr>
<td>Do not agree</td>
<td>75</td>
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</tbody>
</table>

Question 22:

When I book a flight in a non-internet retail store, I prefer brands over no-name airlines or rather unknown airlines.

<table>
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<tr>
<th>Base</th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>Agree very much</td>
<td>16</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>24</td>
</tr>
<tr>
<td>Neutral</td>
<td>14</td>
</tr>
<tr>
<td>Agree less</td>
<td>10</td>
</tr>
<tr>
<td>Do not agree</td>
<td>36</td>
</tr>
<tr>
<td>I never booked a flight in a non-internet shop</td>
<td>20</td>
</tr>
</tbody>
</table>
Text 3:

Last, I will ask you some questions about clothes.

Once again, please indicate, which answer you most strongly agree with.

**Question 23:**

On average, how often do you buy clothes in a period of one month?

<table>
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<th></th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>StdDev</td>
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**Question 24:**

When I buy clothes, the brand is not as important to me as other things.

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<th></th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
<tr>
<td>Agree very much</td>
<td>27</td>
<td>22%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>37</td>
<td>30%</td>
</tr>
<tr>
<td>Neutral</td>
<td>22</td>
<td>18%</td>
</tr>
<tr>
<td>Agree less</td>
<td>25</td>
<td>20%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>11</td>
<td>9%</td>
</tr>
</tbody>
</table>
**Question 26:**
When I buy clothes, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the product that I am searching for.

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</tr>
</thead>
<tbody>
<tr>
<td><strong>122</strong></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>17%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>39%</td>
</tr>
<tr>
<td>Neutral</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>Agree less</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>11%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

**Question 27:**
When I buy clothes, I prefer brands, because brands reduce the risk to be displeased afterwards.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>122</strong></td>
<td>100%</td>
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<tr>
<td>Agree very much</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>14%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>34%</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>Agree less</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>16%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>

**Question 28:**
When I buy clothes, I prefer brands, because I know that I buy good quality when I choose for a brand.

<table>
<thead>
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<th>Base</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>122</strong></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>22%</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>40%</td>
</tr>
<tr>
<td>Neutral</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>14%</td>
</tr>
</tbody>
</table>
Question 29:
Regarding clothes, I care about the brand, because it has to fit well with myself.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>29</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>30</td>
</tr>
<tr>
<td>Neutral</td>
<td>20</td>
</tr>
<tr>
<td>Agree less</td>
<td>18</td>
</tr>
<tr>
<td>Do not agree</td>
<td>25</td>
</tr>
</tbody>
</table>

Question 30:
Regarding clothes, the brand is important to me, because I think that other people judge me by the brands I use.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>11</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>23</td>
</tr>
<tr>
<td>Neutral</td>
<td>16</td>
</tr>
<tr>
<td>Agree less</td>
<td>15</td>
</tr>
<tr>
<td>Do not agree</td>
<td>57</td>
</tr>
</tbody>
</table>

Question 31:
When I buy clothes, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.

<table>
<thead>
<tr>
<th>Base</th>
<th>122</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
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<tr>
<td>Agree very much</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>7%</td>
</tr>
</tbody>
</table>
Question 32:
When I buy clothes in an internet shop, I prefer brands over no-name products or retail brands.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree somewhat</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Neutral</td>
<td>32</td>
<td>26%</td>
</tr>
<tr>
<td>Agree less</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Do not agree</td>
<td>53</td>
<td>43%</td>
</tr>
</tbody>
</table>

Question 33:
When I buy clothes in a non-internet retail store, I prefer brands over no-name products or retail brands.

<table>
<thead>
<tr>
<th></th>
<th>122</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>100%</td>
</tr>
<tr>
<td>Agree very much</td>
<td>10</td>
</tr>
<tr>
<td>Agree somewhat</td>
<td>10</td>
</tr>
<tr>
<td>Neutral</td>
<td>11</td>
</tr>
<tr>
<td>Agree less</td>
<td>7</td>
</tr>
<tr>
<td>Do not agree</td>
<td>8</td>
</tr>
<tr>
<td>I never bought clothes in a non-internet shop</td>
<td>76</td>
</tr>
</tbody>
</table>
End:

Thanks a lot for your participation!! Have a nice day ;-}
Appendix 4

Results of the exploratory (and confirmatory) factor analysis for the market of consumer electronics regarding the questions concerning the three brand functions:

<table>
<thead>
<tr>
<th></th>
<th>Component</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching for my favored brand facilitates the purchase of consumer electronics for me.</td>
<td>0.830</td>
<td>0.350</td>
<td></td>
</tr>
<tr>
<td>When I buy consumer electronics, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the product that I am searching for.</td>
<td>0.722</td>
<td>0.427</td>
<td></td>
</tr>
<tr>
<td>When I buy consumer electronics, I prefer brands, because brands reduce the risk to be displeased afterwards.</td>
<td>0.723</td>
<td>0.252</td>
<td></td>
</tr>
<tr>
<td>When I buy consumer electronics, I prefer brands, because I know that I buy good quality when I choose for a brand.</td>
<td>0.843</td>
<td>0.127</td>
<td></td>
</tr>
<tr>
<td>Regarding consumer electronics, I care about the brand, because it has to fit well with myself.</td>
<td>0.487</td>
<td>0.069</td>
<td></td>
</tr>
<tr>
<td>Regarding consumer electronics, the brand is important to me, because I think that other people judge me by the brands I use.</td>
<td>0.128</td>
<td>0.346</td>
<td></td>
</tr>
<tr>
<td>When I buy consumer electronics, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.</td>
<td>0.181</td>
<td>0.844</td>
<td></td>
</tr>
</tbody>
</table>

