

Why People Buy: Website Characteristics Influencing Online Purchasing Behavior on E-Commerce Websites – A Systematic Literature Review

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Abstract

Although a plethora of research papers concerning online purchasing behavior exist, varying results and a multitude of investigated characteristics aggravate to determine, which cues should be considered as most important and influential. In this literature review, the goal was to examine the most significant website characteristics and emotional and cognitive states regarding online purchasing behavior of consumers on electronic commerce websites. To achieve this, we first defined the most important terms and concepts. Next, we presented and discussed the outcomes, resulting out of 38 collected research papers. Furthermore, we put theoretical and managerial implications, limitations and opportunities for further research forward. The findings indicate that trust, perceived risk, perceived usefulness, perceived ease of use, website design and hedonic value are the most significant characteristics affecting online purchasing behavior in an electronic commerce context. The results furthermore suggest that trust can be considered as the strongest characteristic regarding planned purchase behavior, repeat purchase behavior and non-specific purchase behavior, whereas hedonic value is proposed to be the most powerful characteristic concerning impulse purchase behavior.

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1 Introduction

In today's world, online shopping is perceived as a serious alternative to offline shopping since it offers several advantages and conveniences. In 2020, over four billion users are shopping on electronic commerce platforms worldwide. This number is predicted to rise even higher. By 2024, the figure will increase up to over five billion visitors. Correspondingly, generated sales are even more imposing. Whereas in 2020, e-commerce shoppers are spending nearly two trillion Euros, researchers forecast expenses for 2024 which exceed the 2020 figures by over 30 %. In other words, more individuals will spend even more money in the next years (Statista 2020). However, far from every visitor is purchasing on electronic commerce websites. Recent numbers indicate an average conversion rate, i.e. the ratio of website visitors to users who take action, of under three percent (Ryte 2018, Statista 2019). In order to increase the number of users purchasing online, several actions can be performed on the website itself. Nevertheless, although prior research conducted numerous studies to examine, which characteristics influence online purchase behavior, results are oftentimes varying in significance. Moreover, scholars, in general, research different cues as online platforms are a complex construct nowadays. Therefore, the practical implementation can be perceived as challenging since individuals who are in charge of electronic commerce stores find it difficult to seek out the most important and influential characteristics in the first place.

In the following, we address this problem by conducting an extensive literature review. Thereby we investigate, which characteristics are researched by prior studies and influence online purchasing behavior in an electronic commerce context. In particular, it is the research paper's objective to examine which characteristics influence online purchasing behavior on electronic commerce websites most significantly. As these variables can naturally influence different purchase behaviors, we consequently also investigate, which characteristics are the most significant cues regarding specific purchase situations. The answer to our stated research question will, in turn, facilitate the decision-making progress of those in charge of electronic commerce stores. To achieve our objective, we define the basic terms and concepts in the next section. Afterward, we gather the most important and influential cues, studied by several scholars. Subsequently, we analyze, present and discuss the most important characteristics. Finally, we also mention theoretical and practical implications this

research paper contributes, in addition to the limitations of these studies and inspiration for future research.

2 Theoretical Foundation

By providing a comprehensive theoretical foundation for this paper, our conducted work can be retraced objectively. In the following chapter, we provide basic definitions. Within this segment, we furthermore discuss and define the different buying concepts occurring in the context of electronic commerce, as well as the two underlying purchasing concepts this literature review is divided into. Subsequently, we mention and explain the most significant purchasing factors.

2.1 Basic Definitions

A definition is a method that gives an explanation and depicts the sense and precise restriction of something (Cambridge Dictionary 2020a). With the help of the following definitions, the same understanding of the following terms is guaranteed.

2.1.1 Electronic Commerce

While in the general public, electronic commerce (e-commerce) is commonly associated with the purchase of digital or physical products via the internet (Cambridge Dictionary 2020b), academic literature provides more in-depth definitions for e-commerce. Yoon, for instance, refers to the term e-commerce as an internet transaction between a private person and a firm. These transactions are conducted through varying online platforms (2002). Although this definition is already more precise, it is yet to be complete, as e-commerce can also be carried out between different suppliers and consumers. Namely, transactions can be interchangeably completed between typical consumers, businesses and governments (Chaffey 2014¹). In addition to this aspect, Kalakota and Whinston provide four perspectives of e-commerce which define the term differently and thus in a precise manner.

First, for the communications perspective, e-commerce is defined as a medium to deliver different goods via electronic technology. Second, they state a business process perspective. Here, by definition, technology is utilized to automate business transactions and workflows. Third, for the service perspective, electronic commerce makes it possible to provide higher speed and service quality while lowering the cost at the same time. At last, Kalakota and Whinston postulate the online perspective, which is defining electronic commerce as a place to buy and sell products as well as

¹ Full text not available

information through computer-mediated exchange (1997). As no single definition comprises all necessary components, we choose to utilize all previously mentioned scholars' findings to define e-commerce in the context of this research paper.

2.1.2 Online Purchase Intention

An intention itself is the result of desire or need and leads to purchase planning (Darpy 1997). This, however, is no definitive guarantor for an actual purchase in the context of online purchase intentions (also called online buying behavior), though empirical studies prove a strong correlation between intention to do something and the behavior itself (Sheppard et al. 1988, Venkatesh 2000). Following the theory of reasoned action (TRA) and its extension, the theory of planned behavior (TPB), beliefs lead to behavioral intentions, which in turn are followed by the actual behavior (Ajzen and Fishbein, 1975², Ajzen 1985², Ajzen 1991). The technology acceptance model (TAM) is a further development of TRA and predicts the acceptance of technology in a working environment (Davis 1989). According to Gefen et al., as an e-commerce website is an information technology (IT), online purchase intentions should be explained partially by this model (2003).

In unanimity with prior research, we define initial online purchase intention in this paper as the likelihood and willingness to buy for the first time in an online environment (Davis 1989, Song and Zahedi 2005, Schlosser et al. 2006, Chiu et al. 2014). Following from this, we, therefore, refer to repeat online purchase intention as the likelihood and willingness to buy in the same online environment again (Wu et al. 2010, Chiu et al. 2014).

2.1.3 Online Purchase Behavior

The theory of planned behavior is an extension of the already discussed theory of reasoned action (Ajzen and Fishbein, 1975², Ajzen 1985², Ajzen 1991). The TPB, similar to the TRA, states that a behavior is determined by the intention the individual has, to perform the intended action and is made necessary as the theory of reasoned action does not cover behavior where people do not have the unmitigated control (Ajzen 1985², Ajzen 1991, George 2004). Following and applying the theory of

² Full text not available

planned behavior, online purchase behavior can be seen as the result of online purchase intention.

TPB has been the basis of a number of academic papers investigating online purchase behavior on the internet (Song and Zahedi 2001, Koufaris 2002, George 2004, Lim et al. 2006, Mahmood et al. 2009). Although several scholars utilized online purchase behavior (also called online buying behavior or online shopping behavior) as a variable in their studies, with few exceptions, many fail to define the term. Li and Zhang, as one of those scarce exceptions, refer online purchase behavior to the procedure of buying goods or services over the World Wide Web (2002). Kagan and Bekkerman similarly define it as “the actual purchasing process”, while differentiating it to purchasing intentions (2018, p. 515). Therefore, we utilize the latter definition for this research paper.

2.2 Different Buying Behaviors

Purchase behavior can describe various ways in which an individual fulfills an actual purchasing process. A buyer can either plan the acquisition beforehand, purchase the good impulsively or buy something in an online environment where the individual has already shopped in the past. In the following segment, we define and explain the three main concepts regarding purchase decisions, by name planned purchase, impulse or unplanned purchase and repurchase in greater detail.

2.2.1 Planned Purchase

Planned purchase (also called intended purchase) is characterized by a variety of factors. However, the great majority of academic papers conceptualize the term on one common denominator. Prior to the purchase decision, thought has been put into the purchase by the individual (Piron 1993, Dittmar and Drury 2000, Spears 2006, Lee and Kacen 2008). Besides this, individuals try to decrease the chance of a bad choice and, therefore, postpurchase regret. A potential buyer achieves this by pursuing a “master plan characterized by planning, searching, and carefully deliberating” (Spears 2006, p. 58). By planning the purchase, all origins of information, for instance internal and external sources, are available (Lee and Kacen 2008). In agreement with Spears’s declaration, interviewed individuals propose that they form a rational buying decision during the purchasing process (2006, Dittmar and Drury 2000).

Whereas concrete definitions for planned purchases are relatively scarce, existing examples are similar to each other. Lee and Kacen refer to it as an activity that has been thought about before entering the store (2008). In the online environment, the term store is equivalent to an online store. Piron contributes the earliest known definition for a planned purchase in this paper. The author conceptualizes the act as a carried out purchase action, for which a problem has been recognized or a buying intention has been formed before entering the store (1993). Dittmar and Drury complement the previous definitions by describing a planned purchase as an ultimate decision which often comprises lookout for a potential purchase (2000). Furthermore, buyers themselves report that needed or functional products are the common object of intended purchases (Dittmar and Drury 2000).

In conclusion, a planned purchase is a decision in favor of a purchase action. Prior to the acquisition, the individual forms a purchase intention or recognizes a problem, which is planned to be solved. This is achieved by pursuing a previously created master plan (Piron 1993, Dittmar and Drury 2000, Spears 2006, Lee and Kacen 2008).

2.2.2 Impulse Purchase

Purchasing goods and services, whether digital or physical, is a process influenced by a multitude of factors. Therefore, it is no surprise that a purchase decision can fall spontaneously. In general, impulse purchasing (also called impulse buying) is mainly observed from two different perspectives (Wells et al. 2011a). On one side, scholars observe how shopping environments can influence individuals to feel an urgency to buy (Rook 1987). On the other side, researchers investigate in which way personal traits can act as a trigger to purchase impulsively (Rook and Fisher 1995).

In the context of this paper, the former perspective is applied, in order to advance the empirical evidence in this field. In this context, the affected individual experiences a stimulus, before the urge to buy arises. A stimulus can be a product itself, as well as an extrinsic attribute of the product such as the shopping environment (Parboteeah et al. 2009). This causes an impulse to purchase the desired good. Subsequently, the urge is satisfied by purchasing the desired object (Rook 1987). Certainly, not all urges are acted upon. However, the more urges are witnessed by the affected individual, the likelier an impulse buy gets (Beatty and Ferrell 1998).

