DETERMINANTS OF SOCIAL MEDIA WEBSITE ATTRACTIVENESS

Bernd W. Wirtz
German University of Administrative Sciences Speyer
Chair for Information and Communication Management
Freiherr-vom-Stein-Str. 2, 67346 Speyer, Germany
wirtz@uni-speyer.de

Robert Piehler
German Research Institute for Public Administration Speyer
Freiherr-vom-Stein-Str. 2, 67346 Speyer, Germany
piehler@foev-speyer.de

Sebastian Ullrich
German Research Institute for Public Administration Speyer
Freiherr-vom-Stein-Str. 2, 67346 Speyer, Germany

ABSTRACT

The technologies and functions of social media have significantly changed interaction on the Internet. These changes affect the perceived attractiveness of websites. Prior research regarding classic Internet offers has only partly considered these specifics. The determinants of attractive social media websites and corresponding online instruments remain under-investigated. Therefore, this study describes a conceptualization of website attractiveness in the context of social media and its relevance for potential usage. The research model was empirically tested by a standardized user survey (n=237) with the help of a structural equation model. The results show that social media website attractiveness is determined by the 2nd-order dimensions interaction orientation, social networking and user-added value. Moreover, a link to the intention to use social media offers can be established. Overall, the results shed light on the key aspects of users' expectations towards the integration of social media into electronic commerce and provide insights into how the corresponding social media instruments are to be evaluated.

Keywords: Web 2.0, social media, attractiveness of websites, structural equation modeling

1. Introduction

The user's handling of the Internet as a medium, as well as his own self-image, have undergone major changes in the past few years. The increasing emphasis of interactive, social and networked phenomena of this technology is summarized under the term Web 2.0 [Hoegg et al. 2006, p. 12] or social media, which is used interchangeably [Constantinides & Fountain 2008]. Applications of social media have had an impact on a large variety of areas of life even if they are not directly linked to internet usage like public health surveillance or organizing vacations [Parra-López et al. 2011; Yang et al. 2011]. Furthermore the relevance of social media applications can be verified based on the number of users and the intensity of use. On the one hand, social media platforms are growing at an above-average rate. For example, Facebook shows a monthly increase in users of nearly 10 % in markets not fully penetrated, such as Brazil or India [SocialBakers 2011]. On the other hand, the term of use for social media offers is longer than that of classic web contents [Nielsen 2010], so that, for example, there is a higher potential for online advertising revenues. However, for marketers in the field of electronic commerce an integration of social media features is challenging, since it is often unclear which features are accepted by the users. Furthermore, it is hard to determine which instruments yield corresponding returns in terms of corporate image. To address this knowledge gap is a central motivation of this article.

The development of the terms social media and Web 2.0 has been characterized by a lack of conceptual clarity from the start [O'Reilly 2006]. The phenomenon of Web 2.0 which is often interchangeably referred to as social media has been analyzed in various fields of research such as computer science, business management, or sociology. As a result an extensive, uniform and precise definition has hardly yet been made [Song 2010]. It shows, however, that various fundamental dimensions are almost continuously used in relevant scientific literature. This includes concepts like networks, platforms, applications, interaction, user profiles, information distribution and active participation [Boyd & Ellison 2007, p. 210; Koh et al. 2007, p. 68; Park 2007, p. 175; Allen 2008]. In accordance

with [Kaplan & Haenlein 2010, p. 61] social media is defined as "a group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content". In that regard, web 2.0 refers to the basic technical platform of social media and user generated content refers to its underlying purpose. Therefore, this definition integrates technological, action-theoretical as well as interaction-related aspects which are classified on subject-related, functional as well as teleological levels.

Social media offers include various instruments [Anderson 2007, p. 7] such as blogs, wikis, social bookmarking or content sharing. They are characterized by user integration, social interaction, personalization and the exchange of content [Wirtz et al. 2010, p. 279]. In addition, the instruments are used on the respective platforms in part as a supplement or in the form of a mash up [Benslimane et al. 2008, p. 13]. The success of the offers depends on various design factors as well as individual traits of the users.

There is already a number of articles regarding this topic for classic Internet offers, especially in the area of usability, online service quality and electronic commerce, which examine the success of websites using empirically multivariate methods [Zhang & von Dran 2001; Loiacono et al. 2002; Braddy et al. 2005; Lee & Kozar 2006; Kuan et al. 2008; Liang & Chen 2009; Yoon & Kim 2009; Chiou et al. 2010; Gregg & Walczak 2010]. In this context, a customer-oriented research perspective is pursued which is geared towards the satisfaction, trust, and acceptance of users [Bressolles & Durrieu 2007, p. 3048; Cenfetelli et al. 2008, p. 162]. The corresponding studies mostly refer to motivation-based theories on an individual level. The theoretical approaches most commonly used are the theory of planned behavior [Ajzen 1991], the theory of reasoned action [Ajzen & Fishbein 1973], the diffusion of innovations theory [Rogers 1962], the DeLone & McLean IS success model [DeLone & McLean 2003] as well as various online service quality approaches such as SITEQUAL [Yoo & Donthu 2001], WebQual [Loiacono et al. 2002], WebQual [Barnes & Vidgen 2002], E-S-Qual [Parasuraman et al. 2005] and Netqual [Bressolles 2006].

However, important aspects of social media like user integration or social interaction are often not referred to in these models. The change of the Internet users' self-image through social media offers has been insufficiently taken into account for example [Cormode & Krishnamurthy 2008, p. 18]. Also, the integration of user-generated values into existing value creation and the resultant additional benefit derived cannot be completely comprehended. Hence, additional conceptual considerations are necessary to transfer these aspects to an adequate model. On the whole it can be said that there is a lack of conceptual approach for website attractiveness in the context of social media offers [Constantinides & Fountain 2008, p. 243; Pilgrim 2008, p. 239]: "Although the impact of customer participation and inter-customer support on service quality is recognized, e service quality conceptualizations and measurement models have failed to incorporate the impact of Web 2.0 on e service delivery" [Sigala 2009, p. 1341]. The basis and dimensions of the success of social media communities to that effect have been insufficiently explained up to now. The concept of attractiveness provides relevant insights in this regard for two reasons. On the one hand, it constitutes a potential theoretical extension for determinant models of usage intentions that mainly refer to technological aspects and user acceptance. On the other hand, the developed scales can be used by social media managers as alternative success measures in order to complement online service quality analyses.

The current state of social media research represents the starting point of this study. A literature review highlights important social media concepts and builds the foundation for the research model. Based on a user survey, the derived model of website attractiveness in social media is empirically tested by the method of structural equation modeling. In this regard, the goal of this article is to establish attractiveness of interactive systems as a variable of success and identify drivers of attractive social media websites and instruments. Various dimensions of related influencing factors are emphasized in the process and the effect sizes of relationships are examined. The article is structured as follows: In the next section, the concept of attractiveness is introduced, a literature review regarding social media is presented and a typology of attractiveness determinants of social media is derived. Afterwards, the structure and results of the empirical study are explained. Finally, the implications are derived from it and the limitations of the study and further research potential are shown.

2. Definition, State of Research and Potential Related Concepts
2.1. Definition of Attractiveness

Attractiveness is a concept that originated in the field of interpersonal psychology, where it describes a positive attitude or orientation towards other people. It is based on individual expectations and is hence also subject to social trends [Umberson & Hughes 1987]. Evolutionary approaches of attractiveness measurement emphasize the importance of individual traits in this context [Gangestad & Scheyd 2005]. Often researchers measure attractiveness by a simple confirmatory approach which is called truth-of-consensus-methodology [Donovan et al. 1989]. The test subjects are required to evaluate the level of attractiveness and inter-coder reliability is controlled. Attractiveness as a psychological construct has an effect on self-perception as well as behavior like social interaction [Langlois et al. 2000]. The theoretical background of these effects can be deduced from socialization theory, social expectancy

theory and fitness-related evolutionary theories like mate selection theory [Langlois et al. 2000]. The concept of attractiveness is also used in the context of objects. In this research stream studies with different levels of abstractness can be found as is shown in figure 1.

Research regarding the attractiveness of objects (examples)

Objects / Places	Interactive Systems	Organisat. Units	Ideas / Attitudes
• Toys [Pepitone et al. 1967; Brehm 1981] • Groceries [Haindl / Dürrschmid 2010] • Clothes [Eckmann / Wagner 1994] • Cars [Chang et al. 2007] • Products of Supermarkets [Gardiner 1993] • Ski-Resorts [Ewing / Kulka 1979] • Places to learn [Hendricks 1985] • Effect of Ownership [Beggan 1992; Strahilevitz / Loewenstein 1998] • Effect of Availability [Turner / Wright 1965]	• Geographic information systems [Yao / Thill 2005; Chippendale et al. 2008] • Multimedia applications [Burill et al. 1994] • Websites [Sutcliffe 2002; Hartmann 2006; Hartmann et al. 2007]	• Markets [Chandler / Hanks 1994] • Companies [Turban / Keon 1993; Turban / Greening 1997] • Supply Chains [Mortensen et al. 2008] • Communities [Lekwa et al. 2007]	• Goals [Filer 1952; Brehm et al. 1983] • Rewards / Incentives [Churchill / Ford 1979; Warda 1999] • Product category information [Boyd / Mason 1999] • Design & Aesthetics [Carbon / Leder 2005] • Effects of Emotion, Distance, Timing, Foreground [Shimojo et al. 2009; Shimojo et al. 2011]

