Factors Influencing Corporate Online Identity: A New Paradigm

Steven Walczak[1] and Dawn G. Gregg[2]

University of Colorado Denver, The Business School,
[1] steven.walczak@ucdenver.edu, [2] dawn.gregg@ucdenver.edu

Abstract

Electronic commerce research has shown that a very wide variety of factors such as website quality and vendor reputation influence consumer behaviors and outcomes. These behaviors and outcomes include: trust, intention to transact, and return visits. However, these factors are typically studied in isolation and often show conflicting results. This paper proposes a unifying model of online identity (or e-image) that combines the various factors that influence user perceptions of an e-business. Survey results support the importance of a wide variety of e-image factors when forming impressions online and show that while information content is the foremost concern for most users, the importance of other factors varies depending on the role of the user in establishing a relationship with the owner of the online identity.

Key words: E-commerce, Online Identity, Website Quality, Trust, Feedback/Reviews, Reputation Mechanisms

Introduction

Since the mid-1990s, the ever increasing growth in the World Wide Web has motivated research on the impact this communication medium has on commerce (e-commerce), socialization (social networking), advertising, brands, education and virtually every other aspect of modern life. The focus of this research has been mainly on the corporate website and on how it is perceived by Internet users [40], [80]. This has resulted in a large number of studies that examine how website attributes affect user perceptions of a company and its products with respect to how they affect customers' perceptions of company's credibility and trustworthiness, intention to transact, and promoting return visits (e.g., [3], [32], [47], [61], [69]). While the appearance of an organization's website is a reasonable place to start, a company's online identity frequently extends beyond the contents of their website.

Gregg and Walczak [19] introduced the term "e-image" which has a preliminary definition as "the electronic image presented by a business or individual… *which may be* composed of a variety of factors,… *which may* include identity (username), website appearance and information content, reputation rank from reputation systems, and any reputation feedback." Following the recommendation of Wu and Li [84] who stated that many researchers may criticize the shortcomings of a model (specifically TAM), but the critical need is to extend the framework to make it more comprehensive, we propose to extend this preliminary definition of the e-image construct to make it more universally applicable to e-business research. Hence, we define an e-image as being: all of the characteristics and impressions of a business that are assessable through electronic signals. These characteristics and impressions may be intentionally crafted by the business through the design of their website and its contents or it may be derived from electronic information posted about the business or its products by others. An e-image is influenced by all electronic information available about a business regardless of the source of the information as well as any other electronic interactions with either the business itself or other Internet users. Thus, our extension to the existing research is to include all forms of electronic information that in any way may influence a partner's perceptions of a business beyond the short list of: user name, website appearance and website information quality, and reputation systems provided by Gregg and Walczak [19]. An example of such electronic information is a discussion group or blog about the company hosted by a third party.

A business's e-image is how consumers, investors, suppliers, partners, and the general public perceive the business. In marketing the word 'image' is roughly equivalent to reputation; what people believe about a business versus what that business actually is [65]. For a consumer, the perceived image would typically include beliefs in the competence, honesty, reliability, and customer service of the business. For a potential business partner, image perceptions might include the competence, stability, and trustworthiness of the business. As the type of user changes so does importance of different components of the business's overall e-image. Thus, if the generic factors that are responsible for creating a business's e-image can be formally defined, it will enable comparison of e-business research across domains and for differing desired outcomes. Additionally, understanding what contributes to a business's e-image will assist researchers in the selection of variables that must be controlled in research projects examining the impact of user perceptions with respect to online behavior and the subsequent impact for businesses conducting electronic commerce.

This paper provides several benefits to electronic commerce research. First we provide a review of various factors that appear individually or in small clusters in prior research on electronic commerce drivers and outcomes. Next we define a comprehensive model of the numerous factors that comprise a business's e-image and examine this modle framework for two different simulated electronic commerce activities. Finally the interactions between the various factors comprising this new comprehensive model are discussed.

1 Background

Numerous factors have been identified as contributing to consumers' behavior in e-marketplaces, but again these are commonly researched in isolation or in small clusters. Much of prior research has focused on the technology acceptance model (TAM) as its foundation for examining intrinsic and extrinsic motivations for utilizing e-commerce in general [72] or on specific aspects of electronic commerce such as e-banking [28],[36] and also on general adoption of the Internet and related technologies for electronic commerce activities [49].

In addition to website components directly controlled by the e-business, various other electronic factors may also influence an e-commerce participant's perception of an e-business. An example of one electronic mechanism that may not be directly under the control of the e-business and which influences user perceptions to generate trust online is a reputation scoring system. These systems allow consumers to rate transactions with online businesses, creating a history for the business, which is especially important in online e-business environments such as online auctions where consumers may have no prior transactions with the e-business. The online reputations serve to reduce risk perceptions when product knowledge is asymmetric. However, prior research studies investigating the development of trust and subsequent price premiums based on reputation scores have been inconclusive. Some research indicates that reputation systems do affect price premiums (e.g., [2], [40], [53], [76]-[77]) and other research indicates that differences in reputation scores do not have any affect on price premiums (e.g., [15], [30], [64]). Additional research has indicated problems of collusion and other false signals in rating systems, thus devaluing their utilization by Web users [82].

Another area of research that has produced conflicting results is research on website "stickiness". Much research promoted website stickiness as an alternate measurement of the perceived value of website information quality and has directly linked website stickiness with intention to transact [42]. However, other claims indicate that website stickiness may not be beneficial to e-commerce transactions, especially if the consumer is required to navigate away from the sticky page to conduct the transaction [20]. These conflicting results may occur due to the isolation of factors being studied. The proposal of our research to view the myriad factors simultaneously that affect web participants formation of their perception and consequent trust of an e-business may help to overcome these conflicts.