Questions regarding the function of increased information efficiency

Questions regarding the function of risk reduction

Questions regarding the function of image benefit creation

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.
**Results of the exploratory (and confirmatory) factor analysis for the market of flights regarding the questions concerning the three brand functions:**

<table>
<thead>
<tr>
<th>Rotated Component Matrix&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching for my favored brand facilitates the purchase/booking of flights for me.</td>
<td>0.322</td>
<td>0.174</td>
</tr>
<tr>
<td>When I book a flight, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the airline brand that I am searching for.</td>
<td>0.710</td>
<td>0.322</td>
</tr>
<tr>
<td>When I book a flight, I prefer brands, because brands reduce the risk to be displeased afterwards.</td>
<td>0.838</td>
<td>0.171</td>
</tr>
<tr>
<td>When I book a flight, I prefer brands, because I know that I get good quality when I choose for a brand.</td>
<td>0.838</td>
<td>0.162</td>
</tr>
<tr>
<td>Regarding flights, I care about the brand, because it has to fit well with myself.</td>
<td>0.536</td>
<td>0.525</td>
</tr>
<tr>
<td>Regarding flights, the brand is important to me, because I think that other people judge me by the brands I use (i.e. the airline I fly with).</td>
<td>0.182</td>
<td>0.885</td>
</tr>
<tr>
<td>When I book a flight, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.</td>
<td>0.182</td>
<td>0.905</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 3 iterations.
Results of the exploratory (and confirmatory) factor analysis for the market of clothes regarding the questions concerning the three brand functions:

<table>
<thead>
<tr>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>Questions regarding the function of increased information efficiency</th>
<th>Questions regarding the function of risk reduction</th>
<th>Questions regarding the function of image benefit creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching for my favored brand facilitates the purchase of clothes for me.</td>
<td>.764</td>
<td>.337</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I buy clothes, I pay attention to the brand logo or characteristic brand colors in order to find or retrieve the product that I am searching for.</td>
<td>.785</td>
<td>.473</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I buy clothes, I prefer brands, because brands reduce the risk to be displeased afterwards.</td>
<td>.853</td>
<td>.245</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I buy clothes, I prefer brands, because I know that I buy good quality when I choose for a brand.</td>
<td>.863</td>
<td>.248</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regarding clothes, I care about the brand, because it has to fit well with myself.</td>
<td>.507</td>
<td>.673</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regarding clothes, the brand is important to me, because I think that other people judge me by the brands I use.</td>
<td>.223</td>
<td>.862</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I buy clothes, I prefer certain brands, because I feel that I have a lot in common with other buyers of these brands.</td>
<td>.304</td>
<td>.855</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
   a. Rotation converged in 3 iterations.
Reliability analysis of the computed factors:

Cronbach’s Alpha for the first (rational) factor of consumer electronics:

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.832</td>
<td>0.834</td>
<td>4</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha for the second (emotional) factor of consumer electronics:

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.711</td>
<td>0.762</td>
<td>3</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha for the first (rational) factor of flights:

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.879</td>
<td>0.879</td>
<td>4</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha for the second (emotional) factor of flights:

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.777</td>
<td>0.767</td>
<td>3</td>
</tr>
</tbody>
</table>
Cronbach’s Alpha for the first (rational) factor of clothes:

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.904</td>
<td>0.904</td>
<td>4</td>
</tr>
</tbody>
</table>

Cronbach’s Alpha for the second (emotional) factor of clothes:

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.841</td>
<td>0.843</td>
<td>3</td>
</tr>
</tbody>
</table>
Appendix 5

*Influencing factors of consumer information search and buying behavior through the Internet:*

**Consumer characteristics**
- Knowledge level
- Internet usage skills
- Challenging mind-set to the Internet
- Lifestyle
- Demographic characteristics

**Information search**
- General search / directed search

**Website characteristics**
- Information quantity
- Design
- Access and transmission speed
- User-friendliness of search structure
- Update pace

**Product type**
- Search products / experience products
- Tangible products / intangible products
- Convenience / shopping products

**Benefit of Internet transaction**
- Product quality
- Price
- Assortment
- Time saving
- Convenience

**Risk of Internet transaction**
- Product risk
- Purchase method risk
- Service risk
- Payment risk

*Note. Adapted from: ‘Consumer adoption of the Internet as an information search and product purchase channel: some research hypotheses’ (p. 109) by Moon, Byeong-Joon (2004), in: *Int. J. Internet Marketing and Advertising.*
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