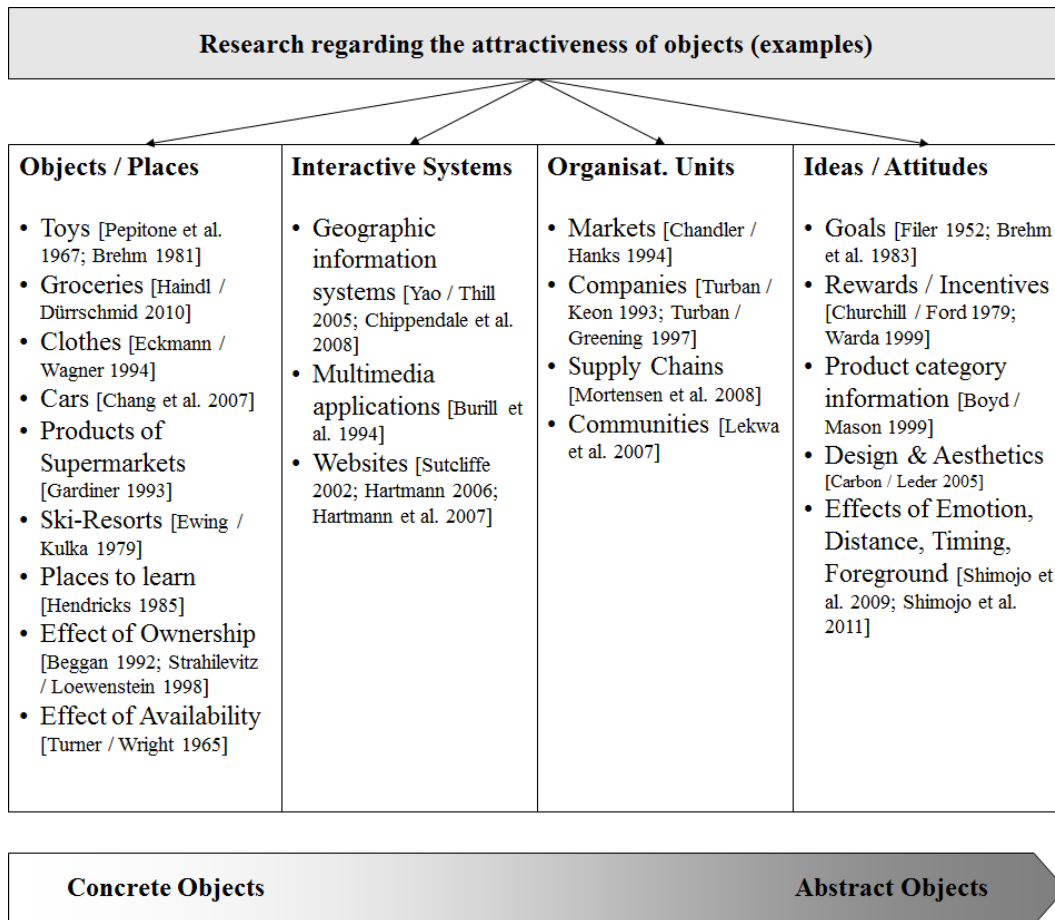Concrete Objects — Abstract Objects

Figure 1: Examples of attractiveness research regarding objects

In the field of object-related attractiveness research, the analysed objects are heterogeneous, ranging from concrete items like toys to more abstract objects and object-related information. There are only few scientific contributions dealing with attractiveness in the context of interactive systems. Most of them are either too specific [Chippendale et al. 2008] to be adapted for social media or cover only basic conceptual considerations [Hartmann 2006]. Therefore, definitional attributes of physical attractiveness are transferred to digital systems in order to give a working definition. Physical attractiveness can be defined as a socially shared orientation towards other human beings that is characterized by a positive valence [Byrne & Griffitt 1973]. In the context of digital systems and social media, attractiveness hence can be understood as a shared aggregated positive valence of users. As a holistic judgement it covers rational and affective aspects of potential or actual usage scenarios and usage experiences. In this regard, the concept bears implications on an attitudinal level and an action-based level. On the one hand, attractiveness of a digital system should affect individual perceptions and attitudes, for example in the context of user satisfaction. On the other hand, it should also positively affect usage behaviour, for example in the context of continued usage or user loyalty.

Furthermore, when using social networks the priming of mental models of social interaction can trigger a halo effect on the evaluation of those platforms. This means that potential benefits of social interactions may be attributed to the platforms. The concepts of online service quality and acceptance can only partly consider this affective component. The emphasis on social interaction in social networks therefore makes a strong argument for integrating attractiveness as an analytical concept in the body of literature. On a methodological level, the concept of

attractiveness can be used complementing user studies regarding technology acceptance or online service quality since it is compatible to attitudinal measurement.

2.2. Literature Review Social Media

As a first step, a conceptual analysis of scientific literature was conducted in the areas of usability, Web 2.0 and electronic commerce, in order to determine relevant influencing factors for website attractiveness in the context of social media. A systematic EBSCO-search inquiry of peer reviewed articles using the term Social Media in the title or abstract from 2002 until 2011 yielded 2533 results in the databases Academic Search Premier, Business Source Complete and Communication Mass Media Complete. A further optimized search term covering only quantitative contributions resulted in 235 hits. These articles were screened and analyzed. In the context of social media offers, there is only a limited portfolio of well-founded scientific publications. This can be ascribed to the relatively early state of this research area. Some research methods and study designs must therefore first be adapted to the new environment [Rathi & Given 2010]. In addition, relevant research literature frequently falls back on qualitative approaches which hardly allow conclusions about the concrete strength of effects and their significance beyond individual cases [Cho & Khang 2006; Wei 2009]. The current state of research often lacks statistical rigor [Khang et al. 2012, p. 293]. Figure 2 shows the current state of research in the field of social media by highlighting key research subjects.

Scientific Papers in the context of Social Media			
Research Segment	**Author / Year**	**Subjects of Research**	**Research Intensity***
Conceptual Papers Social Media	• [Liu / Liu 2009] • [Rayna / Striukova 2010] • [Boyles 2011] • [Bryer / Zavattaro 2011] • [Laick / Aftab 2011] • [Madhava 2011] • [Berthon et al. 2012] • [Castronovo / Huang 2012] • [Jonasz 2012] • …	• Social media applications in supply chains • Social media applications in public administration • Implications of social media for international marketing strategies • Social media as a transmitter of corporate culture • Structures and elements of social media • Increasing website accessibility by social media • …	◑
Qualitative Papers Social Media (Case studies, Content analysis, etc.)	• [Jones et al. 2009] • [Botha et al. 2011] • [Nesbit 2011] • [Spiller et al. 2011] • [St. Eve / Zuckerman 2012] • …	• Integrated marketing communication • Brand and corporate image management • Moral concepts of users • Use patterns • Business impact of social media applications • …	◕
Quantitative Papers Social Media in general	• [Cromer 2010] • [Mora / Barnes 2011] • [Taylor et al. 2011] • [Durukan et al. 2012] • [Lin et al. 2012] • [Pooja et al. 2012] • …	• Influence of gender • Influence of user attitudes • Effectiveness of personalized advertisements • Customer behaviour • Correlation between use and company revenues • …	◕
Quantitative Papers Social Media models of use	• [Chung / Austria 2010] • [Hung et al. 2011] • [Kim et al. 2010] • [Lee / Cho 2011] • [Imran / Zaheer 2012] • …	• Influence of credibility • Acceptance • Motivation to use • Gratification of use • User-perceived value	○

* Numbers of Contributions: ○ Very low intensity ◔ Low intensity ◐ Medium intensity ◕ High intensity ● Very high intensity

Figure 2: Evaluation of Research in the field of Social Media

With regard to contents a number of contribution deals with individual traits of users. For instance, [Correa et al. 2010] found positive effects of the individual traits extroversion and openness to experience on social media use. Emotional stability on the other hand was found to be a negative predictor. The effects were moderated by gender and age. [Durukan et al. 2012] tested a model of individual determinants of word of mouth communication in social media. They found extroverted personality, parameters of social media use, attitudes towards social media, computer using anxiety and social media credibility to be related to positive or negative word of mouth.

Another important research stream deals with the characteristics of social media. [Figueiredo et al. 2012] proposed a method of evaluating the quality of social media content by analyzing textual features like tags,

descriptions and comments. Furthermore, with the help of experiments they showed how classification and recommendation tasks are influenced by these features. [Khang et al. 2012] conducted an extensive scientific literature review in communication, public relations, advertising and marketing. They found that there is an increasing number of articles, a trend which is connected to the emergence of new popular social media platforms like Facebook or Twitter. However, most recent studies focus on social media itself, uses and users or effects, whereas only few address potential improvements of social media.

A third relevant research stream is usage behavior. [Valenzuela et al. 2009] found that the intensity of students' Facebook use is positively related to their life satisfaction, social trust, civic engagement and political participation. [Lorenzo-Romero et al. 2011] showed that quantitative measures based on concepts of technology acceptance can also be applied to social networking sites. In this context, the relevance of perceived risk seems to be questionable since the influence on the intention to use was very low and on perceived usefulness it was even not significant.

Concluding, it can be stated that the field of social media is tackled by a variety of research perspectives and methods. The analysis of the relevant research contributions showed that there is a growing body of literature, which has a strong focus on conceptual work. Substantial quantitative research is in an early stage, where especially the field of success factors in the context of social media use needs further examination. All in all, it can be said that the systematic multivariate study of essential parts of the attractiveness of social media offers has not yet been sufficiently represented in scientific research from a strategic point of view [Wirtz et al. 2010, p. 286]. With regard to the relevance of social media for internet users it remains a topic that needs further scientific analysis. Social media attractiveness constitutes a phenomenon that is rooted in all these research streams.

2.3.   Potential Related Concepts of Social Media Attractiveness

To integrate social media attractiveness in a meaningful research framework, antecedents and consequences were necessary to add. By analyzing theoretical and empirical contributions, three major sets of potential determinants and one potential dependent concept could be identified. The discussion regarding the determinants interaction orientation, social networking and user-added value is based on the empirical findings of [Wirtz et al. 2010]. Each concept and its relevant subtopics are discussed in the following.

Interaction is a crucial element of social media and social media managers even treat artifacts of interaction in the form of Likes or Shares as success measures. The corresponding properties of an attractive social media offer can be summarized as interaction orientation, which hence is hypothesized to be a determinant of social media attractiveness. Interaction orientation covers a user's need for interactive content and the corresponding expectations regarding the provider of these offers. By using modern information and communication media, individual customer interactions can continually be systematically compiled. This data is processed and serves as the orientation basis of the added value of a company. Such an interaction-related strategy is referred to as interaction orientation [Ramani & Kumar 2008]. In this context, relevant management aspects include general customer orientation, the configuration of customer interfaces [Piller et al. 2003; Frutos & Borenstein 2004], the potential of reaction to customer inquiries [Jayachandran et al. 2004] as well as cooperative added value [Prahalad & Ramaswamy 2004; Payne et al. 2008; Potts et al. 2008]. Regarding content, interaction orientation covers the focus of companies on individual customer interactions through instruments of social media. In this article, a positive correlation is assumed with regard to the effect of interaction orientation on social media website attractiveness. Therefore, an Internet user who has a high orientation on individual customer interactions should also show a high level of perceived attractiveness of social media websites.

The online interaction between individual users is frequently referred to as social networking and is considered to be a central aspect of social media [Hoegg et al. 2006, p. 6]. The motivation of users to participate in social networking services is due to several reasons, for example self-reflection, image cultivation as well as access information. [Coyle & Vaughn 2008, p. 14]. The hypothesized construct social networking combines, on a conceptual level, different user-related aspects of social online networks. In so doing, social network effects are viewed on an individual level. Constructs related to this phenomenon include customer power [Constantinides & Fountain 2008; Wei et al. 2011], virtual word of mouth [Dwyer 2007; Chen & Xie 2008], social identity [Gangadharbatla 2008; Pentina et al. 2008] and social trust [Valenzuela et al. 2009]. It is also hypothesized to be a determinant of social media attractiveness. The directional effect of social networking on social media website attractiveness is formulated positively in the research model of this article. Accordingly, an Internet user should show a high degree of attractiveness for social media websites, if social networking experiences are appreciated.

The generating of values by users is an aspect of social media which is relevant for business models and has received a lot of attention in literature [Franke et al. 2006; Füller et al. 2006; Bilgram et al. 2008; Daugherty et al. 2008; Strube et al. 2011]. In this regard, various levels of value generation are taken into account. This way user integration in the context of value generation can occur as part of a value proposition on the basis of content such as the inclusion of user-generated videos on a website. User integration can also take place on the level of product

innovation, e. g. with interactive product design systems in the fashion sector. Lastly, user integration can also occur via a marketplace-based system, which makes expansions of existing offers available by providing access to various components of the business model, e. g. the forms of revenue. Such a development can be found at app-marketplaces in the smartphone sector. Based on these considerations, user-added value is conceptualized as a construct that consists of user-generated content, user-generated innovation and user-generated revenue/contacts. The integration of corresponding applications at companies shows an increasing degree of complexity from user-generated content and user-generated innovation to user-generated contacts/revenue. Regarding content, user integration is included in the goods and services process of companies by this conceptualization in the context of social media. In the research model of this article, a positive correlation to social media website attractiveness is proclaimed for perceptions regarding user-added value. Hence, it can be concluded that an Internet user, who shows a high appreciation of customer integration into the value added process, should also show a high degree of social media website attractiveness.