Although an impulse purchase has frequently been seen analogous to an unplanned purchase in early academic work (Clover 1950, West 1951), more recent studies criticize this view, as an unplanned purchase is not equivalent to an impulse purchase (Iyer 1989, Piron 1991, Beatty and Ferrell 1998). Prior to this paper, a choice of scholars utilized the terms unplanned purchase and impulse purchase as synonyms (Koufaris et al. 2001, Koufaris 2002). However, to utilize these two terms as synonyms can be seen as problematic, since not planning a purchase in beforehand is just one component of impulse purchases. For instance, Piron defines an impulse purchase as a purchase, consisting out of three parts. First, the purchase is unplanned. Second, the purchase takes place when the individual is exposed to a stimulus and finally, the decision is made curtly (1991). Piron's definition is extended even further by Beatty and Ferrell and therefore we utilize it as the definition for an impulse purchase in this paper. As they state, an impulse purchase "is a sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task. The behavior occurs after experiencing an urge to buy and it tends to be spontaneous and without a lot of reflection (i.e., it is "impulsive")" (1991, 1998, p. 170).

As Piron states, an impulse purchase is not only unplanned and significantly influenced by a stimulus. It is also decided "on-the-spot" (1991, p. 512). Therefore, an impulse buying decision is made immediately after experiencing the stimulus or feeling the urge to buy, as stated by Beatty and Ferrell (Piron 1991, 1998).

Though, an impulse purchase is not only a mere conglomerate of characteristics. Academic literature also subdivides impulse buying into different types. Stern significantly ameliorated this field, as he split impulse purchases up into four different types. Pure impulse buying is classified as a novelty or escape purchase, breaking normal purchasing patterns. A reminder purchase can take place if the affected individual is exposed to a stimulus in the form of a product. A reminder impulse buy occurs, if an earlier experience with the good, for instance, an advertisement or a personal experience, is remembered. The recalled memory, in turn, leads to the urge to buy. In contrast to a reminder impulse purchase, for a suggestion impulse purchase, the potential buyer witnesses a product for the first time and visualizes a need for it. At last, Stern defines the term planned impulse buying. In this case, potential buyers make their purchase dependent on special incentives, such as coupon codes or price

specials. Prior to the actual acquisition, the individual plans to purchase another specific product, but is intending to take advantage of the special incentives offered (1962). Consistent with the prior definition by Beatty and Ferrell, all of the described unplanned purchases occur without a lot of reflection and after being exposed to a stimulus (1998).

2.2.3 Repeat Purchase

Attracting new customers can be exceedingly expensive in today's online environment. The problem of acquiring new customers can be reduced, however, if a visitor has already purchased from the shop concerned at least once in the past. The potential customer by then knows of the shop's existence and can utilize this experience as a further repurchase decision-making tool (Fang et al. 2014).

A repeated purchase (also called repurchase) is clearly distinct in comparison to planned and impulse purchases. Individuals already experienced an acquisition situation prior to the upcoming buying decision (Kim et al. 2009).

In addition, repurchase behavior has to be distinguished from repurchase intention. We define repurchase intention as the likelihood and willingness to buy in the same online environment again (Wu et al. 2010, Chiu et al. 2014). All of our investigated academic literature, however, fails to define the term repeat purchase and decide to define purchase intention instead. Therefore, we utilize related areas, in order to define the former term.

In the context of consumer-decision making, for instance, the status quo bias can and has been applied to explain repurchase behavior (Inman and Zeelenberg 2002). As proposed by Samuelson and Zeckhauser, individuals acting upon the status quo effect maintain their present or earlier decision. According to the status quo bias, customers purchasing from a specific online store tend to purchase products or services from this specific store repeatedly (1988). However, even though the status quo bias is a helpful concept for understanding repeat purchase behavior, a concrete definition is not given by the authors.

Academic literature defining repeat purchases exists. As one of the few researchers, Curtis et al. define repeat purchase and describe it as an individual's actual behavior. This behavior leads to a purchasing action for the same product or service for more than one time (2013). This definition refers to actual repurchase behavior as a prod-

uct-specific behavior. However, repurchases can also take place in relation to a certain brand or store. For example, an individual can be a supporter of an online shop that offers comparative advantages or the like. Seiders et al. instead refer to it as the extent of repurchase behavior which is explored impartially (2005). This definition takes into account the necessary generalization for this term and is, therefore, more adequate as justified earlier.

In conclusion, a distinction between repurchase behavior and repurchase intention must be made. Whereas the intention to repurchase only describes the probability of another purchase for a given context, we define repurchases as the actual purchase behavior.

2.3 Influencing Purchasing Concepts

In the field of economics, scholars frequently use the concept of an “economic man”. An economic man is acting rational and possesses at least a very large proportion, if not all, of the available and needed relevant aspects for his decision. Further, the economic man is defined as an individual that has a stable system of preferences. These characteristics lead to an action that are driven by use maximization (Simon 1955). This concept helps scholars in order to explain several economic models. Though helpful, the economic man is at least not completely applicable to everyday life as a humongous amount of characteristics influence people on a daily basis and also on e-commerce platforms. These characteristics, in turn, influence purchasing behavior. In the upcoming chapter, we define and discuss the two preambles, which influence purchasing behavior on e-commerce websites, namely website characteristics and emotional and cognitive states. To achieve this, we utilize several proven theories and underlying concepts.

2.3.1 Website Characteristics

In an online environment, products and services are not physically present in contrast to goods or services in a physical store. Therefore, the exposure of the product is mediated by the online environment via the human-computer interface (Parboteeah et al. 2009). The influence of such an online shopping environment can vary, depending on the task the individual is pursuing (Valacich et al. 2007). The tasks a visitor can carry out are ranging between goal-directed (e.g. specific purchase) and open-ended (e.g. browsing) (Hoffman and Novak 1996, Parboteeah et al. 2009). Fur-

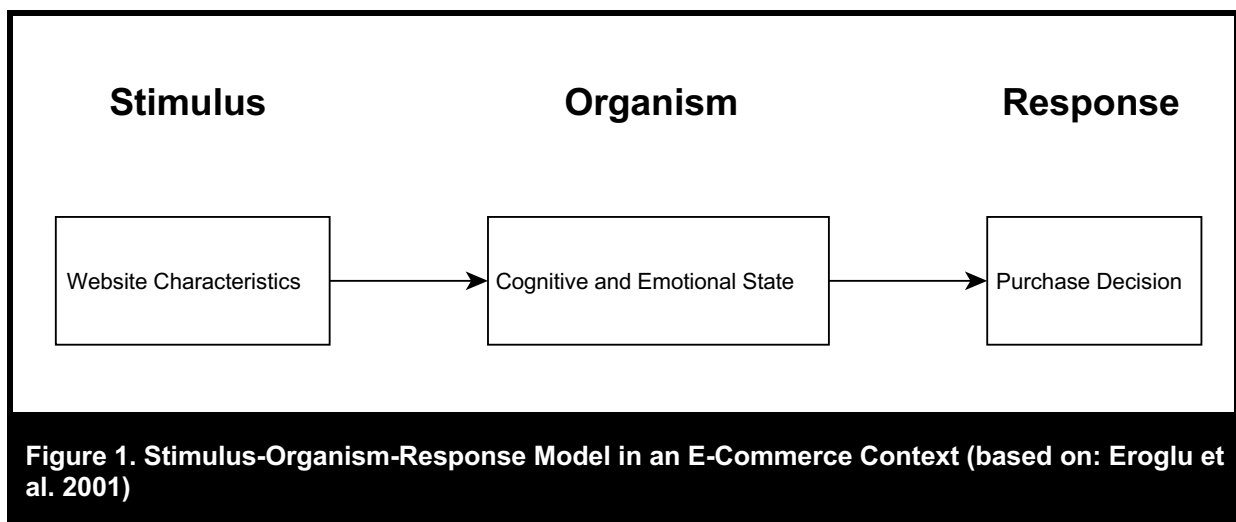
thermore, not only the task of an individual can vary. On top of that, visitors can also show different levels of involvement, which influence attention and comprehension effort (Celsi and Olson 1988). An enhanced level of involvement, for example, improves the level of attention an individual is paying to the online environment (Hoffman and Novak 1996). Whereas highly involved visitors concentrate on the most important aspects of a website, those are aspects directly relating to the product of involvement and dealing with complex evaluations, low involved visitors pay more attention to peripheral aspects (e.g. sound or visuals) of the online environment (Balabanis and Reynolds 2001).

This, in turn, substantiates conducted research in the area of environmental psychology, as Eroglu et al. identify and classify environmental cues (i.e. website characteristics) into high-task relevant cues and low-task relevant cues (2001). High-task relevant cues comprise all site descriptors, whether verbal or by picture that make an appearance on the display. Therefore, the consumer is able to make the achievement of his shopping goal possible and more easily (Eroglu et al. 2001). Examples for such high-task relevant cues are verbal content, such as a product description, but also pictorial content, for instance, a picture of the offered product. High-task relevant cues are related to the presented product and convey their attributes (Eroglu et al. 2001). In contrast, low-task relevant cues are not related directly to shopping goals and are therefore comparatively irrelevant in order to accomplish the shopping (Eroglu et al. 2001). However, these cues can create an atmosphere which, in turn, influences the individual's mood. For instance, such low-task relevant cues are music, sounds or color of a website (Eroglu et al. 2001).

Derived from Eroglu et al., we refer to website characteristics as verbal or pictorial cues that are related or unrelated to the individual's shopping goal. Furthermore, they are visible on the screen (2001). Childers et al. establish the synonymous phrase webmosphere and define it as the virtual counterpart of a physical store environment which is related to the retail atmosphere (2001). Webmospherics include three categories, namely "structural design attributes", "media dimensions" and "layout dimensions". These three categories are all referring to visible verbal or pictorial website characteristics either being related or unrelated to shopping goals, thus supporting our conducted definition (Childers et al. 2001, p. 529).

2.3.2 Cognitive and Emotional State

As individuals consider purchasing a product or service in an online environment, they need to decide, whether to buy the good or not. Individuals, therefore, utilize website characteristics. However, these environmental cues not only influence purchasing behavior directly. In addition, observable cues can be utilized by sellers in order to influence their mood. This change in emotion can indirectly lead to a desire to purchase and therefore to an actual behavior. The process can be explained via the so-called stimulus-organism-response model (S-O-R). We utilize this model for our conducted paper because it has been applied numerous times in the context of online environments (Eroglu et al. 2001, 2003, Parboteeah et al. 2009, Jiang et al. 2010, Cui and Lai 2013). Furthermore, it has been applied not only to regular online purchasing contexts, but also to repurchase and impulse purchase behavior (Parboteeah et al. 2009, Cui and Lai 2013).