As a potential dependent variable, the concept of intention to use was identified. Intention to use is regularly applied in the context of technology acceptance and information system success measurement [DeLone & McLean 2003; Venkatesh et al. 2003]. It describes user attitudes towards actions concerning the technological system and thereby constitutes a measurement concept in the tradition of the theory of reasoned action [Ajzen & Fishbein 1973]. Intention to use can also be used in post-adoption scenarios of empirical research, where in most cases it captures an intention to continue usage [Bhattacherjee 2001]. Since social media attractiveness is also understood as an attitudinal concept in this article, a direct link between both concepts is assumed to explain a potential link between attractiveness and behavior. In this regard, intention to use also provides a good basis to connect and compare the research model of this article to other scientific examinations.

3. Definition, State of Research and Potential Related Concepts

3.1. Definition of Attractiveness

After the literature review, a screening of existing social media offers was performed. The set of factors derived were first qualitatively tested by using semi-standardized expert discussions. In the process, in-depth interviews were conducted with 26 social media users. The data gained was open, axial and selectively codified and analyzed by applying the grounded theory [Glaser 1978; Strauss & Corbin 2008]. A temporary model structure was identified from this two-step process and items were generated according to the literature review. Next, an item-sorting pretest [Anderson & Gerbing 1991] was conducted with 12 scientists to test for validity of the item batteries before the data gathering. Five items had to be changed. The final research model consists of three 2nd-order constructs, comprising a total of 11 1st-order constructs, which affect Social Media Website Attractiveness. This involves the constructs Interaction Orientation, Social Networking as well as User-added value. Social Media Website Attractiveness is hypothesized to have a direct effect on Intention to Use, which was therefore selected as another latent variable and endogenous construct of the research model. Building on basic structural considerations from the theory of reasoned action [Ajzen & Fishbein 1973] as well as the theory of planned behaviour [Ajzen 1991], attitudinal measurements are aimed for. In the following, the 2nd-order constructs and their components are shown before the final research model is presented.

3.2. Definition of Attractiveness

A system of hypotheses has been derived from the preceding conceptual considerations and research process. The hypotheses of the research model serve to explain the structure and effect of website attractiveness on social media. They exhibit either a confirmatory-descriptive or a confirmatory-explicative character and are presented below. Three confirmatory-descriptive hypotheses were formulated, targeted to the structure of relevant influencing factors of social media website attractiveness:

H1: Interaction Orientation is a latent, reflective construct of 2nd order that consists of the dimensions Customer Centricity, Interaction Configuration, Customer Response and Cooperative Value Generation.

H2: Social Networking is a latent, reflective construct of 2nd order that consists of the dimensions Customer Power, Virtual Word of Mouth, Social Identity and Social Trust.

H3: User-added Value is a latent, reflective construct of 2nd order that consists of the dimensions User-generated Content, User-generated Innovation and User-generated Revenue/Contacts.

The effect of these constructs on social media website attractiveness is covered in four additional hypotheses. These are therefore to be classified as confirmatory-explicative and are as follows:

H4: The more pronounced the Interaction Orientation of a social media user is, the higher his or her Social Media Website Attractiveness will be.

H5: The more pronounced Social Networking in a social media user is, the higher his or her Social Media Website Attractiveness will be.

H6: The more important the possibilities for User-added Value within a social media offer for a user are, the higher his or her Social Media Website Attractiveness will be.

H7: The higher the Social Media Website Attractiveness of a social media user is, the stronger the Intention to Use will be.

These hypotheses can be depicted in aggregated form in the overall model, as seen in Figure 3. Social Media Website Attractiveness is conceptualized as a 1st-order construct that is influenced by the 2nd-order dimensions Interaction Orientation, Social Networking and User-added Value. This Social Media Website Attractiveness has an effect on the intention of use of a social media offer, which also represents a dependent, latent success variable of this study.
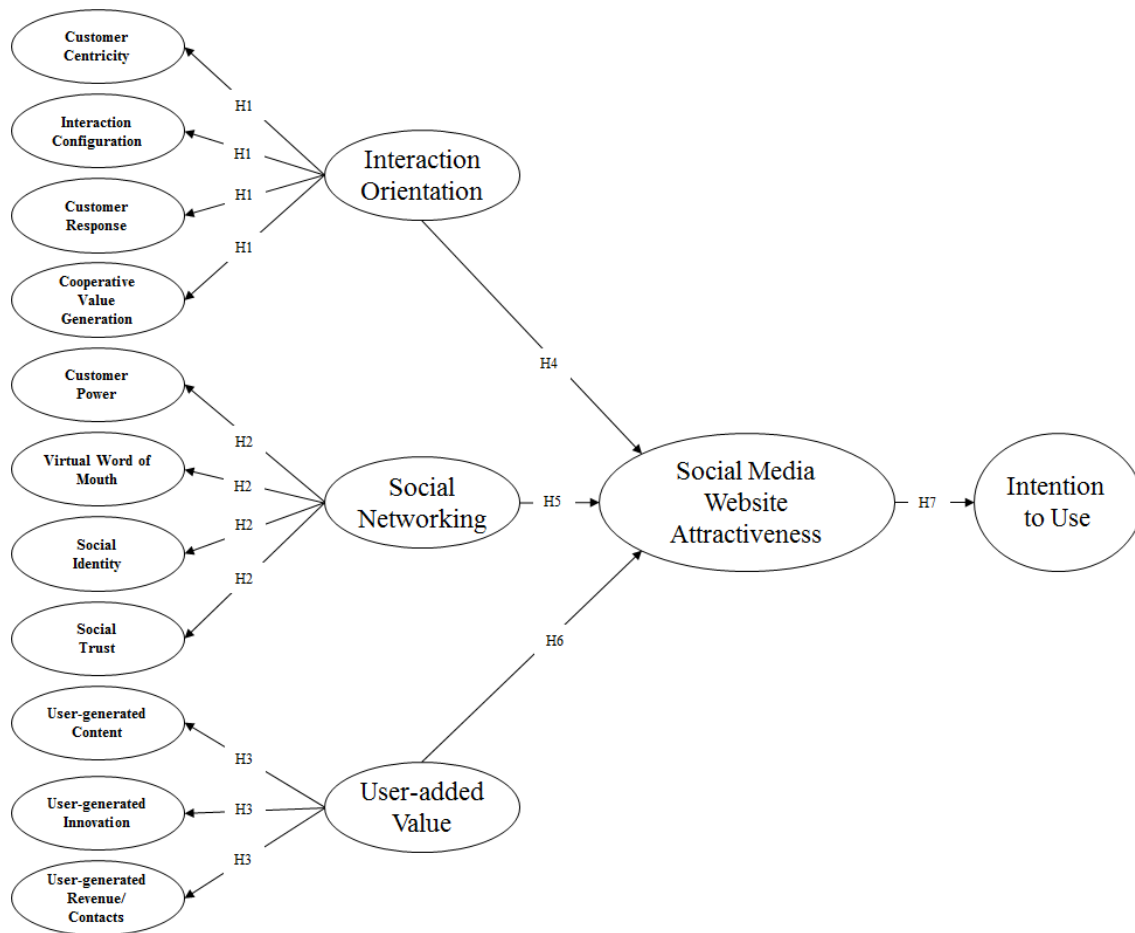

Figure 3: Research Model

4. Empirical Study

Due to the conceptualization of website attractiveness as well as its influencing factors as latent constructs of 1st or 2nd order and the path relationships to be studied, the use of a powerful multivariate method of analysis is necessary in order to manage the complexity of the model. In the following, the fundamentals of this research methodology are explained, the database is described, the implementation of the constructs, including considerations of reliability and validity, is presented and an analysis of postulated cause and effect is done on the level of the overall model. Thus, the significance of individual influencing factors can be concluded.

4.1.   Research Methodology & Study Design

Structural equation models are proven instruments of empirical social research for theory-based studies of complex multivariate phenomena [Bollen 1989, p. 4; Steenkamp & Baumgartner 2000, p. 195; Kline 2011, p. 18; Hair et al. 2010, p. 706]. Variance and covariance-based approaches differ from one another, exhibiting specific advantages and disadvantages, so that their use depends on the particular research objective [Chin & Newsted 1999, p. 314]. While variance-based methods are mainly used for the purpose of prognosis, since they are targeted to a preferably accurate prediction of the empirical data matrix in regard to the target variables [Fornell 1987, p. 413],

the covariance-based methods are mainly used in studies of confirmatory character. In this context, a distinction can be drawn between hard and soft modeling [Tenenhaus et al. 2005]. Since the present study's focus is on testing the hypothesized model structure and not prediction, a covariance approach was taken by using the EQS. 6.1 software package and the ML-Method. The requirements on the size of the sample as well as the multi-normal distribution of data are fulfilled.

4.2.   Database & Sample Characteristics

To gather suitable data, the method of standardized online questionnaires using 7-point-Likert scales was applied. For use in the context of social media, biases in data for technically-savvy users are not expected, because the use of an online questionnaire does not differ from the use of social media offers in regard to cognitive requirements. On the contrary, it is even an ideal survey instrument for the study, since the entry of answers from non-onliners is prevented.

From April to August 2009, 1339 social media users were contacted per e-mail for participation in the survey. The respondent pool was randomly extracted from a sample of a previous large-n study with a focus on social media. A reminder was used to increase the response rate. This kind of sampling served to ensure sufficient expertise regarding social media. A total of 237 completed questionnaires could be used for the analysis, which corresponds to a response rate of 17,7 %. Data was collected about the online experience and self-assessment of users. Those questioned had a mean value of 8.3 years of experience with the Internet and even 2.9 years of experience in dealing with social media offers. More than 73 % were members of several online networks and used them more than three times per week. 83 % of those surveyed classified themselves as heavy social media users.

To start with, it was tested for potential systematic bias of data [Groves 2004, p. 9]. The first step was to calculate the squared Mahalanobis Distances by an SPSS script, in order to identify completed questionnaires which made no sense [Kline 2011, p. 54, Hair et al. 2010, p. 75]. There were no conspicuities determined. Secondly, data was examined for non-response bias. Under this phenomenon, data bias is understood based on missing information from the population, arising from non-responses [Ruxton 2006, p. 690]. For testing purposes, the responses of former participants in the study were compared with the questionnaires submitted later on. Inasmuch as there were significant differences in the response behavior with only 3.4 % of the items, the parametric t-test as well as the non-parametric Mann-Whitney U test showed that it can be assumed that non-response bias is absent [Armstrong & Overton 1977]. However, it cannot be definitely excluded because the motives for a late participation in the study may differ from those for refusing to participate [Mentzer & Flint 1997].

4.3.   Operationalization of Constructs

Based on the analysis of literature, research was conducted for the individual factors for already existing scales and indicators, supplemented by data from expert discussions and an item-sorting pretest [Anderson & Gerbing 1991]. With some scales an adjustment was made to social media specifics. It should be noted that only a few relevant scales were identified in the studied area. To measure the individual constructs, the study model was transferred to a questionnaire containing items for the individual factors. All factors were collected via a 7-stage Likert scale. To ensure reliable and valid operationalization, recommendations concerning a multistage testing process have been taken into account [Hinkin 1995; DeVellis 2003]. All factors in the model are specified reflectively.

With the data gathered a number of statistical tests were carried out. As a first step, Cronbach alpha values and the item-to-total-correlation were assessed using SPSS to test for scale reliability. Items which did not meet the corresponding cutoff-criteria were eliminated from further analysis [Kaiser 1974; Hair et al. 2010, p. 92; Bearden et al. 2011, p. 7]. Afterwards, an exploratory factor analysis using principal axis factoring and direct oblimin rotation was carried out. The following table shows all constructs, working definitions [Wirtz et al. 2010], the corresponding conceptual sources, items and a summary of the 1st-generation reliability indices of the measurement models used in the study. Furthermore, the number of eliminated items is shown. For each construct, there was only one factor extracted in the exploratory factor analysis. For all constructs a Cronbach alpha value > 0.8 and more than 50 % of explained variance could be reached.

Table 1: Reliability and Validity of the Measurement Models

Construct	Definition	Item	It.-total corr.	Factor loading	Cronb. alpha	Explained variance	Items elimin.
Customer Centricity (Based on [Wagner & Majchrzak 2007; Ramani & Kumar 2008])	• Perceived organizational structure of companies using social media • Customers as focal points of all business activities	It feels good when I receive product recommendations tailored to my needs. I want the social media companies, where I buy products, to know exactly what my wishes are. I really appreciate it when individual advertising efforts are made for me.	0.635 0.712 0.646	0.835 0.882 0.845	0.813	72.964 %	4
Interaction Configuration (Based on [Chung & Austria 2010; Lee & Cho 2011])	• Perceived structure of interaction processes of companies using social media • Social media as a communication channel	Social media companies have to provide applications for interactive communication among users. Social media companies have to allow for connecting with other users on their websites. Chats or forums are an important part of companies which are active in social media.	0.602 0.711 0.681	0.812 0.882 0.866	0.813	72.900 %	4
Customer Response (Based on [Ramani & Kumar 2008; Pagani & Mirabello 2011])	• Perceived capacity of a firm to manage customer dialogs • Reaction to customer feedback	I value quick responses to my inquiries by the companies. An individual reply to my inquiries goes without saying on social media. A prompt reply to my inquiries goes without saying on social media. Contact with companies should offer an honest and authentic response. I wish to get into contact with persons responsible within a company. Customers and companies are communicatively equal on social media. Companies must communicate directly, individually and authentically.	0.756 0.816 0.736 0.749 0.667 0.435 0.777	0.852 0.903 0.848 0.843 0.756 0.518 0.838	0.885	64.447 %	1

Construct	Definition	Item	It.-total corr.	Factor loading	Cronb. alpha	Explained variance	Items elimin.
Co-operative Value Generation (Based on [Nambisan & Baron 2007; Payne et al. 2008])	• Attitude towards participating in shared value generation projects of firms via social media.	I would like to make my contribution on social media to help support companies.	0.600	0.704	0.904	68.182 %	1
		I enjoy solving problems together with other users.	0.801	0.875			
		When users and companies work together, it brings about true values.	0.641	0.746			
		I am thrilled when companies motivate me to cooperate.	0.827	0.894			
		Mutual generation of value is especially important to me.	0.767	0.848			
		I like taking part in the cooperative generation of value on social media.	0.799	0.869			
Customer Power (Based on [Park 2007; Füller et al. 2009; Leung 2010])	• Perceived increase of power for consumers related to social media	Social media has increased my influence on companies.	0.696	0.813	0.842	56.195 %	1
		Social media allows me to find the information I need with low search costs (e.g. time).	0.545	0.681			
		Users know better how to use social media than the companies themselves.	0.597	0.727			
		Social media has significantly improved the cost-/price transparency for customers.	0.694	0.809			
		Through the influence of social media I less frequently buy from the same companies on the Internet.	0.540	0.675			
		All in all, through the influence of social media chances increase that I, as a customer, gain more power over companies.	0.656	0.780			

Construct	Definition	Item	It.-total corr.	Factor loading	Cronb. alpha	Explained variance	Items elimin.
Virtual Word of Mouth (Based on [Riegner 2007; Durukan et al. 2012; Pitt et al. 2012])	• Perceived relevance of social media for information transfer between different parties via electronic applications such as blogs, review websites or even e-mail	Social media allows to make the right buying decisions by user comments.	0.720	0.803	0.927	73.304 %	2
		Information about products and services supplied by other social media users are more valuable than those of companies.	0743	0.821			
		Through the user comments on products or services on social media websites one gets information a lot faster than from the companies themselves.	0.800	0.864			
		To gather information about products the experiences of other social media users are of particular importance.	0.856	0.907			
		Social media allows to solve problems regarding products faster through the experiences of others.	0.836	0.892			
		Through the comments of other social media users one gets the right answers to questions much faster.	0.771	0.845			
Social Identity (Based on [Bailey 2005; Kim et al. 2010; Chai et al. 2011])	• Perceived membership of the specific web interest group of social media users	It makes me feel better when someone mentions the social media community in a positive way.	0.752	0.827	0.927	73.545 %	3
		I behave like a typical social media user.	0.750	0.827			
		When talking about social media users, I frequently use the word "we".	0.839	0.895			
		I combine a lot of skills of social media users.	0.789	0.860			
		When the social media community succeeds, then I succeed as well.	0.797	0.863			
		Should the social media community ever be spoken ill of in the media, I would take it personally.	0.812	0.872			
Social Trust (Adapted from [Mathwick et al. 2008; Valenzuela et al. 2009])	• Perceived confidence in reciprocative beneficial behaviour in interactions with others using social media	The more a social media user publishes or contributes to a project (e.g. Wikipedia), the more trustworthy he is.	0.717	0.881	0.834	75.137 %	4
		A strong willingness to become active for the community on social media makes the user trustworthy.	0.792	0.920			
		The trust in the community of users shapes social media as a whole.	0.588	0.795			

Construct	Definition	Item	It.-total corr.	Factor loading	Cronb. alpha	Explained variance	Items elimin.
User-generated-Content (Based on [Daugherty et al. 2008; Imran & Zaheer 2012])	• Perceived relevance of user-generated content for social media	The generation of content is an essential part of social media.	0.783	0.876	0.878	67.714 %	2
		Social media is largely dependent on the supply of content by the user.	0.891	0.899			
		User-generated content is very important for the forming of opinions.	0.664	0.784			
		Without the provision of user-generated content there would be no social media.	0.629	0.757			
		The information provided by the user is comparable to that of professional news agencies.	0.669	0.790			
User-generated Innovation (Based on [Füller et al. 2008; Hung et al. 2011])	• Perceived relevance of user-generated innovations for the further development of social media offers	For the new and further development of offers on social media, it is the users who especially contribute to problem solving.	0.817	0.876	0.940	77.219 %	-
		The problem-solving expertise of social media users is of great importance for the new and further development of offers.	0.851	0.901			
		It is mostly the social media users who have good and new ideas for offers.	0.826	0.881			
		The ideas of social media users to improve offers of companies have high potential of also being implemented.	0.747	0.821			
		Innovations initiated by social media users greatly benefit other Internet users as well.	0.821	0.879			
		On the whole, user-generated innovations on social media are of major importance for the new and further development of offers.	0.867	0.911			

Construct	Definition	Item	It.-total corr.	Factor loading	Cronb. alpha	Explained variance	Items elimin.
User-generated Revenue / Contacts (Based on [Vilpponen et al. 2006; Ryu & Feick 2007; Hanna et al. 2011])	• Perceived relevance of user-generated contacts for value creation of companies using social media	Companies obtain new users through my contributions on social media.	0.724	0.813	0.927	78.467 %	1
		My invitations for friendship help to increase the advertising revenue of companies.	0.842	0.901			
		The inviting of friends by the user generates value for companies.	0.844	0.907			
		Articles provided by users increase the attractiveness of the website for other users.	0.806	0.883			
		User recommendations enhance sales for the companies.	0.863	0.921			
Social Media Website Attractiveness (Based on [Sutcliffe 2002; Hartmann 2006; Hartmann et al. 2007])	• Perceived individual preference to use social media offers	I find websites that allow users to interact with each other or with the companies that provide the service very attractive.	0.880	0.938	0.930	83.036 %	2
		I find websites that allow users to connect with other users or companies in the form of networks very attractive.	0.843	0.914			
		I find social media websites very attractive.	0.869	0.931			
		I find social media websites that allow users to get in touch with a company or other users very attractive.	0.762	0.860			
Intention to Use (Adapted from [Venkatesh et al. 2003; Java et al. 2007; Parra-López et al. 2011])	• Attitude towards using or continuing use of social media offers	If I had the chance to use social media websites I would do so.	0.879	0.927	0.946	82.546 %	-
		It is probable that I am going to use social media websites.	0.874	0.924			
		I am ready to use social media websites at any time.	0.851	0.905			
		If and when the occasion arises I will use social media websites.	0.870	0.920			
		Even if there are alternative websites, I prefer using social media websites.	0.797	0.865			

The process of the scale reduction can be classified as acceptable. Most concepts were measured adequately since only few items had to be eliminated. However, the operationalization of Customer Centricity, Interaction Configuration and Social Trust seems to be critical, since only three items can be retained. Further research is needed to develop more measurement items for these concepts. For all measurement models, discriminant validity was checked using the Fornell/Larcker criterion as a next step. According to this method, the average variance extracted of each construct is set into relation to the squared crossloadings with the other constructs [Hair et al. 2010, p. 710]. For all constructs the average variance extracted was higher than the crossloadings and therefore the criterion is met. The results are shown in Table 2.

Table 2: Fornell/Larcker Criterion for all Measurement Models

	1	2	3	4	5	6	7	8	9	10	11	12	13
Customer Centricity (1)	**0.599**												
Interaction Configuration (2)	0.491	**0.599**											
Customer Response (3)	0.141	0.153	**0.517**										
Cooperative Value Generation (4)	0.362	0.531	0.111	**0.624**									
Customer Power (5)	0.222	0.426	0.135	0.312	**0.513**								
Virtual Word of Mouth (6)	0.094	0.295	0.194	0.228	0.461	**0.683**							
Social Identity (7)	0.340	0.315	0.010	0.296	0.371	0.179	**0.684**						
Social Trust (8)	0.130	0.397	0.033	0.194	0.423	0.217	0.602	**0.667**					
User-generated Content (9)	0.077	0.327	0.138	0.185	0.367	0.352	0.181	0.397	**0.603**				
User-generated Innovation (10)	0.125	0.345	0.147	0.266	0.441	0.298	0.218	0.458	0.569	**0.727**			
User-generated Revenue / Contacts (11)	0.060	0.426	0.089	0.248	0.373	0.372	0.271	0.408	0.475	0.537	**0.721**		
Social Media Website Attrac-tiveness (12)	0.371	0.325	0.121	0.195	0.357	0.301	0.254	0.382	0.273	0.283	0.147	**0.769**	
Intention to Use (13)	0.215	0.427	0.078	0.261	0.328	0.252	0.194	0.177	0.193	0.264	0.351	0.492	**0.777**

4.4. Discussion of Cause and Effect Relations

The last step of analysis of the research model is the examination of the overall model fit as well as the evaluation of cause and effect relations. Regarding the global quality levels, the overall model has sufficient fit (see

Fig. 4). The indices GFI, AGFI, RMSEA as well as the chi-square value are below or above the required values for complex models in method literature [Byrne 1989], p. 5; Kline 2011, p. 193]. Only for CFI und TLI, the required values of $\geqslant 0.9$ are not achieved by a small margin [Bollen 1989, p. 273; Bentler 1990, p. 238]. The first order constructs all sufficiently reflect their superordinate construct. The only close exception is the concept of Customer Response, whose path coefficient is 0.445. The factor was kept due to concerns of content validity, but further research may be needed to come to a clearer picture, whether or not Customer Response is a part of Interaction Orientation. The hypotheses H1 to H3 were not rejected in the context of these results.