The S-O-R was conceptualized for the first time by Mehrabian and Russell (1974³). The proposed model in Figure 1 consists of three different parts. First, stimuli are atmospheric cues, related to the environment. Offline and in general, stimuli can manifest in different ways, for instance, product display or the experienced store environment (Jacoby 2002). In the context of purchasing behavior on e-commerce websites, website characteristics, as defined earlier, act as the stimulus. The stimulus, in turn, influences the second part of this model, called organism as it influences their inter-

³ Full text not available

nal states (Eroglu et al. 2001, 2003). It refers to the individuals' cognitive and emotional states. The impact on the organism, based on the stimulus, at last leads to a response. In the context of this paper, an individual is exposed to a website characteristic. The exposure to this cue leads to a changed cognitive and emotional state, which finally results in a purchase decision (Eroglu et al. 2003).

3 Analysis

Next, we present the conducted methodology for our conducted literature review. This step is expedient to provide comprehensive, valid and scientifically sound results. In this chapter, we present the most important results of our concept matrix and point out the most rousing concepts. Supplementary, we analyze, discuss and interpret the outcomes in terms of their significance for theory and practice. We furthermore answer the constructed research question and name limitations to our conducted work.

3.1 Methodology

We describe the utilized methodology hereinafter by subdividing the topic into three parts. First, we explain our approach in collecting data for our literature review. Next, we present the exclusion and inclusion criteria for our paper. Exclusion and inclusion rules are ensuring that the conducted concept matrix only contains relevant literature and therefore provides a valid scientific basis. At last, we describe our analysis procedure. In this subchapter, we expound how we assigned the collected literature to the single concept categories.

3.1.1 Data Collection

As our literature review shall only consist of thematically fitting literature, we used different retrieval strategies. At first, we conducted an initial literature research via Google Scholar. For this first research step, we searched through the search engine with the following keywords: *Online purchase behavior*, *online purchasing behavior*, *buying behavior* and *purchase behavior* for the first set and *electronic commerce*, *e-commerce*, *online*, as the second set of keywords. In addition to searching for the first set of terms, we also combined the first set with the second set of keywords to create new search strings. After conducting an initial set of academic literature, we proceeded to search in other search engines, namely EBSCO Information Services, Web of Science and also ProQuest. For these search engines, the already introduced search strings were expanded.

Table 1. Search terms		
First set of search terms	Second set of search terms	Third set of search terms
Planned purchase	Online	Website characteristics
Impulse purchase	E-commerce	Web characteristics
Repurchase	Electronic commerce	Technology Acceptance Model
Unplanned purchase	Online commerce	TAM
Buying behavior	Online shopping	
Purchase behavior		
Purchase intention		
Impulse buying		
Purchase		

The search was put through by combining two, respectively three, sets of search terms with each other. The first set of keywords displays the individual's potential buying behavior. The second set of terms considers the online aspect of our research paper and the third category includes search terms regarding environmental cues on a website. In the next step, we executed a backward search for additional significant literature.

Even though it is possible to miss out on relevant literature, we attempted to achieve a list of literature, which is as complete as possible, by carrying out the described method.

3.1.2 Inclusion and Exclusion Criteria

By applying the now proposed inclusion and exclusion rules, 38 journal and conference papers, ranging from 2001 to 2018, are left to be used for our concept matrix. 18 of the extant papers were found via search engines, whereas 20 papers were discovered through a backward search.

As long as the academic literature was fundamentally about purchasing behavior in an e-commerce context and has been published in a peer-reviewed journal or conference paper, the work was initially comprised into the pre-selection. To decide whether the investigated study should be integrated at first, we investigated the provided title and abstract. If by then, the decision was not obvious, the full text was

consulted. Furthermore, the publications had to be academic scripts being ranked by VHB-JOURQUAL3 (JQ3) between A+ to C (Vhbonline 2019). At last, only academic papers released between 2000 and 2019 were added.

After collecting an initial set of papers that meet the original requirements, further exclusion rules were employed. If a full text was not available, the paper was not included in our concept matrix. Moreover, a form of purchase intention or actual purchase behavior had to be measured by the paper. If this was not the case, the examined work was omitted (e.g. Loiacono et al. 2007). Furthermore, academic literature was left out of the concept matrix, if there were no website characteristics or emotional and cognitive states related to purchasing behavior or purchase intention measured in the study (e.g. Ahuja et al. 2003). Other than this, papers were also not included if they did not report necessary empirical and statistical evidence (e.g. Keeney 1999) or were solely based on a literature review (e.g. Li and Zhang 2002).

Overall, 19 of 38 journals and conference papers are only rated in the information systems (IS) field. Furthermore, 15 of 38 academic papers are inter alia rated in the information systems field. In addition, three scripts are rated in the marketing field and one is rated in the general business management field. Overall, the concept matrix consists of 36 journals and two conference papers.

3.1.3 Analysis Procedure

It was the goal of our literature analysis to identify website characteristics, as well as cognitive and emotional states, which influence different purchasing behaviors most significantly. Therefore, we subdivided our concept matrix into three different parts. First, we divided the researcher's methodology into survey, experiment, data analysis, a combination of survey and experiment and a combination of an interview, a survey and an experiment. Second, we integrated different characteristics that influence buying behavior. These characteristics were, in turn, split up into website characteristics and cognitive and emotional states. At last, different purchase behaviors were identified and separated into four subsidiary points, namely planned purchase, impulse purchase, repurchase, and non-specific purchase. In order to gather a broader variety of significant scientific work, we also included scientific papers which studied the influence of the regarding cues on purchase intention into our concept matrix, as several scholars utilize the research of purchase intentions to investigate purchase behavior (e.g. Slyke et al. 2006, Zhang et al. 2008, Bianchi and Andrews

2012, Liu et al. 2013). A cue was only counted in the concept matrix if the scholars beforehand hypothesized an impact of the regarding cue on the purchase behavior.

In our content analysis, we classified purchasing behavior as “non-specific” if none of the other acquainted buying behaviors were explicitly mentioned in the regarding literature. Similarly, if one of the other purchase behaviors were addressed, they were classified accordingly. In terms of the influencing characteristics, we integrated every website cue into our concept matrix which also referred to an e-commerce context and was empirically examined, either as an independent, dependent or mediating variable, in the corresponding paper. A website characteristic or emotional and cognitive states were classified as significant if the cue was found to possess a significant impact, either directly or mediated via another variable on purchase behavior or purchase intention. Eventually, we clustered the different methodologies by analyzing scholars’ research methods, research design, and their methodology description.

3.2 Results

In this section, we present the results extracted from the previously described concept matrix. Therefore we inter alia present the most common characteristics and underlying concepts of the examined studies (see Appendix A for a classification of all examined research papers regarding the following findings).

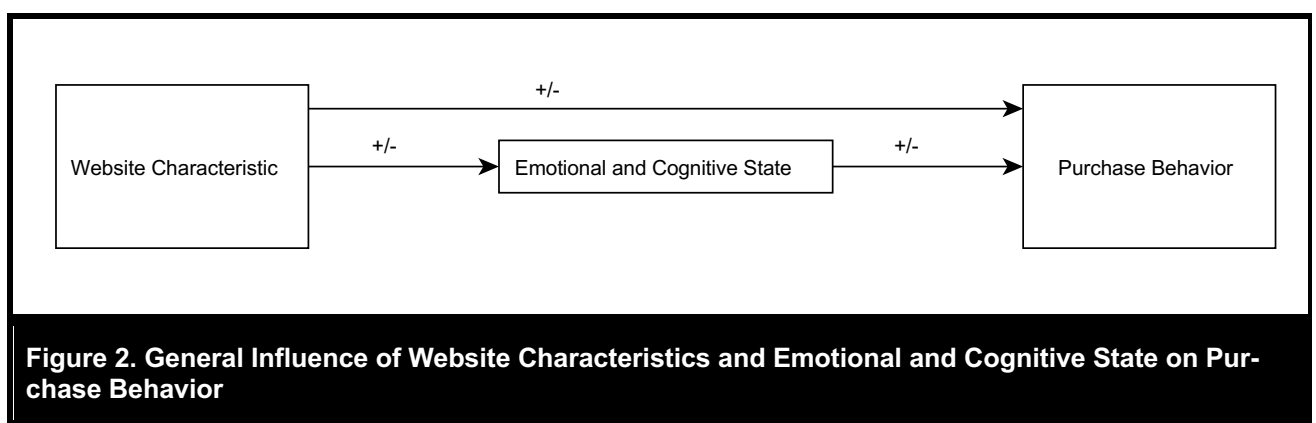
Table 2. Most Common Characteristics in the Examined Studies			
Characteristic	Characteristic Type	Count	% of 38
Trust	Cognitive and Emotional State	21	55
Perceived Risk	Cognitive and Emotional State	12	32
Perceived Usefulness	Cognitive and Emotional State	10	26
Perceived Ease of Use	Cognitive and Emotional State	6	16
Hedonic Value	Cognitive and Emotional State	6	16
Website Design	Website Characteristic	6	16

As shown in Table 2, the most commonly investigated cues are presented. Characteristic types are divided into two separate classes. The first set of characteristics are called website characteristics, whereas other cues are classified as cognitive and

emotional states. The column “count” refers to the number of times, a characteristic was investigated by scholars. The last column represents the count column in percent.

In total, 44 different website related characteristics were examined by the investigated literature. Six of these 44 cues were studied more than four times, namely trust, perceived risk, perceived usefulness (PU), perceived ease of use (PEOU), hedonic value and website design. 30 out of 44 characteristics were investigated once, and eight out of 44 cues were examined between two and four times. We classify 15 of the discovered cues as website characteristics and 29 variables as emotional and cognitive states.

Furthermore, 21 studies utilized a survey approach in their work, whereas zero scholars solely used an experiment to conduct their research. 15 scientists made use of a mix of surveys and experiments. One research paper each utilized a combination of an experiment, a survey and an interview, and a conducted data analysis. Moreover, three scholars investigated a planned purchase. Six papers researched impulse purchase behavior, nine others investigated repurchase behavior. On top of that, 21 academics studied non-specific purchase behavior. 13 examined studies were published between 2001 and 2006, 16 between 2007 and 2012 and nine between 2013 and 2019. The most scientific works, namely six, were published in 2009 (see Appendix A).



As shown in Figure 2, cognitive and emotional states, as well as website characteristics can influence purchase behavior. In the case of cognitive and emotional states, this happens directly, whereas website characteristics can influence purchase behavior either directly or indirectly. The influence on purchase behavior can, either way,

take place in a positive or a negative manner. Website characteristics can be mediated by non-website related characteristics and furthermore also emotional and cognitive states can be mediated by other emotional and cognitive states as proposed by different researchers (e.g. van der Heijden et al. 2003, Chen and Teng 2013). These two factors were omitted in Figure 2 and the following Figure 3 for simplification reasons.