In regard to the path relationships of the model, there is a heterogenous significance of individual influencing factors on website attractiveness on social media. While Interaction Orientation (0.255) and Social Networking (0.351) exhibit low to middle effect size, the strongest influence comes from User-added Value (0.581). User integration in added value is the most important aspect of social media offers from the user perspective. Since all relationships exhibit positive signs, the Hypotheses H4, H5 und H6 are not to be rejected. The effect of Website Attractiveness on Intention to Use (0.708) can be classified as middle to high. For this reason, Hypothesis H7 cannot be rejected and the postulated model structure is confirmed. The results of the analysis are shown in Figure 8, where manifest variables were omitted to enhance readability.
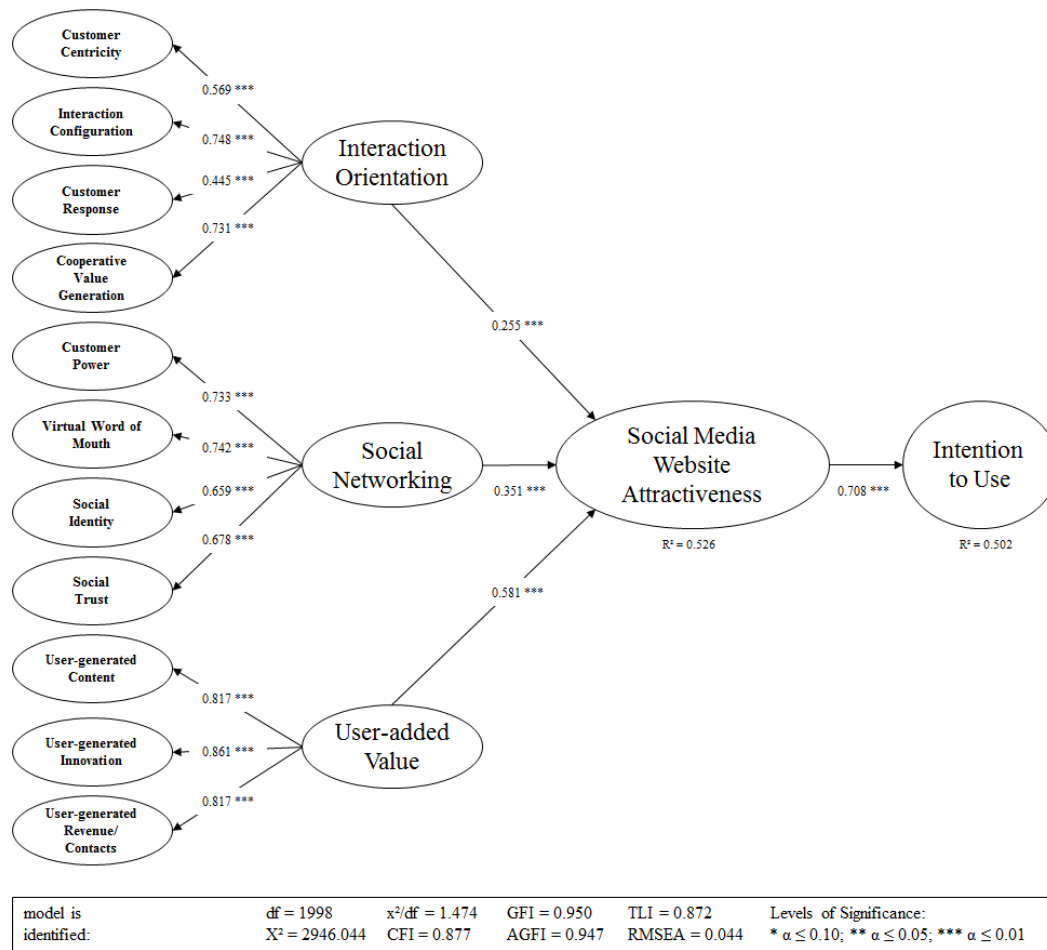

Figure 4: Cause and Effect Relationships of the Model

5. Conclusion

This study constitutes a first concept-driven contribution to the empirical identification and measurement of determinants for the attractiveness and usage of digital systems using social media as an example. So far, the concept of attractiveness primarily has been used in the context of physical attraction. A definition has been transferred and measures were developed with regard to social media research. The starting point of the study was a conceptional derivation and empirical examination of factors which influence the attractiveness of social media

offers. These target specifically features of social media that go beyond classic Internet offers. Thereto, 11 1st-order factors and three 2nd-order factors were identified from expert discussions, by screening existing offers and from an analysis of literature. Corresponding impact hypotheses were also formulated and intention to use was used as an endogenous construct.

5.1. Discussion of Findings

The developed measures prove to be reliable and valid. These scales can be used to differentiate the concept of digital attractiveness in further empirical contributions. Overall, the research model shows an acceptable fit and all hypotheses concerning the structure of constructs cannot be rejected. However, the role of Customer Response needs to addressed in further research. It was found that its path coefficient in the final model is only moderate, but in the data there is no conceptual overlap detected. Customer response could hint to another phenomenon that is not covered by the model of social media attractiveness in this regard.

The postulated 2nd-order structure of the factors and the impact hypotheses were also confirmed by the data. The Interaction Orientation of users has a positive effect on the perceived attractiveness of a social media offer via Customer Centricity, Interaction Configuration, Customer Response and Cooperative Value Generation. Attitudes towards Social Networking also have a positive effect on Social Media Website Attractiveness. The dimensions of this construct include perceived Customer Power, individual Virtual Word of Mouth, opportunities to build up Social Identity and Social Trust. Finally, User-added Value shows positive effects on the perceived attractiveness of social media offers as well via the dimensions of User-generated Content, User-generated Innovation and User-generated Revenue/Contacts. Furthermore, User-added Value is the most important factor influencing the attractiveness of social media. Perceived Social Media Website Attractiveness in turn has a strong effect on the intention to use respective offers and covers a substantial proportion of explained variance. With this model the structure of individual proclivity for social media offers and the basic related affective causal effect chain can be explained.

In context of electronic commerce and the attractiveness of social media offers, this study is one of the few complex-multivariate contributions with a confirmatory study design. For the area of social media, it shows essential success-relevant factors from the user perspective. Accordingly, the results can serve as a starting point for other theoretical and empirical studies. Besides validation studies, in particular the integration of scales from the areas of technology acceptance, online service quality as well as information system success can be stated on a research agenda to classify the results in more general research streams. Also, the development of short scales and single measure items can be fruitful to apply the concept of social media attractiveness in a more complex setting. Moreover, the features of specific application scenarios of social media can also be an object of continued user-oriented studies [Schaffers et al. 2007; Purdy 2010] or cultural features of certain user groups may be taken into account [Ji et al. 2010].

5.2. Limitations

The limitations of the study are mainly the result of methodical considerations. For one thing, a potential distortion through common method bias cannot be completely excluded even though a Harman's single factor test showed no irregularities because the data for exogenous and endogenous variables stems from the same source [Podsakoff et al. 2003]. In this context, a triangulation or multi-informant design would be interesting for future studies. On the other hand, there are no conclusions to be drawn about changes in chronological sequence due to the cross-sectional design of the study. Long-term effects of individual factors can probably therefore only inadequately be depicted in the model of this study. To address this issue, for instance, the RET-procedure could be adapted in this context [Carbon & Leder 2005]. Moreover, it cannot be completely excluded that individual aspects have inadequately entered into the conceptualization, due to the partially inductive procedure with the generating of factors. Also, the low sample size for such a complex model and the corresponding response rate have to be mentioned as limiting factors.

5.3. Implications

The special significance of fundamental aspects of social media platforms for users has been shown by this study. Practical implications of this research can be derived for two groups of business stakeholders. On the one hand, implications for companies which are platform providers in the area of social media can be summarized as follows: Different aspects of individual perception have a significant influence on the attractiveness of social media offers, which in turn determines the intention to use these offers. A systematic analysis of social media offers is possible by means of the proposed influencing factors. Accordingly, instruments und concepts from the areas of Interaction Orientation, Social Networking and User-added Value contribute to the attractiveness of social media platforms. The expectations of users have to be considered when social media strategies are developed. They cannot be successful if they are not aligned to an active role of the user in the process of value generation and user feedback. The most important success factor is identified as providing interfaces for user-added value applications

and the communication of corresponding offers. Since this aspect is the most relevant for users, companies have to make sure they allocate a sufficient amount of resources in this sector. Furthermore, based on results of this study, design guidelines and checklists for social media offers can be adapted. In coordination with basic considerations about the business model, an analysis of strengths and weaknesses can be created.

On the other hand, implications can be concluded for marketers in the area of electronic commerce. When integrating social media platforms into an electronic commerce online offer, the main focus should be on creating possibilities for users to contribute or interact in the context of value creation. This will yield the biggest returns in terms of attractiveness. Instruments to enhance Social Networking and Interaction Orientation should accompany this process however. These three dimensions drive the attractiveness of social media and are necessary to increase the intention to use.

REFERENCES

Ajzen, I., "The theory of planned behavior," Organizational Behavior and Human Decision Processes, Vol. 50, No. 2:179–211, 1991.

Ajzen, I. and M. Fishbein, "Attitudinal and normative variables as predictors of specific behaviors," Journal of Personality and Social Psychology, Vol. 27, No. 1:41–57, 1973.

Allen, M., Web 2.0: An argument against convergence, http://frodo.lib.uic.edu/ojsjournals/index.php/fm/article/view/2139/1946, last access: 15.11.2011, 2008.

Anderson, P., What is Web 2.0? Ideas, technologies and implications for education, http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf, last access: 14.11.2011, 2007.

Anderson, J. C. and D. W. Gerbing, "Predicting the Performance of Measures in a Confirmatory Factor Analysis with a Pretest Assessment of Their Substantive Validities," Journal of Applied Psychology, Vol. 76, No. 5:732–740, 1991.

Armstrong, J. Scott and T. S. Overton, "Estimating Nonresponse Bias in Mail Surveys," Journal of Marketing Research, Vol. 14, No. 3:396–402, 1977.

Bailey, A. Anthony, "Consumer Awareness and Use of Product Review Websites," Journal of Interactive Advertising, Vol. 6, No. 1:68–81, 2005.

Barnes, S. J. and R. Vidgen, "An Integrative Approach to the Assessment of E-Commerce Quality," Journal of Electronic Commerce Research, Vol. 3, No. 3:114–127, 2002.

Bearden, W. O.; R. G. Netermeyer; and K. L. Haws. Handbook of Marketing Scales. Multi-Item Measures for Marketing and Consumer Behavior Research, Thousand Oaks: Sage, 2011.

Beggan, J. K., "On the social nature of nonsocial perception: The mere ownership effect," Journal of Personality and Social Psychology, Vol. 62, No. 2:229–237, 1992.

Benslimane, D., S. Dustdar, and A. Sheth, "Services Mashups: The New Generation of Web Applications," IEEE Internet Computing, Vol. 12, No. 5:13–15, 2008.

Bentler, P. M., "Comparative fit indexes in structural models," Psychological Bulletin, Vol. 107, No. 2:238–246, 1990.

Berthon, P. R., L. F. Pitt, K. Plangger, and D. Shapiro, "Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy," Business Horizons, Vol. 55, No. 3:261–271, 2012.

Bhattacherjee, A., "Understanding Information System Continuance: An Expectation-Confirmation Model," MIS Quarterly, Vol. 25, No. 3:351–370, 2001.

Bilgram, V., A. Brem, and K.-I. Voigt, "User-Centric Innovations in New Product Development — Systematic Identification of Lead Users Harnessing Interactive and Collaborative Online-Tools," International Journal of Innovation Management, Vol. 12, No. 03:419–458, 2008.

Bollen, K. A., Structural equations with latent variables, New York: Wiley, 1989.

Botha, E., M. Farshid, and L. Pitt, "How sociable? An exploratory study of university brand visibility in social media," South African Journal of Business Management, Vol. , No. Vol.42, No.2:4–51, 2011.

Boyd, D. M. and N. B. Ellison, "Social Network Sites: Definition, History, and Scholarship," Journal of Computer-Mediated Communication, Vol. 13, No. 1:210–230, 2007.

Boyd, T. C. and C. H. Mason, "The Link between Attractiveness of "Extrabrand" Attributes and the Adoption of Innovations," Journal of the Academy of Marketing Science, Vol. 27, No. 3:306–319, 1999.

Boyles, T., "Small Business and Web 2.0. Hope or Hype?," Entrepreneurial Executive, Vol. , No. Vol. 16:81–96, 2011.

Braddy, P. W., A. W. Meade, and C. M. Kroustalis, Organizational Website Usability and Attractiveness Effects on Viewer Impressions. Paper presented at the 20th Annual Conference of the Society for Industrial and

Organizational Psychology, Los Angeles, CA., http://www4.ncsu.edu/~awmeade/Links/Papers/WebImpressions%28SIOP05%29.pdf, last access: 14.11.2011, 2005.

Brehm, S. S., "Psychological reactance and the attractiveness of unobtainable objects: Sex differences in children's responses to an elimination of freedom," Sex Roles, Vol. 7, No. 9:937–949, 1981.

Brehm, J. W., R. A. Wright, S. Solomon, L. Silka, and J. Greenberg, "Perceived difficulty, energization, and the magnitude of goal valence," Journal of Experimental Social Psychology, Vol. 19, No. 1:21–48, 1983.

Bressolles, G., "La qualite de service electronique: NetQual. Proposition d'une echelle de mesure appliquee aux sites marchands et effets moderateurs," Recherche et Applications en Marketing, Vol. 21, No. 3:19–45, 2006.

Bressolles, G. and F. Durrieu, "Impact of e-Service Quality on Satisfaction and Loyalty Intentions: Differences between Buyers and Visitors, " Proceedings of ANZMAC 2007 Dunedin Conference, ANZMAC (ed.), ANZMAC, Dunedin, pp. 3047–3054, 2007.

Bryer, T. A. and S. M. Zavattaro, "Social Media and Public Administration," Administrative Theory & Praxis, Vol. 33, No. 3:325–340, 2011.

Burrill, V., G. Evans, D. Fokken, and K. Väänänen, "The lust to explore space: The attractiveness of interactive video within multimedia applications," Computers & Graphics, Vol. 18, No. 5:675–683, 1994.

Byrne, B. M., A primer of LISREL: Basic applications and programming for confirmatory factor analytic models, New York: Springer, 1989.

Byrne, D. and W. Griffitt, "Interpersonal Attraction,"Annual Review of Psychology, Volume 24:317-336, 1973.

Carbon, C.-C. and H. Leder, " The Repeated Evaluation Technique (RET). A method to capture dynamic effects of innovativeness and attractiveness,"Applied Cognitive Psychology, Vol. 19, No. 5:587–601, 2005.

Castronovo, C. and L. Huang, "Social Media in an Alternative Marketing Communication Model," Journal of Marketing Development & Competitiveness, Vol. 6, No.1:117–136, 2012.

Cenfetelli, R. T., I. Benbasat, and S. Al-Natour, "Addressing the What and How of Online Services: Positioning Supporting-Services Functionality and Service Quality for Business-to-Consumer Success," Information Systems Research, Vol. 19, No. 2:161–181, 2008.

Chai, S., S. Das, and H. R. Rao, "Factors Affecting Bloggers' Knowledge Sharing: An Investigation Across Gender," Journal of Management Information Systems, Vol. 28, No. 3:309–342, 2011.

Chandler, G. N. and S. H. Hanks, "Market attractiveness, resource-based capabilities, venture strategies, and venture performance," Journal of Business Venturing, Vol. 9, No. 4:331–349, 1994.

Chang, H.-C., H.-H. Lai, and Y.-M. Chang, "A measurement scale for evaluating the attractiveness of a passenger car form aimed at young consumers," International Journal of Industrial Ergonomics, Vol. 37, No. 1:21–30, 2007.

Chen, Y. and J. Xie, "Online Consumer Review: Word-of-Mouth as a New Element of Marketing Communication Mix," Management Science, Vol. 54, No. 3:477–491, 2008.

Chin, W. W. and P. R. Newsted, "Structural Equation Modeling Analysis with Small Samples Using Partial Least Squares," Statistical strategies for small sample research, R. H. Hoyle (ed.), Sage, Thousand Oaks, pp. 307–341, 1999.

Chiou, W.-C., C.-C. Lin, and C. Perng, "A strategic framework for website evaluation based on a review of the literature from 1995–2006," Information & Management, Vol. 47, No. 5-6:282–290, 2010.

Chippendale, P., M. Zanin, and C. Andreatta, "Spatial and Temporal Attractiveness Analysis Through Geo-Referenced Photo Alignment." IGARSS 2008 - 2008 IEEE International Geoscience and Remote Sensing Symposium, IEEE (ed.), IEEE, Boston, pp. 1116–1119, 2008.

Cho, C.-H. and H. Khang, "The State of Internet-Related Research in Communications, Marketing, and Advertising: 1994-2003," Journal of Advertising, Vol. 35, No. 3:143–163, 2006.

Chung, C. and K. Austria, "Social Media Gratification and Attitude toward Social Media Marketing Messages. A Study of the Effect of Social Media Marketing Messages on Online Shopping Value," Northeast Business Economics Association, Susana Yu, Richard Lord and Betsy Lin (eds.), Montclair State University, New Jersey, pp. 581–586, 2010.

Churchill, G. A., N. M. Ford, and O. C. Walker, "Personal characteristics of salespeople and the attractiveness of alternative rewards," Journal of Business Research, Vol. 7, No. 1:25–50, 1979.

Constantinides, E. and S. J. Fountain, "Web 2.0: Conceptual foundations and marketing issues," Journal of Direct, Data and Digital Marketing Practice, Vol. 9, No. 3:231–244, 2008.

Cormode, G. and B. Krishnamurthy, "Key Differences between Web1.0 and Web2.0," First Monday, Vol. 13, No. 6:1–30, 2008.

Correa, T., A. W. Hinsley, and H. G. de Zúñiga, "Who interacts on the Web?: The intersection of users' personality and social media use," Computers in Human Behavior, Vol. 26, No. 2:247–253, 2010.

Coyle, C. L. and H. Vaughn, "Social networking: Communication revolution or evolution?," Bell Labs Technical Journal, Vol. 13, No. 2:13–17, 2008.

Cromer, C., "Understanding Web 2.0's Influences on Public e-services: A Protection Motivation Perspective," Innovation: Management Policy and Practice, Vol. 12, No. 2:192–205, 2010.

Daugherty, T., M. Eastin, and L. Bright, "Exploring Consumer Motivations for Creating User-Generated Content," Journal of Interactive Advertising, Vol. 8, No. 2:16–25, 2008.

DeLone, W. H. and E. R. McLean, "The DeLone and McLean Model of Information Systems Success: A Ten-Year Update," Journal of Management Information Systems, Vol. 19, No. 4:9–30, 2003.

DeVellis, R. F., Scale Development: Theory and Applications, Thousand Oaks: Sage, 2003.

Donovan, J. M., E. Hill, and W. R. Jankowiak, "Gender, sexual orientation, and truth‐of‐consensus in studies of physical attractiveness," Journal of Sex Research, Vol. 26, No. 2:264‐271, 1989.

Durukan, T., I. Bozaci, and A. Bugra Hamsioglu, "An Investigation of Customer Behaviours in Social Media," European Journal of Economics,, Finance & Administrative Sciences, Vol. Jan2012, No. 44:148–158, 2012.

Dwyer, P., "Measuring the value of electronic word of mouth and its impact in consumer communities," Journal of Interactive Marketing, Vol. 21, No. 2:63–79, 2007.

Eckmann, M. and J. Wagner, "Judging the Attractiveness of Product Design: The Effect of Visual Attributes and Consumer Characteristics," Advances in Consumer Research Volume, Vol. 21:560–564, 1994.

Ewing, G. O. and T. Kulka, "Revealed and stated preference analysis of ski resort attractiveness," Leisure Sciences, Vol. 2, No. 3-4:249–275, 1979.

Figueiredo, F., H. Pinto, F. Belém, J. Almeida, M. Gonçalves, D. Fernandes, and E. Moura, "Assessing the quality of textual features in social media," Information Processing & Management, Vol. 49, No. 1:222-247, 2012.

Filer, R. J., "Frustration, satisfaction, and other factors affecting the attractiveness of goal objects," The Journal of Abnormal and Social Psychology, Vol. 47, No. 2:203–212, 1952.

Fornell, C., "A Second Generation of Multivariate Analysis: Classification of Methods and Implications for Marketing Research", Review of Marketing, M. J. Houston (ed.), Chicago: American Marketing Association, pp. 407–450, 1987.

Franke, N., E. von Hippel, and M. Schreier, "Finding Commercially Attractive User Innovations: A Test of Lead-User Theory," Journal of Product Innovation Management, Vol. 23, No. 4:301–315, 2006.

Frutos, J. and D. Borenstein, "A framework to support customer–company interaction in mass customization environments," Computers in Industry, Vol. 54, No. 2:115–135, 2004.

Füller, J., M. Bartl, H. Ernst, and H. Mühlbacher, "Community based innovation: How to integrate members of virtual communities into new product development," Electronic Commerce Research, Vol. 6, No. 1:57–73, 2006.