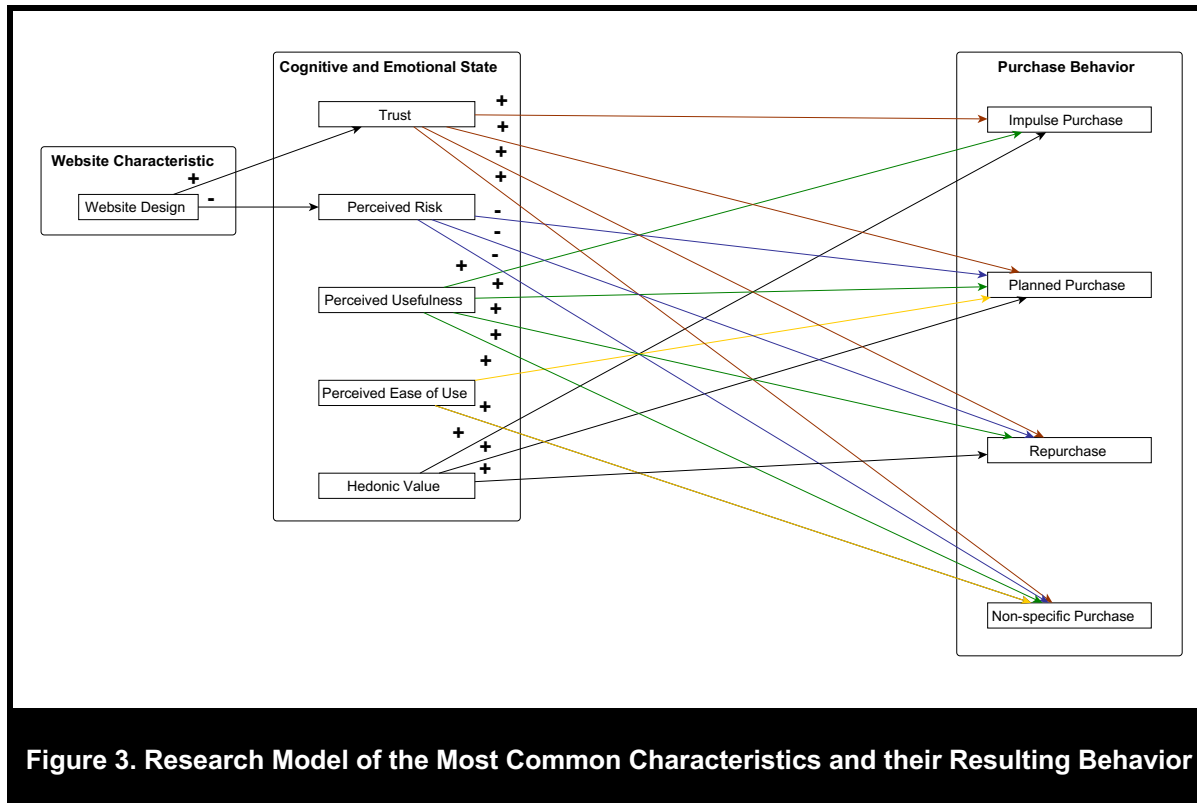


Figure 3 illustrates the relationship between the most commonly researched website characteristics, cognitive and emotional states, and the resulting purchase behavior. The displayed arrows symbolize the influence, single variables have on other variables, either in a positive (symbolized by a plus icon) or negative (symbolized by a minus icon) manner. In total, the most common cues were investigated 61 times. In two instances, researchers conducted several studies and came to different results within their paper. In the following, we examine the individual relationships, explain the single cues in more detail and report the main results.

3.2.1 Trust

Trust has been defined numerous times in the past, frequently in different ways. Therefore, several scholars acknowledged the difficulty to define trust uniformly

(Husted 1998, Rousseau et al. 1998). In consequence, several definitions exist, depending on the discipline the concept of trust is applied to (Everard and Galletta 2006). According to Rousseau et al., the most cited definition is proposed by Mayer et al., which define trust as the “willingness to be vulnerable” (1998, 1995, p. 724, 1998). Although this definition is, in general, also applicable in an online environment, existing differences between offline and online trust must not be forgotten. As stated by Yoon, differences could occur inter alia as of the physical distance between buyer and seller as well as buyer and product, but also because of the lack of salesmen (2002). Therefore, trust in an e-commerce context can be described as possessing an impersonal nature (Gefen 2002). In addition to the first presented definition, many scholars define trust with the help of a specific set of beliefs which primarily deal with benevolence, ability, and integrity (Lee and Turban 2001, McKnight et al. 2002a). Ability includes skills and characteristics which make it possible for a party to possess influence inside a certain domain. Benevolence refers to the extent to which the trusting individual wants to undertake something good to the trusted one, instead of merely maximizing his profit. At last, integrity is referred to as the trusting individual’s perception that the trusted party holds on to a lot of principles, which the trusting party finds reasonable (Mayer and Davis 1999). This set of beliefs can, however, not solely define trust.

The most complete definition of trust in an online environmental context is provided by Gefen et al., as it consists of the two previously presented definition components and adds another aspect. Therefore, we adopt this definition for our paper. The scholars define trust in an e-commerce context as a conglomerate of certain beliefs which are regarding integrity, ability and benevolence of a different party in first hand, an overall ideology that a different party is trustful (2003) and the influence reflected in “feelings of confidence and security in the caring response” of the second party or a combination of both components (Rempel et al. 1985, p. 96, Gefen et al. 2003).

Overall, 21 out of 38 scholars investigated trust. Therefore, it is the most researched concept in our paper.

Table 3. Influence of Trust on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	3	1	5	9	18
Not Significant	0	0	1	2	3
Mixed Results	0	0	0	1	1
Overall	3	1	6	12	22

Table 3 displays the influence of trust on the different purchasing behaviors. The overall counted occasions for trust amounts to 22, as Kim et al. investigated a repurchase situation, as well as a non-specific purchase behavior (2009). All studies hypothesized trust to have a positive impact on purchase intention and behavior. Whereas three scholars investigated a planned purchase situation, and all three studies were found to be significant, only Wu et al. researched trust in an impulse purchase context (2016). In this context, trust was also found to have a positive significant impact on impulse purchases. Out of six scholars, five found trust to possess a significant impact on repurchase behavior. However, most scientists explored non-specific purchase behavior. Regarding non-specific purchase behavior, 75 % found trust to be positively significant, about 17 % came to a non-significant outcome. One paper conducted more than one study, which differed in terms of significance. In conclusion, 18 out of 22 researched cases had a positively significant impact on purchase behavior, three cases were found to be non-significant and one study came to mixed results. Therefore, trust is not only the most researched concept regarding purchasing behavior but also most often found to be significant. In addition, trust is the most researched concept regarding planned purchases, repurchases and non-specific purchase behavior. Moreover, no concept was found to have a significant influence on repurchase behavior, planned purchase and non-specific purchasing behavior more often than trust.

3.2.2 Perceived Risk

Purchase behavior, in general, is risky as the concerned individual has to deal with the resulting consequences of the purchase decision, which are impossible to predict perfectly. Moreover, some of the decisions made could even be uncomfortable (Bau-

er 1960). Similar to the concept of trust, perceived online risk is more pronounced than perceived offline risk as buyers and sellers, as well as buyers and the product of interest, are divided in physical and temporal presence (Tan 1999, Lee et al. 2001, Kim et al. 2009). Furthermore, risk is conceptualized as a subjective belief (Pavlou and Gefen 2004, Kim et al. 2009). Risk itself is defined as the perceived likelihood of loss or harm (Rousseau et al. 1998). Perceived risk in an e-commerce context, on the other hand, is defined as the individual's subjective belief regarding the possible unsafe adverse values from the web transaction with the seller (Kim et al. 2009). We choose this definition since it contains the most important aspects of perceived risk which we previously presented. Perceived risk is a subjective belief, it is uncertain and it comprises a potential of a negative outcome.

Table 4. Influence of Perceived Risk on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	1	0	3	6	10
Not Significant	0	0	0	2	2
Overall	1	0	3	8	12

Perceived risk is hypothesized to have a negative impact on purchase intention and behavior. No scholar investigated the relationship between perceived risk and impulse purchasing. One paper studied perceived risk in the context of planned purchases and found the relationship to be significant. All three researchers who investigated the relationship of perceived risk and repurchasing came to a significant outcome. Most scholars did not specify the purchase behavior. Six out of eight works detected perceived risk to be a significant influential factor in this context, whereas two did not. Regarding non-specific purchase behavior, 75 % found perceived risk to have a significant negative impact on buying behavior and intentions. 25 %, on the other hand, did not find the impact to be significant. Behind trust, perceived risk is not only examined the second most overall but is also found to be significant in the second most cases, namely ten times. Furthermore, all of the most commonly investigated concepts were also researched in the context of impulse purchasing, apart from perceived risk.

3.2.3 Perceived Usefulness and Perceived Ease of Use

Perceived usefulness and perceived ease of use are part of a concept named the technology-acceptance model. As stated previously, TAM is a further development of TRA and predicts the acceptance of technology in a working environment (Davis 1989). Although TAM has been developed in order to examine the acceptance of information technology in workplace settings, the concept can be and has been applied numerous times in different non-organizational fields (e.g. Agarwal and Karahanna 2000, Moon and Kim 2001), including e-commerce (Koufaris 2002, Gefen et al. 2003). The technology-acceptance model basically predicts IT usage.

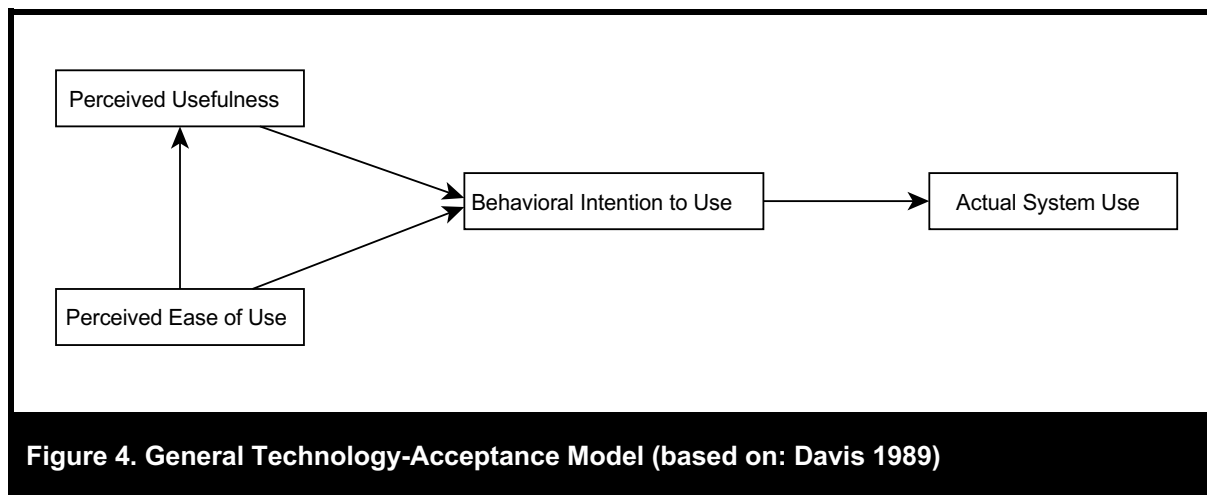


Figure 4 presents perceived usefulness and perceived ease of use as the main determinants for the behavior intention to use a system which, in turn, is the only determinant for actual system use in the model. Furthermore, perceived ease of use is proposed to influence perceived usefulness (Davis 1989).

Perceived ease of use refers to the individual's degree of belief that a utilized system is perceived as effortless, whereas perceived usefulness refers to the level to which an individual thinks that utilizing a certain system would boost its job output (Davis 1989). However, as stated by Gefen et al., perceived usefulness does not only refer to job performance but any general task in non-organizational settings (2003).

According to our conducted literature review, perceived usefulness has been investigated ten times by scholars. Therefore, PU was the third most studies concept in our paper. All researchers hypothesized PU to impact purchase behavior in a positive way.

Table 5. Influence of Perceived Usefulness on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	1	1	0	4	6
Not Significant	1	1	1	1	4
Overall	2	2	1	5	10

PU was studied two times each in the context of impulse and planned to purchase. In both cases, one scholar found the hypothesized impact to be significant, whereas the other scientific work did not. Furthermore, perceived usefulness was investigated once in a repurchasing context, where the researchers came up with a non-significant result. Most often, PU was researched in a non-specific purchasing context. This is the only setting, where scientists discovered predominantly significant outcomes, namely in four out of five occasions. Overall, 40 % of scientific works came to a non-significant result. No other out of the six presented researched concepts was found to have a non-significant influence more often than PU.

PEOU was investigated six times. All researchers hypothesized PEOU to have a positive influence on purchase behavior. PU and PEOU were researched in the same study five times. All of these scientific works also hypothesized the influence of PEOU on PU as proposed in the previously presented TAM model and found it to be positively significant. Moreover, out of these five cases, PEOU and PU were found to have a significant impact on purchase behavior four times each.

Table 6. Influence of Perceived Ease of Use on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	1	1	0	3	5
Not Significant	0	0	0	0	0
Mixed Results	1	0	0	0	1
Overall	2	1	0	3	6

As it was the case with the concept of trust, one paper came to mixed results as they conducted more than one study. However, regarding PEOU, the study took place in a planned purchase context. Another planned purchase study found PEOU to possess a positive significant impact on planned purchase behavior. One scientific work investigated the influence of PEOU on impulse purchasing. This paper came to a significant result. Additionally, three papers studied non-specific purchase behavior and all came to a positively significant result. In total, five out of six study outcomes were declared as positively significant, and one other paper's results were found to be mixed.

3.2.4 Hedonic Value

Enjoyment in the context of e-commerce websites can, for instance, arise when an individual interacts with the website's interface (Parboteeah et al. 2009). Hedonic value (also called perceived enjoyment) has been classified as an affective reaction by former studies (Koufaris 2002) and therefore captivates the visitor's emotional reaction when they interact with the internet (Sun and Zhang 2006). Enjoyment is seen as an intrinsic motivation and refers to the degree to which the pursuit of utilizing a website recognized as being delightful per se, aside from other performance consequences that could be predicted in an online context (Davis et al. 1992).

In total, six scientific works investigated the influence of perceived enjoyment on purchase behavior. All scholars predicted the influence to be positive.

Table 7. Influence of Hedonic Value on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	1	2	1	0	4
Not Significant	0	2	0	0	2
Overall	1	4	1	0	6

Perceived enjoyment has primarily been researched in an impulse purchasing context, with an approximated share of 66,6 %. Therefore, hedonic value is considered as the most often investigated cue and is also found to be the most often significant concept in relation to impulse purchase behavior. Out of four studies, two have been

found to be significant, whereas the other two papers examined could not prove a significant impact on impulse purchasing. Furthermore, one work each conducted research on a planned purchase and repurchasing behavior. Both scientific papers proved a significant impact of hedonic value on the regarding purchase behavior. No paper researched the concept in the context of non-specific purchase behavior. Overall, four studies concluded perceived enjoyment to be a significant antecedent of a certain purchase behavior.

3.2.5 Website Design

Website design reflects a company's identity and supports the representation of the regarding business in an online environment. Each website consists of a variety of different factors which, in total, reflect the total website design. These factors are defined as "the features, components, and information used in developing e-commerce websites" (Song and Zahedi 2005, p. 1223). The website itself can be seen as the interface between the seller and buyer (Song and Zahedi 2005).

As with hedonic value and PEOU, website design was investigated six times across our literature review. All six researchers hypothesized that website design would have a positive influence on individuals purchase behavior.

Table 8. Influence of Website Design on Purchase Behavior

	Planned Purchase	Impulse Purchase	Repurchase	Non-specific Purchase	Overall
Significant	0	1	2	2	5
Not Significant	0	1	0	0	1
Overall	0	2	2	2	6

No scholar studied the impact of website design on planned purchases as opposed to impulse purchases. One paper found the impact of website design on impulse purchases to be significant, whereas the other paper did not. Two scientific works each dealt with repurchase and non-specific purchase behavior. In all four cases, the outcome was considered significant. In total, five out of six scholars found website de-

sign to possess a significant influence on purchase behavior. Approximately 83 % of the conducted studies are considered significant.

3.3 Discussion

In this chapter, we interpret and discuss the main results of our conducted literature review. Thereby, we are able to answer our initial research question and to designate limitations of this study. Furthermore, we discuss the contributions, this study has on theory and practice.

3.3.1 Discussion

To the best of our knowledge, there is no other existent scientific paper that has examined the impact of website characteristics on different purchasing behaviors in an e-commerce context in the form of a literature review and put forward a synonymous research question. This means that prior research has studied if certain cues or concepts have an impact on buying behavior, but not which are the most important ones.

The objective of this literature review was to discover which website-related characteristics are the most significant cues regarding purchase behavior of consumers on e-commerce websites. The result of this research shows that a plethora of characteristics exist. In total, 44 different characteristics, either classified as website characteristics or emotional and cognitive states, were discovered. This comes to no surprise as websites, and e-commerce platforms, in particular, are highly complex constructs. Six of those characteristics were studied especially often. Simultaneously, these six cues were most often found to be significant. Therefore, this paper suggests that trust, (found significant 18 times) perceived risk (found significant ten times), perceived usefulness (found significant six times), perceived ease of use (found significant five times), hedonic value (found significant four times) and website design (found significant five times) are considered as the most significant website-related characteristics influencing online purchasing behavior of consumers on e-commerce websites. In detail, we suggest trust as the most significant variable regarding planned purchase behavior, repeat purchase behavior and non-specific purchase behavior as it is researched and found to be significant most often by the investigated work. Simultaneously, we suggest hedonic value as the most influential cue concerning impulse purchase behavior.

Table 9. Most common Characteristics and Significance Frequency in the Examined Studies

Characteristic	Characteristic Type	Count ⁴	Significance frequency	In %
Trust	Cognitive and Emotional State	22	18	82
Perceived Risk	Cognitive and Emotional State	12	10	83
Perceived Usefulness	Cognitive and Emotional State	10	6	60
Perceived Ease of Use	Cognitive and Emotional State	6	5	83
Website Design	Website Characteristic	6	5	83
Hedonic Value	Cognitive and Emotional State	6	4	67

A possible explanation for this result could be that the six presented cues have already been extensively researched in several different settings. For instance, PU and PEOU were originally conceptualized by Davis in order to predict the acceptance of technology in a workplace setting (1989). As the TAM is a fitting and well-researched model in IS literature, an application in an e-commerce context is only logical.

Out of the six most researched cues we only characterized one as a website characteristic, namely website design. A potential explanation for this is that we primarily conducted research from IS literature. Overall, 19 papers are only rated in the IS field. 15 scientific works are inter alia rated in the IS field, three papers are rated in the marketing field and one further work is rated in the general business management field. Out of three marketing journals, two investigated at least one website characteristic. In the case of IS journals and conferences, 42 % studied at least one website characteristic. This could imply that marketing journals investigate website characteristics more often than IS related journals. Therefore, this is a possible but no definitive explanation as the number of investigated marketing journals is particularly small.

⁴ Note that the column "count" in Table 9 refers to the frequency of a purchase behavior being investigated and not the number of researchers studying purchase behavior in general.

Another finding is that many of the examined cues differ in significance. However, this is not utterly surprising as a plethora of scientists utilized different antecedents, measuring the regarding cues. For instance, although Slyke et al. and Kim et al. investigated perceived risk, different antecedents were outlined in their research models (2006, 2009). In addition, surveys and experiments were partially conducted in different ways. For example, scholars who utilized a survey have used differing questions in several cases to gather results for their studies, as seen for instance when comparing Sullivan and Kim's questions with questions of Zhang et al. (2018, 2011). Furthermore, varying purchase behavior concepts were studied and comprised in our concept matrix. As a result, the numbers of significant studies are varying from purchase behavior to purchase behavior. For example, all three studies investigating the influence of perceived risk on repurchase behavior found the impact to be significant. Contrary, 25 % of conducted studies found the influence of perceived risk on non-specific purchase behavior to be non-significant. As another possible reason, scholars applied dissimilar methodologies. Whereas some scholars, for example, utilized a purely survey-based approach, other scientists conducted a mixture of surveys and experiments. Moreover, the researcher's examined e-commerce platform could also be an important reason for differing results regarding significance. Whereas Sullivan and Kim asked questions regarding the individual's most recent shopping experience, and were therefore not providing a specified e-commerce platform, Chiu et al. asked questions referring to a specific website, namely Yahoo!Kimo (2018, 2014).