Füller, J., K. Matzler, and M. Hoppe, "Brand Community Members as a Source of Innovation," Journal of Product Innovation Management, Vol. 25, No. 6:608–619, 2008.

Füller, J., H. Mühlbacher, K. Matzler, and G. Jawecki, "Consumer Empowerment Through Internet-Based Co-creation," Journal of Management Information Systems, Vol. 26, No. 3:71–102, 2009.

Gangadharbatla, H., "Facebook Me: Collective Self-Esteem, Need to Belong, and Internet Self-Efficacy as Predictors of the iGeneration's Attitudes toward Social Networking Sites," Journal of Interactive Advertising, Vol. 8, No. 2:1–28, 2008.

Gangestad, S. W. and G. J. Scheyd, "The Evolution of Human Physical Attractiveness," Annual Review of Anthropology, Vol. 34, No. 1:523–548, 2005.

Gardiner, S. C., "Measures of Product Attractiveness and the Theory of Constraints," International Journal of Retail & Distribution Management, Vol. 21, No. 7:, 1993.

Glaser, B. G., Theoretical Sensitivity: Advances in the methodology of Grounded Theory, Mill Valley: Sociology Press, 1978.

Gregg, D. G. and S. Walczak, "The relationship between website quality, trust and price premiums at online auctions," Electronic Commerce Research, Vol. 10, No. 1:1–25, 2010.

Groves, R. M., Survey errors and survey costs, Hoboken: Wiley, 2004.

Haindl, M. and K. Dürrschmid, "Food Attractiveness and Gazing Behaviour," Proceedings of Measuring Behavior 2010, A. Spink, F. Grieco, O. Krips, L. Loijens, L. Noldus and P. Zimmermann (eds.), Noldus, Eindhoven, pp. 419–421, 2010.

Hair, J. F., W. C. Black, B. J. Babin, and R. E. Anderson, Multivariate data analysis. A global perspective, Upper Saddle River: Pearson Education, 2010.

Hanna, R., A. Rohm, and V. L. Crittenden, "We're all connected: The power of the social media ecosystem," Business Horizons, Vol. 54, No. 3:265–273, 2011.

Hartmann, J., "Assessing the attractiveness of interactive systems," Proceeding CHI EA '06. CHI '06 extended abstracts on Human factors in computing systems, ACM (ed.), ACM Press, New York, pp. 1755–1758, 2006.

Hartmann, J., A. Sutcliffe, and A. de Angeli, "Investigating attractiveness in web user interfaces," Proceedings of the SIGCHI conference on Human factors in computing systems - CHI '07, ACM (ed.), ACM Press, New York, pp. 387–396, 2007.

Hendricks, P., "Measurement of the Attractiveness of Places of Study for Geography Students," Tijdschrift voor Economische en Sociale Geografie, Vol. 76, No. 1:22–31, 1985.

Hinkin, T. R., "A Review of Scale Development Practices in the Study of Organizations," Journal of Management, Vol. 21, No. 5:967–988, 1995.

Hoegg, R., R. Martignoni, M. Meckel, and K. Stanoevska-Slabeva, "Overview of business models for Web 2.0 communities," Proceedings of GeNeMe 2006, GeNeMe (ed.), : GeNeMe, Dresden, pp. 1–17, 2006.

Hung, C.-L., J. C.-L. Chou, and T.-P. Dong, "Innovations and communication through innovative users: An exploratory mechanism of social networking website," International Journal of Information Management, Vol. 31, No. 4:317–326, 2011.

Imran, M. and A. Zaheer, "Verification of Social Impact Theory claims in Social Media Context," Journal of Internet Banking & Commerce, Vol. 17, No. 1:1–15, 2012.

Java, A., T. Finin, X. Song, and B. Tseng, "Why we Twitter: Understanding Microblogging Usage And Communities," Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis, ACM (ed.), ACM Press, New York, pp. 56–65, 2007.

Jayachandran, S., K. Hewett, and P. Kaufman, "Customer Response Capability in a Sense-and-Respond Era: The Role of Customer Knowledge Process," Journal of the Academy of Marketing Science, Vol. 32, No. 3:219–233, 2004.

Ji, Y. Gu, H. Hwangbo, J. S. Yi, P. L. P. Rau, X. Fang, and C. Ling, "The Influence of Cultural Differences on the Use of Social Network Services and the Formation of Social Capital," International Journal of Human-Computer Interaction, Vol. 26, No. 11-12:1100–1121, 2010.

Jonasz, A., "Social Media. Some Thing to Consider Before Creating an Online Presence," U.S. Army Medical Department Journal, Vol. 6, No. 1:37–46, 2012.

Jones, B., J. Temperley, and A. Lima, "Corporate reputation in the era of Web 2.0: the case of Primark," Journal of Marketing Management, Vol. 25, No. 9-10:927–939, 2009.

Kaplan, A. M. and M. Haenlein, "Users of the world, unite! The challenges and opportunities of Social Media," Business Horizons, Vol. 53, No. 1:59–68, 2010.

Khang, H., E.-J. Ki, and L. Ye, "Social Media Research in Advertising, Communication, Marketing, and Public Relations, 1997-2010," Journalism & Mass Communication Quarterly, Vol. 89, No. 2:279–298, 2012.

Kim, J. Hyun, M.-S. Kim, and Y. Nam, "An Analysis of Self-Construals, Motivations, Facebook Use, and User Satisfaction," International Journal of Human-Computer Interaction, Vol. 26, No. 11-12:1077–1099, 2010.

Kline, R. B., Principles and practice of structural equation modeling, New York: Guilford Press, 2011.

Koh, J., Y.-G. Kim, B. Butler, and G.-W. Bock, "Encouraging participation in virtual communities," Communications of the ACM, Vol. 50, No. 2:68–73, 2007.

Kuan, H.-H., G.-W. Bock, and V. Vathanophas, "Comparing the effects of website quality on customer initial purchase and continued purchase at e-commerce websites," Behaviour & Information Technology, Vol. 27, No. 1:3–16, 2008.

Laick, S. and A. A. Dean, "Using Web 2.0 technology in personnel marketing to transmit corporate culture," International Journal of Management Cases, Vol. 13, No. 3:297–303, 2011.

Langlois, J. H., L. Kalakanis, A. J. Rubenstein, A. Larson, M. Hallam, and M. Smoot, "Maxims or myths of beauty? A meta-analytic and theoretical review," Psychological Bulletin, Vol. 126, No. 3:390–423, 2000.

Lee, S. and M. Cho, "Social Media Use in a Mobile Broadband Environment. Examination of Determinants of Twitter and Facebook Use," International Journal of Mobile Marketing, Vol.6, No. 2:71–87, 2011.

Lee, Y. and K. A. Kozar, "Investigating the effect of website quality on e-business success: An analytic hierarchy process (AHP) approach," Decision Support Systems, Vol. 42, No. 3:1383–1401, 2006.

Lekwa, V. L., T. W. Rice, and M. V. Hibbing, "The Correlates of Community Attractiveness," Environment and Behavior, Vol. 39, No. 2:198–216, 2007.

Leung, L., "User-generated content on the internet: an examination of gratifications, civic engagement and psychological empowerment," New Media & Society, Vol. 11, No. 8:1327–1347, 2010.

Li, J., "Theoretical Model of Consumer Acceptance: In the View of Website Quality," 2009 International Conference on E-business and Information System Security (Ebiss), IEEE (ed.), IEEE, Wuhan, pp. 1–4, 2009.

Liang, C.-J. and H.-J. Chen, "A study of the impacts of website quality on customer relationship performance," Total Quality Management & Business Excellence, Vol. 20, No. 9:971–988, 2009.

Lin, J. Ying-Chao, A. N. H. Le, S. Khalil, and J. M.-S. Cheng, "Social Media Usage and Work Values: The Example of Facebook in Taiwan," Social Behavior and Personality: an international journal, Vol. 40, No. 2:195–200, 2012.

Liu, C.-H. and H.-S. Liu, "Increasing Competitiveness of a firm and Supply Chain with Web 2.0 Initiatives," International Journal of Electronic Business Management, Vol. 7, No. 4:248–255, 2009.

Loiacono, E. T., R. T. Watson, and D. L. Goodhue, "Webqual: A measure of website quality," AMA Winter Educators' Conference Proceedings, Vol. 13:432–438, 2002.

Lorenzo-Romero, C., E. Constantinides, and M.-d.-C. Alarcón-del-Amo, "Consumer adoption of social networking sites: implications for theory and practice," Journal of Research in Interactive Marketing, Vol. 5, No. 2/3:170-188, 2011.

Madhava, R., "10 Things to Know About Preserving Social Media," Information Management Journal, Vol.45, No. 5:33–37, 2011.

Mathwick, C., C. Wiertz, and K. de Ruyter, "Social Capital Production in a Virtual P3 Community," Journal of Consumer Research, Vol. 34, No. 6:832–849, 2008.

Mentzer, J. T. and D. J. Flint, "Validity in Logistics Research," Journal of Business Logistics, Vol. 18, No. 1:199–216, 1997.

Mora, J.-D. and N. G. Barnes, "Online Media in Fast-growing Companies:. Adoption, usage and relation to revenues," Marketing Management Journal, Vol. 21, No. 2:128–144, 2011.

Mortensen, M. Hovmøller, P. V. Freytag, and J. S. Arlbjørn, "Attractiveness in supply chains: a process and matureness perspective," International Journal of Physical Distribution & Logistics Management, Vol. 38, No. 10:799–815, 2008.

Nambisan, S. and R. A. Baron, "Interactions in virtual customer environments: Implications for product support and customer relationship management," Journal of Interactive Marketing, Vol. 21, No. 2:42–62, 2007.

Nesbit, T., "Social Media. In the Work Place and Patterns of Usage," International Journal of Interdisciplinary Social Sciences, Vol. 5, No. 9:61–80, 2011.

Nielsen, Led by Facebook, Twitter, Global Time Spent on Social Media Sites up 82% Year over Year, http://blog.nielsen.com/nielsenwire/global/led-by-facebook-twitter-global-time-spent-on-social-media-sites-up-82-year-over-year/, last access: 14.11.2011, 2010.

O'Reilly, T., What Is Web 2.0? Design Patterns and Business Models for the Next Generation of Software, http://www.oreilly.de/artikel/web20.html, last access: 22.09.2011, 2005.

O'Reilly, T., Web 2.0 Compact Definition: Trying Again, http://radar.oreilly.com/2006/12/web-20-compact-definition-tryi.html, last access: 15.11.2011, 2006.

Organisation for Economic Co-operation and Development., Participative Web and User-Created Content. Web 2.0, Wikis and Social Networking, Paris: Organisation for Economic Co-operation and Development, 2007.

Pagani, M. and A. Mirabello, "The Influence of Personal and Social-Interactive Engagement in Social TV Web Sites," International Journal of Electronic Commerce, Vol. 16, No. 2:41–68, 2011.

Parasuraman, A., V. A. Zeithaml, and A. Malhotra, "E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality," Journal of Service Research, Vol. 7, No. 3:213–233, 2005.

Park, J. Yong, "Empowering the user as the new media participant," Digital Creativity, Vol. 18, No. 3:175–186, 2007.