Surprisingly, over half of the examined papers in this thesis do not specify which purchase behavior they observe. Various potential reasons exist for this phenomenon. First, if scholars are not able to control every of their studies participants, it is nearly impossible to determine the exact numbers of occurring purchase behaviors. For instance, Mallapragada et al. assembled a data set containing over 770,000 individual browsing sessions and nearly 10,000 actual purchases. Because of this humongous amount of data, it is virtually impossible to categorize the exact purchase behavior of every buyer (2016). In return, it is simpler to classify the behavior, if a website is created especially for the conducted study. However, this study design can be not only time consuming, but also expensive to put through. Possibly, researchers could also refer to a special type of purchase behavior but decide not to define it. Exemplary, Ganguly et al. implement repurchase elements in their questions to measure pur-

chase intention. However, they did not define purchase intention explicitly as a repurchase situation (2010). At last, scholars also mix different types of purchase behaviors when consulting survey participants. For example, Kim et al. utilize elements of planned purchases, impulse purchases and repurchases in their research design and questionnaire. Conversely, that does not mean the researchers did not put effort into their study. Instead, the scholars could potentially have deliberately decided to measure a mixture of these purchase behaviors (2009).

As a last major finding, we found trust to be the most significant cue in three out of four purchasing behaviors, namely planned purchase, repurchase and non-specific purchase behavior. Regarding impulse purchasing behavior, trust was only investigated by one scientific work. In contrast, hedonic value has been researched six times in total. Out of these six papers, four *inter alia* researched the impact of hedonic value on impulse purchase behavior. Although only two out of four studies found hedonic value to have a significant influence on impulse purchase behavior, it is most often significant. One possible explanation for this result could be that hedonic value acts as a more influential cue in comparison to trust or other concepts. An impulse purchase is defined as spontaneous and comes along with a lack of reflection (Piron 1991). As trust builds up over time, it is more difficult to utilize this concept as an explanation for a spontaneous reaction (Lewicki and Bunker 1995). However, impulse purchases can theoretically also occur after an individual already collected prior experiences with the regarding online environment and certainly does not account solely for this result. Therefore, this result can be considered fragile in the first place, as none of the six cues were investigated particularly frequently in the context of impulse purchasing.

3.3.2 Implications for Theory and Practice

This study provides several contributions to existing research and also for e-commerce platforms. First, we examined which characteristics are investigated most often by scholars to influence several purchase behaviors. Therefore, we were able to derive the most important website characteristics and emotional and cognitive states in the eyes of the current state of research. To the best of our knowledge, this is the first paper conducting a literature review which is investigating the influence of several variables on different purchase behaviors. Therefore, we are widening the research field by applying a new research methodology to this specific field. Second,

according to other studies (e.g. Kim and Peterson 2017), trust is suggested as a crucial component in customers purchase decisions. Analogous, in our paper, trust is the cue found to be significant most often. Third, we separated website characteristics and emotional and cognitive states and outlined the differences between these two concepts in detail. In prior research, this differentiation is often disregarded. This separation led to the realization that website characteristics are often dismissed in IS research. Moreover, emotional and cognitive states are the primarily examined factors. Fourth, scholars oftentimes do not define which exact purchase behavior they investigate. Out of 38 papers, 21 did not specify in detail, which purchase behavior is examined. A specific definition of the studied purchase behavior supports research, as scientific work can be allocated more easily to the matching topic.

Besides theoretical implications, we are also able to provide helpful practical implications. First, all six website characteristics and emotional and cognitive states can be addressed over time on the corresponding website as every variable is theoretically increasing purchase intentions and behavior. However, close attention should be paid to the purchase behavior, the variable is influencing. For instance, perceived ease of use is hypothesized to have no impact on repeat purchase behavior or at least it has not been investigated to our knowledge. Therefore, if an e-commerce website primarily aims to generate profit from repeat purchases, PEOU may not need to be improved, at least in terms of influencing buying behavior. Second, e-commerce platform managers can utilize this study to facilitate the decision of which marketing instrument should be implemented. In order to maximize profit, the responsible party has to decide on the most advantageous and low-cost method. Therefore, it is indispensable to seek out which website characteristics and emotional and cognitive states have the greatest and most consistent impact on purchase behavior. With the help of this paper, an e-commerce platform manager can more easily decide, which strategy should be implemented to achieve the desired purchase behavior from customers more frequently. Third, trust can be used to encourage planned purchase behavior as well a repeat purchase behavior. In the case of impulse purchase behavior, hedonic value can be enhanced by e-commerce managers in order to increase this specific purchase behavior. Fourth, through this paper, the high priority of web design is emphasized. As shown in our paper and Figure 3, website design is hypothesized

to influence trust in a positive manner, whereas perceived risk is reduced. Therefore, good web design can lead to a purchase at last.

3.3.3 Limitations

Despite the fact that we applied several exclusion and inclusion rules to guarantee certain thematic proximity between the papers, some differences between these studies do exist and need to be addressed. First, scholars utilized different methodologies to gather results. Whereas some researchers solely relied on a survey (e.g. Bianchi and Andrews 2012), other scientists related their questions to existing websites (e.g. Chiu et al. 2014). Another group of scholars developed new websites, whereby they put through their scientific work (e.g. Everard and Galletta 2006). In order to gather a sufficient amount of research papers for our concept matrix, we included scientific work with varying research methods. However, this means that differences in results may have come about because of this. An individual who is only asked about certain behaviors could potentially act in another way if the results are directly measured on a created website. As, for instance, impulse purchases can be acted upon without a lot of reflection and on-the-spot, the results could vary hereby (Piron 1991, Beatty and Ferrell 1998). Moreover, behavior could alternate even if only the websites and the industry they act in are different. Second, demographics also varied in some of the studies. Younger individuals, for example, use the World Wide Web more frequently than senior citizens (Niehaves and Plattfaut 2014) and could, therefore, be more likely to purchase goods and services over the internet beforehand. Furthermore, scholars conducted their studies in different countries. As the internet is used in varying amounts across different countries (Internet Live Stats 2016), the applicability of this literature research to a specific e-commerce shop, for instance in Germany, could be considered as limited. On the other side, the broad spectrum of demographical characteristics and survey methods provides a more general overview of this topic than a study that is restricted to one country or a group of individuals who are similar in their demographic characteristics.

Furthermore, although we conducted an extensive literature review, it is impossible to collect every relevant study. For instance, we did not explicitly search for scientific work in marketing-specific journals as we focused on IS literature for this paper. Because of this and other reasons, the list of website characteristics and emotional and cognitive states is not complete.

At last, also the procedure we utilized to determine non-specific purchase behavior needs to be mentioned. Although we have applied the procedure consistently across all studies, the criteria on which we classified the individual papers are not irrevocable. For that reason, altering the classifying rules potentially leads to a different number of non-specific purchase-related papers.

4 Conclusion

Purchasing goods online has long become commonplace for a large number of individuals. The ever-increasing competition, therefore, requires e-commerce platforms to know how and to constantly improve their web appearance. This is a crucial factor in staying or becoming competitive. In this work, we questioned, which characteristics influence online purchasing behaviors on e-commerce websites the most significant. After conducting our study, we suggest six characteristics to be the most significant ones out of all collected cues, namely trust, perceived risk, perceived usefulness, perceived ease of use, website design and hedonic value. We furthermore subdivided purchasing behavior into four subcategories, namely planned purchases, repeat purchases, impulse purchases and non-specific purchases and characteristics into website characteristics and emotional and cognitive states. For every behavior, other than impulse purchases, we found trust to be the dominant influencing characteristic in terms of research and significance frequency. In the case of impulse purchasing behavior, we found hedonic value to be the dominant characteristic in terms of research and significance frequency. In order to establish which cues are the most significant ones, we first defined elementary terms. Subsequently, we carried out an extensive literature review. Thereby, we were able to put through a meaningful concept matrix and evaluate how frequently the collected papers investigated different cues. Additionally, we analyzed how often those discovered website characteristics and emotional cognitive states were found to be statistically significant. The previously mentioned ranking list was drawn up based on these two evaluations.

This research paper contributes to IS literature in a theoretical and practical manner. As mentioned beforehand, we examined which variables influence different purchase behaviors the most. As far as we know, this has not been put through in any other paper. Furthermore, we not only support the concept of trust to be a strong antecedent of purchase behavior. We also draw a clear line between the two subcategories influencing online purchasing behavior on a website, namely website characteristics and emotional and cognitive states. As a last theoretical contribution, we help future research in drawing clear lines between different purchase behaviors by defining them extensively. In a practical manner, we provide a guideline for e-commerce managers with which responsible employees can increase the desired purchase behavior. This guideline moreover simplifies the decision-making process. In general,

the conducted literature review emphasizes the importance of an excellent e-commerce website, conveying important emotional and cognitive states such as trust, hedonic value and possessing influential website characteristics such as good website design as those cues *inter alia* help to increase sales and therefore profit.

Out of this paper, several inspirations can be drawn for further research. As seen throughout this literature review, purchase behavior on an e-commerce website is a multidimensional construct. The influence of website design on trust and perceived risk, for instance, has already been examined. However, the influence of web design on perceived usefulness, perceived ease of use and hedonic value has not been investigated yet to the best of our knowledge. Therefore, another scientific work could investigate just that. As a further development of this review, the six examined characteristics could also be investigated empirically together. Furthermore, this prospective study can be put through throughout different demographics in order to understand behavior in a more precise manner. At last, as trust is suggested to be a very important characteristic to influence purchase behavior, future studies could examine, which antecedents influence online trust. Despite the previously mentioned limitations, we believe that the answer to our conducted research question presents useful contributions to assist companies to improve their website and thus their conversion rate.

References

- Agarwal, R., and Karahanna, E. 2000. "Time Flies When You're Having Fun: Cognitive Absorption and Beliefs about Information Technology Usage," *MIS Quarterly* (24:4), pp. 665-694.
- Ahuja, M., Profile, S., Ahuja, M., Gupta, B., and Raman, P. 2003. "An empirical investigation of online consumer purchasing behavior," *Communications of the ACM*, pp. 145-151.
- Ajzen, I. 1985. "From Intentions to Actions: A Theory of Planned Behavior," in *Action Control*, J. Kuhl and J. Beckmann (eds.), Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 11-39.
- Ajzen, J. 1991. "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Process* (50), pp. 179-211.
- Balabanis, G., and Reynolds, N. L. 2001. "Consumer attitudes towards multi-channel retailers' Web sites: The role of involvement, brand attitude, Internet knowledge and visit duration," *Journal of Business Strategies; Huntsville* (18:2), pp. 105-132.
- Beatty, S. E., and Ferrell, M. E. 1998. "Impulse Buying: Modeling Its Precursors," (74:2), pp. 169-191.
- Bauer, R. 1960. "Consumer Behavior as Risk Taking," in *Proceedings of the 43rd National Conference of the American Marketing Association*, pp. 389-398.
- Bianchi, C., and Andrews, L. 2012. "Risk, trust, and consumer online purchasing behaviour: a Chilean perspective," *International Marketing Review* (29:3), pp. 253-275.
- Boyer, K. K., and Olson, J. R. 2002. "Drivers of Internet Purchasing Success," *Production and Operations Management* (11:4), pp. 480-498.
- Cambridge Dictionary. 2020a. DEFINE | Bedeutung im Cambridge Englisch Wörterbuch. Retrieved 9. January, 2020, from <https://dictionary.cambridge.org/de/worterbuch/englisch/define>.
- Cambridge Dictionary. 2020b E-COMMERCE | Bedeutung im Cambridge Englisch Wörterbuch. Retrieved 9. January, 2020, from <https://dictionary.cambridge.org/de/worterbuch/englisch/e-commerce>.
- Celsi, R. L., and Olson, J. C. 1988. "The Role of Involvement in Attention and Comprehension Processes," *Journal of Consumer Research* (15:2), pp. 210-224.
- Chaffey, D. 2014. *E-Business & E-Commerce Management* (6th ed.). FT Prentice Hall, p. 26.
- Chen, M.-Y., and Teng, C.-I. 2013. "A comprehensive model of the effects of online store image on purchase intention in an e-commerce environment," *Electronic Commerce Research* (13:1), pp. 1-23.
- Childers, T. L., Carr, C. L., Peck, J., and Carson, S. 2001. "Hedonic and utilitarian motivations for online retail shopping behavior," *Journal of Retailing* (77:4), pp. 511-535.
- Chiu, C.-M., Wang, E. T. G., Fang, Y.-H., and Huang, H.-Y. 2014. "Understanding customers' repeat purchase intentions in B2C e-commerce: the roles of utilitarian value, hedonic value and perceived risk," *Information Systems Journal* (24:1), pp. 85-114.
- Clover, V. T. 1950. "Relative Importance of Impulse-Buying in Retail Stores," *Journal of Marketing* (15:1), pp. 66-70.
- Cui, X., and Lai, V. S. 2013. "E-Loyalty to Online Auction Websites: A Stimulus-Organism-Response Model," in *Proceedings of the Pacific Asia Conference on Information Systems*. Jeju, Korea.

- Curtis, T., Abratt, R., Rhoades, D. L., and Dion, P. 2013. "Customer Loyalty, Repurchase and Satisfaction: A Meta-Analytical Review," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior* (24), pp. 1-26.
- Darpy, D. 1997. "Une variable médiatrice du report d'achat : la procrastination," in *XIIIème Congrès de l'Association Française de Marketing*, Toulouse, France, pp. 1-23.
- Davis, F. D. 1989. "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly* (13:3), pp. 319-340.
- Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. 1992. "Extrinsic and Intrinsic Motivation to Use Computers in the Workplace," *Journal of Applied Social Psychology* (22:14), pp. 1111-1132.
- Dittmar, H., and Drury, J. 2000. "Self-Image - Is it in the Bag? A Qualitative Comparison Between 'Ordinary' and 'Excessive' Consumers," *Journal of Economic Psychology* (21), pp. 109-142.
- Eid, M. 2011. "Determinants of E-Commerce Customer Satisfaction, Trust, and Loyalty in Saudi Arabia," *Journal of Electronic Commerce Research*, (12:1), pp. 78-93.
- Eroglu, S. A., Machleit, K. A., and Davis, L. M. 2001. "Atmospheric qualities of online retailing A conceptual model and implications," *Journal of Business Research* (54:2), pp. 177-184.
- Eroglu, S. A., Machleit, K. A., and Davis, L. M. 2003. "Empirical testing of a model of online store atmospherics and shopper responses," *Psychology & Marketing* (20:2), pp. 139-150.
- Everard, A., and Galletta, D. F. 2006. "How Presentation Flaws Affect Perceived Site Quality, Trust, and Intention to Purchase from an Online Store," *J. of Management Information Systems* (22:3), pp. 55-96.
- Fang, Y., Qureshi, I., Sun, H., McCole, P., Ramsey, E., & Lim, K. H. 2014. "Trust, Satisfaction, and Online Repurchase Intention: The Moderating Role of Perceived Effectiveness of E-Commerce Institutional Mechanisms," *MIS Quarterly* (38:2), pp. 407-427.
- Fishbein, M. and Ajzen, I. *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, Reading, MA, USA, 1975.
- Ganguly, B., Dash, S. B., Cyr, D., and Head, M. 2010. "The effects of website design on purchase intention in online shopping: the mediating role of trust and the moderating role of culture," *International Journal of Electronic Business* (8:4/5), pp. 302-330.
- Gefen, D., 2002. "Reflections on the dimensions of trust and trustworthiness among online consumers," *Database for Advances in Information Systems* (33:3), pp. 38-53.
- Gefen, D., Karahanna, E., and Straub, D. W. 2003. "Trust and TAM in Online Shopping: An Integrated Model," *MIS Quarterly* (27:1), pp. 51-90.
- George, J. F. 2004. "The theory of planned behavior and Internet purchasing," *Internet Research* (14:3), pp. 198-212.
- Hoffman, D. L., and Novak, T. P. 1996. "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing* (60:3), pp. 50-68.
- Husted, B. W. 1998. "The Ethical Limits of Trust in Business Relations," *Business Ethics Quarterly* (8:2), pp. 233-248.
- Inman, J. J., and Zeelenberg, M. 2002. "Regret in Repeat Purchase versus Switching Decisions: The Attenuating Role of Decision Justifiability," *Journal of Consumer Research* (29:1), pp. 116-128.

- Internet Live Stats. 2016. Internet Users by Country (2016) - Internet Live Stats. Retrieved 17. February, 2020, from <https://www.internetlivestats.com/internet-users-by-country/>.
- Iyer, E. S. 1989. "Unplanned Purchasing: Knowledge of Shopping Environment and Time Pressure," *Journal of Retailing* (65:1), pp. 40-57.
- Jacoby, J. 2002. "Stimulus-Organism-Response Reconsidered: An Evolutionary Step in Modeling (Consumer) Behavior," *Journal of Consumer Psychology* (12:1), pp. 51-57.
- Jiang, Z., Chan, J., Tan, B. C. Y., and Chua, W. S. 2010. "Effects of Interactivity on Website Involvement and Purchase Intention," *Journal of Association for Information System* (11:1), pp. 34-59.
- Kagan, S., and Bekkerman, R. 2018. "Predicting Purchase Behavior of Website Audiences," *International Journal of Electronic Commerce* (22:4), pp. 510-539.
- Kalakota, R., and Whinston, A. B., editors. 1997. *Electronic Commerce: A Manager's Guide*, Addison-Wesley Professional, Reading, MA.
- Keeney, R. L. 1999. "The Value of Internet Commerce to the Customer," *Management Science* (45:4), pp. 533-542.
- Kim, D. J., Ferrin, D. L., and Rao, H. R. 2009. "Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration," *Information Systems Research* (20:2), pp. 237-257.
- Kim, Y., and Peterson, R. A. 2017. "A Meta-analysis of Online Trust Relationships in E-commerce," *Journal of Interactive Marketing* (38), pp. 44-54.
- King, R. C., Schilhavy, R. A. M., Chowa, C., and Chin, W. W. 2016. "Do Customers Identify with Our Website? The Effects of Website Identification on Repeat Purchase Intention," *International Journal of Electronic Commerce* (20:3), pp. 319-354.
- Koufaris, M. 2002. "Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior," *Information Systems Research* (13:2), pp. 205-223.
- Koufaris, M., Kambil, A., and Labarbera, P. A. 2001. "Consumer Behavior in Web-Based Commerce: An Empirical Study," *International Journal of Electronic Commerce* (6:2), pp. 115-138.
- Lee, D., Park, J., and Ahn, J. 2001. "On the Explanation of Factors Affecting E-Commerce Adoption," in *ICIS*, New Orleans, Louisiana, USA, pp. 109-120.
- Lee, J. A., and Kacen, J. J. 2008. "Cultural influences on consumer satisfaction with impulse and planned purchase decisions," *Journal of Business Research* (61:3), pp. 265-272.
- Lee, M. K. O., and Turban, E. 2001. "A Trust Model for Consumer Internet Shopping," *International Journal of Electronic Commerce* (6:1), pp. 75-91.
- Lewicki, R. J., and Bunker, B. B. 1995. *Trust in relationships: a model of trust development and decline*, Columbus, Ohio: Max M. Fisher College of Business, Ohio State University.
- Liang, T.-P., and Lai, H.-J. 2002. "Effect of store design on consumer purchases: van empirical study of on-line bookstores," *Information & Management* (39), pp. 431-444.
- Lim, K. H., Sia, C. L., Lee, M. K. O., and Benbasat, I. 2006. "Do I Trust You Online, and If So, Will I Buy? An Empirical Study of Two Trust-Building Strategies," *Journal of Management Information Systems* (23:2), pp. 233-266.
- Lin, J., and Chan, H. C. 2009. "Understanding the Beliefs and Intentions in Search and Purchase Functions in an E-Commerce Web Site," *IEEE Transactions on Engineering Management* (56:1), pp. 106-114.

- Liu, Y., Li, H., and Hu, F. 2013. "Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions," *Decision Support Systems* (55:3), pp. 829–837.
- Loiacono, E. T., Watson, R. T., and Goodhue, D. L. 2007. "WebQual: An Instrument for Consumer Evaluation of Web Sites," *International Journal of Electronic Commerce* (11:3), pp. 51–87.
- Mahmood, M. A., Mukhopadhyay, S., and Joseph, J. L. 2009. "Consumer purchasing behaviour and e-commerce adoption factors," *International Journal of Electronic Business* (7:4), pp. 348–370.
- Mallapragada, G., Chandukala, S. R., and Liu, Q. 2016. "Exploring the Effects of 'What' (Product) and 'Where' (Website) Characteristics on Online Shopping Behavior," *Journal of Marketing* (80:2), pp. 21–38.
- Mavlanova, T., Benbunan-Fich, R., and Lang, G. 2016. "The role of external and internal signals in E-commerce," *Decision Support Systems* (87), pp. 59–68.
- Mayer, R. C., and Davis, J. H. 1999. "The Effect of the Performance Appraisal System on Trust for Management: A Field Quasi-Experiment," *Journal of Applied Psychology* (84:1), pp. 123–136.
- Mayer, R. C., Davis, J. H., and Schoorman, F. D. 1995. "An Integrative Model of Organizational Trust," *The Academy of Management Review* (20:3), pp. 709–734.
- McKnight, D. H., Choudhury, V., and Kacmar, C. 2002a. "Developing and Validating Trust Measures for e-Commerce: An Integrative Typology," *Information Systems Research* (13:3), pp. 334–359.
- McKnight, D. H., Choudhury, V., and Kacmar, C. 2002b. "The impact of initial consumer trust on Intentions to transact with a web site: a trust building model," *Journal of Strategic Information Systems* (11:3/4), pp. 297–323.
- Mehrabian, A., and Russell, J. A. 1974. *An approach to environmental psychology*, Cambridge, MA, USA: The MIT Press.
- Moon, J., and Kim, Y. 2001. "Extending the TAM for a World-Wide-Web context," *Information and Management* (38:4), pp. 217–230.
- Mummalaneni, V. 2005. "An empirical investigation of Web site characteristics, consumer emotional states and on-line shopping behaviors," *Journal of Business Research* (58:4), pp. 526–532.
- Niehaves, B., and Plattfaut, R. 2014. "Internet adoption by the elderly: employing IS technology acceptance theories for understanding the age-related digital divide," *European Journal of Information Systems* (23:6), pp. 708–726.
- Li, N., and Zhang, P. 2002. "Consumer Online Shopping Attitudes and Behavior: An Assessment of Research," in *Proceedings of the 8th Americas Conference on Information System*, Dallas, TX, USA, pp. 508–517.
- Parboteeah, D. V., Valacich, J. S., and Wells, J. D. 2009. "The Influence of Website Characteristics on a Consumer's Urge to Buy Impulsively," *Information Systems Research* (20:1), pp. 60–78.
- Pavlou, P. A., and Gefen, D. 2004. "Building Effective Online Marketplaces with Institution-Based Trust," *Information Systems Research* (15:1), pp. 37–59.
- Pelet, J.-É., and Papadopoulou, P. 2012. "The effect of colors of e-commerce websites on consumer mood, memorization and buying intention," *European Journal of Information Systems* (21:4), pp. 438–467.