Parra-López, E., J. Bulchand-Gidumal, D. Gutiérrez-Taño, and R. Díaz-Armas, "Intentions to use social media in organizing and taking vacation trips," Computers in Human Behavior, Vol. 27, No. 2:640–654, 2011.

Payne, A. F., K. Storbacka, and P. Frow, "Managing the co-creation of value," Journal of the Academy of Marketing Science, Vol. 36, No. 1:83–96, 2008.

Pentina, I., V. R. Prybutok, and X. Zhang, "The Role of Virtual Communities as Shopping Reference Groups," Journal of Electronic Commerce Research, Vol. 9, No. 2:114-136, 2008.

Pepitone, A., C. McCauley, and P. Hammond, "Change in attractiveness of forbidden toys as a function of severity of threat," Journal of Experimental Social Psychology, Vol. 3, No. 3:221–229, 1967.

Pilgrim, C. J., "Improving the usability of web 2.0 applications," Hypertext '08. Proceedings of the 19th ACM Conference on Hypertext and Hypermedia with Creating '08 & WebScience '08 : Pittsburgh, PA, USA, June 19-21, 2008, ACM (ed.), ACM Press, New York, pp. 239–240, 2008.

Piller, F., C. Berger, K. Möslein, and R. Reichwald, Co-Designing the Customer Interface: Learning from Exploratory Research. Arbeitsbericht Nr. 37 (März 2003) des Lehrstuhls für Betriebswirtschaftslehre - Information, Organisation und Management der Technischen Universität München, http://www.aib.wiso.tu-muenchen.de/neu/eng/content/publikationen/arbeitsberichte_pdf/TUM-AIB%20WP%20037%20Berger%20Piller%20et%20al%20Co-Designing.pdf, last access: 09.11.2011, 2003.

Pitt, L. F., D. L. Williams, V. L. Crittenden, T. Keo, and P. McCarty, "The use of social media: an exploratory study of usage among digital natives," Journal of Public Affairs, Vol. 12, No. 2:127–136, 2012.

Podsakoff, P. M., S. B. MacKenzie, J.-Y. Lee, and N. P. Podsakoff, "Common method biases in behavioral research: A critical review of the literature and recommended remedies," Journal of Applied Psychology, Vol. 88, No. 5:879–903, 2003.

Pooja, M., J. E. Black, C. Jiangmei, P. D. Berger, and B. D. Weinberg, "The Impact of Social Media Usage on Consumer Buying Behavior," Advances in Management, Vol. Vol. 5, No. 1:14–22, 2012.

Potts, J., J. Hartley, J. Banks, J. Burgess, R. Cobcroft, S. Cunningham, and L. Montgomery, "Consumer Co-creation and Situated Creativity," Industry & Innovation, Vol. 15, No. 5:459–474, 2008.

Prahalad, C. and V. Ramaswamy, "Co-creation experiences: The next practice in value creation," Journal of Interactive Marketing, Vol. 18, No. 3:5–14, 2004.

Purdy, J. P., "The Changing Space of Research: Web 2.0 and the Integration of Research and Writing Environments," Computers and Composition, Vol. 27, No. 1:48–58, 2010.

Ramani, G. and V. Kumar, "Interaction Orientation and Firm Performance," Journal of Marketing Management, Vol. 72, No. 1:27–45, 2008.

Rathi, D. and L. M. Given, "Research 2.0: A Framework for Qualitative and Quantitative Research in Web 2.0 Environments," 2010 43rd Hawaii International Conference on System Sciences, IEEE (ed.), IEEE, Koloa, pp. 1–10, 2010.

Rayna, T. and L. Striukova, "Web 2.0 is cheap: supply exceeds demand," Prometheus, Vol. 28, No. 3:267–285, 2010.

Riegner, C., "Word of Mouth on the Web. The Impact of Web 2.0 on Consumer Purchase Decisions," Journal of Advertising Research, Vol. 47, No. 4:436–447, 2007.

Rogers, E. M., Diffusion of innovations, New York: Free Press, 1962.

Ruxton, G. D., "The unequal variance t-test is an underused alternative to Student's t-test and the Mann-Whitney U test," Behavioral Ecology, Vol. 17, No. 4:688–690, 2006.

Ryu, G. and L. Feick, "A Penny for Your Thoughts: Referral Reward Programs and Referral Likelihood," Journal of Marketing Development & Competitiveness, Vol. 71, No. 1:84–94, 2007.

Schaffers, H., K. Kristensen, R. Slagter, and H. Löh, Web 2.0 Technologies and Workplace Paradigms to Enable e-Professional Workstyles, http://www.4entrepreneurship.org/projects/408/ICE%202007/Collaborative%20Systems%20%28Environments, %20Platforms,%20Tools,%20etc%29/19-127_Schaffers_final.pdf, last access: 16.11.2011, 2007.

Shimojo, E., D. Mier, and S. Shimojo, "Visual attractiveness is leaky (3): Effects of emotion, distance and timing," Journal of Vision, Vol. 11, No. 11:631, 2011.

Shimojo, E., J. Park, and S. Shimojo, "Integration of attractiveness across object categories and figure/ground," Journal of Vision, Vol. 9, No. 8:517, 2009.

Sigala, M., "E-service quality and Web 2.0: expanding quality models to include customer participation and inter-customer support," The Service Industries Journal, Vol. 29, No. 10:1341–1358, 2009.

SocialBakers, Facebook Statistics by country, http://www.socialbakers.com/facebook-statistics/?interval=last-3-months#chart-intervals, last access: 14.11.2011, 2011.

Song, F. Wu, "Theorizing Web 2.0," Information, Communication & Society, Vol. 13, No. 2:249–275, 2010.

Spiller, L., T. Tuten, and M. Carpenter, " Social Media and Its Role in Direct and Interactive IMC. Implications for Practitioners and Educators,"International Journal of Integrated Marketing Communications, Vol. , No. :74–84, 2011.

St. Eve, A. J. and M. A. Zuckerman, "Ensuring an Impartial Jury in the Age of Social Media," Duke Law & Technology Review, Vol. , No. Vol. 11:, 2012.

Steenkamp, J.-B. E.M and H. Baumgartner, "On the Use of Structural Equation Models in Marketing Modeling," International Journal of Research in Marketing, Vol. 17, No. 2:195–202, 2000.

Strahilevitz, M. Ann and G. F. Loewenstein, "The Effect of Ownership History on the Valuation of Objects," Journal of Consumer Research, Vol. 25, No. 3:276–289, 1998.

Strauss, A. L. and J. M. Corbin, Basics of qualitative research. Techniques and procedures for developing grounded theory, London: Sage, 2008.

Strube, M., I. Knuth, and C.-M. Wellbrock, "User Motivation on Generating Content - A critical review of recent research and an analysis of motivation for different UGC types," Managing Media Economy, Media Content and Technology in the Age of Digital Convergence, Z. Vukanovic and P. Faustino (eds.), Media XXI, Lissabon, pp. 343–363, 2011.

Sutcliffe, A., "Assessing the reliability of heuristic evaluation for Web site attractiveness and usability," Proceedings of the 35th Annual Hawaii International Conference on System Sciences, IEEE (ed.), IEEE, Hawaii, pp. 1838–1847, 2002.

Taylor, D. G., J. E. Lewin, and D. Strutton, "Friends, Fans, and Followers: Do Ads Work on Social Networks? How Gender and Age Shape Receptivity," Journal of Advertising Research, Vol. 51, No. 1:258, 2011.

Tenenhaus, M., V. E. Vinzi, Y.-M. Chatelin, and C. Lauro, "PLS path modeling," Computational Statistics & Data Analysis, Vol. 48, No. 1:159–205, 2005.

Turban, D. B. and D. W. Greening, "Corporate Social Performance and Organizational Attractiveness to Prospective Employees," The Academy of Management Journal, Vol. 40, No. 3:658–672, 1997.

Turner, E. Ann and J. C. Wright, "Effects of severity of threat and perceived availability on the attractiveness of objects," Journal of Personality and Social Psychology, Vol. 2, No. 1:128–132, 1965.

Umberson, D. and M. Hughes, "The Impact of Physical Attractiveness on Achievement and Psychological Well-Being," Social Psychology Quarterly, Vol. 50, No. 3:227–236, 1987.

Valenzuela, S., N. Park, and F. K. Kee, "Is There Social Capital in a Social Network Site?: Facebook Use and College Students' Life Satisfaction, Trust, and Participation," Journal of Computer-Mediated Communication, Vol. 14, No. 4:875–901, 2009.

Venkatesh, V., M. G. Morris, G. B. Davis, and F. D. Davis, "User Acceptance of Information Technology: Toward a Unified View," MIS Quarterly, Vol. 27, No. 3:425–478, 2003.

Vilpponen, A., S. Winter, and S. Sundqvist, "Electronic Word-of-Mouth in Online Environments: Exploring Referral Network Structure and Adoption Behavior," Journal of Interactive Advertising, Vol. 6, No. 2:63–77, 2006.

Wagner, C. and A. Majchrzak, "Enabling Customer-Centricity Using Wikis and the Wiki Way," Journal of Management Information Systems, Vol. 23, No. 3:17–43, 2007.

Warda, J., Measuring the Attractiveness of R&D Tax Incentives: Canada and Major Industrial Countries. A Report Prepared for: Foreign Affairs and International Trade Canada, Ontario Investment Service and Statistics Canada, http://epe.lac-bac.gc.ca/100/200/301/statcan/science_innovation88f0006-e/1999/no010/88F0006XIB99010.pdf, last access: 10.07.2012, 1999.

Wei, R., "The state of new media technology research in China: a review and critique," Asian Journal of Communication, Vol. 19, No. 1:116–127, 2009.

Wei, Y., D. W. Straub, and Amit Poddar, "The Power of Many: An Assessment of Managing Internet Group Purchasing," Journal of Electronic Commerce Research, Vol. 12, No. 1:19-43, 2011.

Wirtz, B. W., O. Schilke, and S. Ullrich, "Strategic Development of Business Models: Implications of the Web 2.0 for Creating Value on the Internet," Long Range Planning, Vol. 43, No. 2/3:272–290, 2010.

Yang, M., Y. Li, and M. Kiang, "Uncovering Social Media Data For Public Health Surveillance. Paper 218," PACIS 2011 Proceedings, AIS (ed.), Queensland University of Technology, Brisbane, pp. 1–11, 2011.

Yao, X. and J.-C. Thill, "How Far Is Too Far? - A Statistical Approach to Context-contingent Proximity Modeling," Transactions in GIS, Vol. 9, No. 2:157–178, 2005.

Yoo, B. and N. Donthu, "Developing a Scale to Measure the Perceived Quality of an Internet Shopping Site (SITEQUAL)," Quarterly Journal of Electronic Commerce, Vol. 2, No. 1:31–47, 2001.

Yoon, C. and S. Kim, "Developing the Causal Model of Online Store Success," Journal of Organizational Computing & Electronic Commerce, Vol. 19, No. 4:265–284, 2009.

Zhang, P. and G. von Dran, "Expectations and Rankings of Website Quality Features: Results of Two Studies on User Perceptions," Proceedings of the 34th annual Hawaii international conference on system sciences, January 3-6, 2001, Maui, Hawaii. Abstracts and CD-ROM of full papers, R. H. Sprague (ed.), IEEE Computer Society, Washington, pp. 1–10, 2001.