- Piron, F. 1991. "Defining Impulse Purchasing," *Advances in Customer Research* (18), pp. 509-514.
- Piron, F. 1993. "A Comparison of Emotional Reactions Experienced By Planned, Unplanned and Impulse Purchasers," *ACR North American Advances* (20), pp. 341-344.
- Rempel, J. K., Holmes, J. G., and Zanna, M. P. 1985. "Trust in Close Relationships," *Journal of Personality and Social Psychology* (49:1), pp. 95-112.
- Rook, D. W. 1987. "The Buying Impulse," *Journal of Consumer Research* (14:2), pp. 189-199.
- Rook, D. W., and Fisher, R. J. 1995. "Normative Influences on Impulsive Buying Behavior," *Journal of Consumer Research* (22:3), pp. 305-313.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., and Camerer, C. 1998. "Introduction to Special Topic Forum: Not so Different after All: A Cross-Discipline View of Trust," *The Academy of Management Review* (23:3), pp. 393-404.
- Ryte. 2018. Conversion Rate - Definition und Beispiele! - Ryte Wiki. Retrieved 18. February, 2020, from https://de.ryte.com/wiki/Conversion_Rate.
- Samuelson, W., and Zeckhauser, R. 1988. "Status quo bias in decision making," *Journal of Risk and Uncertainty* (1:1), pp. 7-59.
- Schlosser, A. E., White, T. B., and Lloyd, S. M. 2006. "Converting Web Site Visitors into Buyers: How Web Site Investment Increases Consumer Trusting Beliefs and Online Purchase Intentions," *Journal of Marketing* (70:2), pp. 133-148.
- Seiders, K., Voss, G. B., Grewal, D., and Godfrey, A. L. 2005. "Do Satisfied Customers Buy More? Examining Moderating Influences in a Retailing Context," *Journal of Marketing* (69:4), pp. 26-43.
- Sheppard, B. H., Hartwick, J., and Warshaw, P. R. 1988. "The Theory of Reasoned Action: A Meta-Analysis of Past Research with Recommendations for Modifications and Future Research," *Journal of Consumer Research* (15:3), pp. 325-343.
- Simon, H. A. 1955. "A Behavioral Model of Rational Choice," *Quarterly Journal of Economics* (69), pp. 99-118.
- Slyke, C. V., Shim, J. T., Johnson, R. D., and Jiang, J. J. 2006. "Concern for Information Privacy and Online Consumer Purchasing," *J. AIS* (7), pp. 415-444.
- Song, J. and Zahedi, F. 2001. "Web design in e-commerce: a theory and empirical analysis", in *Proceedings of the 22nd International Conference on Information Systems*, New Orleans, LA, USA, pp. 205-220.
- Song, J., and Zahedi, F. "Mariam" 2005. "A Theoretical Approach to Web Design in E-Commerce: A Belief Reinforcement Model," *Management Science* (51:8), pp. 1219-1235.
- Spears, N. 2006. "Just moseying around and happening upon it versus a master plan: Minimizing regret in impulse versus planned sales promotion purchases," *Psychology & Marketing* (23:1), pp. 57-73.
- Statista. 2019. Global online shopping conversion rate 2019. in Statista Retrieved 18. February, 2020, from <https://www.statista.com/statistics/439576/online-shopper-conversion-rate-worldwide/>.
- Statista. 2020. eCommerce - weltweit | Statista Marktprognose. in Statista Retrieved 18. February, 2020, from <https://de.statista.com/outlook/243/100/e-commerce/weltweit>.
- Stern, H. 1962. "The Significance of Impulse Buying Today," *Journal of Marketing* (26:2), pp. 59-62.

- Sullivan, Y. W., and Kim, D. J. 2018. "Assessing the effects of consumers' product evaluations and trust on repurchase intention in e-commerce environments," *International Journal of Information Management* (39), pp. 199–219.
- Sun, H., and Zhang, P. 2006. "The Role of Affect in IS Research: A Critical Survey and a Research Model," in *Human-Computer Interaction and Management Information Systems: Foundations*.
- Tan, S. J. 1999. "Strategies for reducing consumers' risk aversion in Internet shopping," *Journal of Consumer Marketing* (16:2), pp. 163–180.
- Thirumalai, S., and Sinha, K. K. 2009. "Customization Strategies in Electronic Retailing: Implications of Customer Purchase Behavior*," *Decision Sciences* (40:1), pp. 5–36.
- Ting-Peng Liang, and Hung-Jeng Lai 2000. "Electronic store design and consumer choice: an empirical study," in *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences*, Maui, HI, pp. 1-10.
- Tsai, J. Y., Egelman, S., Cranor, L., and Acquisti, A. 2011. "The Effect of Online Privacy Information on Purchasing Behavior: An Experimental Study," *Information Systems Research* (22:2), pp. 254–268.
- Valacich, J. S., Parboteeah, D. V., and Wells, J. D. 2007. "The online consumer's hierarchy of needs," *Communications of the ACM* (50:9), pp. 84–90.
- van der Heijden, H., Verhagen, T., and Creemers, M. 2003. "Understanding online purchase intentions: contributions from technology and trust perspectives," *European Journal of Information Systems* (12:1), pp. 41–48.
- Venkatesh, V. 2000. "Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model," *Information Systems Research* (11:4), pp. 342–365.
- Vhbonline. 2019. Gesamtliste - vhbonline.de. Retrieved 19. January, 2020, from <https://vhbonline.org/vhb4you/vhb-jourqual/vhb-jourqual-3/gesamtliste>.
- Wang, H., Du, R., and Olsen, T. 2018. "Feedback mechanisms and consumer satisfaction, trust and repurchase intention in online retail," *Information Systems Management* (35:3), pp. 201–219.
- Wells, J. D., Parboteeah, D. V., and Valacich, J. S. 2011a. "Online Impulse Buying: Understanding the Interplay between Consumer Impulsiveness and Website Quality," *J. AIS* (12:1), pp. 32–56.
- Wells, J. D., Valacich, J. S., and Hess, T. J. 2011b. "What Signal Are You Sending? How Website Quality Influences Perceptions of Product Quality and Purchase Intentions," *MIS Quarterly* (35:2), pp. 373–396.
- West, C. J. 1951. "Results of Two Years of Study into Impulse Buying," *Journal of Marketing* (15:3), pp. 362–363.
- Wu, G., Hu, X., and Wu, Y. 2010. "Effects of Perceived Interactivity, Perceived Web Assurance and Disposition to Trust on Initial Online Trust," *Journal of Computer-Mediated Communication* (16:1), pp. 1–26.
- Wu, I. L., Chen, K. W., & Chiu, M. L. 2016. "Defining key drivers of online impulse purchasing: A perspective of both impulse shoppers and system users," *International Journal of Information Management* (36:3), pp. 284–296.
- Yoon, S.-J. 2002. "The antecedents and consequences of trust in online-purchase decisions," *Journal of Interactive Marketing* (16:2), pp. 47–63.

- Zhang, Y., Fang, Y., Wei, K. K., Ramsey, E., McCole, P., and Chen, H. 2008. "Repurchase Behavior in B2C eCommerce-a Relationship Quality Perspective," in Proceedings of the Pacific Asia Conference on Information Systems, pp. 1-12.
- Zhang, Y., Fang, Y., Wei, K., Ramsey, E., Mccole, P., and Chen, H. 2011. "Repurchase intention in B2C e-commerce-A relationship quality perspective," *Information & Management* (48), pp. 192–200.
- Zhou, T., Lu, Y., and Wang, B. 2009. "The Relative Importance of Website Design Quality and Service Quality in Determining Consumers' Online Repurchase Behavior," *Information Systems Management* (26:4), pp. 327–337.

Abbreviations

E-Commerce	Electronic Commerce
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
TAM	Technology Acceptance Model
IT	Information Technology
S-O-R	Stimulus-Organism-Response Model
TRA	Theory of Reasoned Action
IS	Information Systems
PU	Perceived Usefulness
PEOU	Perceived Ease of Use

Appendix A Concept Matrix

[illegible]

Erklärung

Hiermit versichere ich, dass diese Arbeit von mir persönlich verfasst wurde und dass ich keinerlei fremde Hilfe in Anspruch genommen habe. Ebenso versichere ich, dass diese Arbeit oder Teile daraus weder von mir selbst noch von anderen als Leistungsnachweise andernorts eingereicht wurden. Wörtliche oder sinngemäße Übernahmen aus anderen Schriften und Veröffentlichungen in gedruckter oder elektronischer Form sind gekennzeichnet. Sämtliche Sekundärliteratur und sonstige Quellen sind nachgewiesen und in der Bibliographie aufgeführt. Das Gleiche gilt für graphische Darstellungen und Bilder sowie für alle Internet-Quellen.

Ich bin ferner damit einverstanden, dass meine Arbeit zum Zwecke eines Plagiatsabgleichs in elektronischer Form anonymisiert versendet und gespeichert werden kann. Mir ist bekannt, dass von der Korrektur der Arbeit abgesehen werden kann, wenn diese Erklärung nicht erteilt wird.

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