Feedback from past consumers, or "direct feedback", has been proposed as a more reliable mechanism than reputation systems for communicating information about an online business. Direct feedback is simply the qualitative comments left by consumers about past transactions with an online business. Although this form of online reputation building mechanism can also be subject to fraud and misdirection [24], [66], [75], the development of direct feedback mechanisms appears to be a priority for many e-businesses [8], [16], [25]. Direct feedback is particularly popular for Web users that rely on the extrinsic motivator of external feedback for forming opinions. Another type of feedback forum which we will call "open feedback" provides qualitative information concerning either a business or its products (potentially from non-consumers) is also becoming popular as the new Web-savvy population wants to see what others are saying and also wants to be heard [16], [33]. Open feedback forums are highly sought after by information seekers, especially if the forum appears to be candid and unbiased such as blog postings by several Microsoft employees that describe interesting information about computing in general, but also occasionally describe problems with various Microsoft products and potential fixes that the bloggers have attempted. Sidali et al. [71] have also provided evidence that online reviews significantly increase the likelihood of making hotel reservations in the asymmetric online travel tourism industry.

A variety of other factors have been identified as potentially contributing to user perceptions about online businesses. Table 1 provides an overview of a more recent research that has examined factors that influence e-image and classified them into five super-groups: information content, security, website characteristics, feedback and reputation, and others. In Table 1, we have tried to distinguish between research that supports what we have defined as direct feedback and open feedback using the labels feedback mechanism or review mechanism. Each of the factors presented in Table 1 has been investigated and determined to influence e-commerce outcomes and as such needs to be represented in any construct attempting to capture the essence of e-images.

As may be seen from the representative research listed in Table 1, much of consumer motivation and interaction research is directly concerned with the e-business's website. This may be because the e-business's website is directly observable and allows for both qualitative and quantitative survey research to be performed. However in addition to feedback and reputation systems, which may not be directly controlled by the e-business, various other factors beyond the business's website itself may additionally influence consumers, partners, suppliers, and other interested Internet parties. An example of these types of factors includes the number of inbound links from other websites that point to the business's website and thus imply a level of authority or competence [10]. Additionally, the inclusion of a simple visit counter may be used by site visitors to imply popularity if not other business aspects like reliable information content [23].

Other research suggests outbound links may also be seen as providing reliable and authoritative content [14], [25], [45]. Provision of external links may also satisfy the need for external validation or extrinsic motivation in decision making [14], [79], [84], which provides a strong decision making and cognitive processing influence in most individuals [35]. Other factors that may signal business quality to Web users include the domain name or URL [50] and the user name in domains where a separate user account is possible [19].

While, many of the studies from Table 1 have investigated factors like credibility or trustworthiness as attributes of a corporate website, our study views these characteristics as outcomes of e-image. It is assumed that when analyzing the company or product information for accuracy, clarity and ownership, the user forms impressions of the credibility or trustworthiness of the business; i.e. the e-business is perceived to be credible and therefore their posted information may be believed. However, these perceptions must be based on something accessible to the user and our research claims that this something is the wide variety of cues available electronically.

2   E-Image Model

"Image is more important than reality" [17]. Consumers' mental images of e-businesses form the foundation for trust and other outcomes desired by the businesses. Reynolds [65] stated that personal image formation is "the development of a mental construct based upon a few impressions chosen from a flood of information." Every individual will observe numerous electronic information and action signals and will determine individually, which of these signals is useful for developing their e-image of an e-businesses. The range of possible signals is quite large and as such, it is important to create an ontology that defines what contributes to e-image formation.

S. Walczak
D. G. Gregg

Table 1: Prior recent research (2005-2009) on factors of e-image

Factors	Citations
Information Content	
Accurate product information	[13], [19], [21], [56]
Company information	[13], [19], [22]
Clear explanations	[60]
Quality of information	[52]
Access to information	[55], [57], [83]
Dynamic data	[37]
Product diagnosticity	[56]
Photo or image of product	[21], [56]
Other domain information	[14], [25], [45]
Search capability	[22]
Security	
Security mechanisms	[1], [7], [18], [22], [31], [44]
Clear privacy policy	[22], [38], [52], [58]
Website Characteristics	
General webpage design	[1], [54], [57], [78]
Navigation	[1], [25], [37], [42], [55]
Availability/reliability	[18]
Usability	[4], [31]
Personalization or social presence	[37], [52], [56]
Feedback & Reputation	
Brand/company name recognition	[6], [26], [39]
Reputation ranking system	[43]
Feedback mechanism (direct)	[16], [24]
Review mechanism (open)	[16], [22], [33], [71]
Rapid response to email queries	[4], [25]
Credibility	[12], [27], [45]
Prior experience/ reputation	[1], [31], [48], [57], [67], [69]
Other	
Appropriate price	[6], [62]
Perceived vendor integrity or Perceived vendor competence	[7], [31]
Efficient	[22], [25], [37], [52]
Online company name/username	[19]
Availability of multiple products/ shopping cart	[22], [52], [62]

One of the goals of this research is to define a unifying model of all electronic signals that may be used by potential e-commerce participants to form perceptions of an organization. While much research has examined how both perceptions and personality are formed (see e.g., [59]), this article focuses on externally received signals that assist the e-commerce participant in forming such perceptions of an e-commerce business.

The unified model provides a framework for examining the possible extent of perceptual and electronic signal factors and is based on signaling theory which states that in information asymmetric environments, hidden knowledge of quality (and other attributes of a business) may be conveyed through purposeful signals by the business [63], [73]. We propose that these signals do not necessarily have to originate from the business, but may be any signal that is given credibility by the receiver (consumer or other e-commerce associate), including signals by third party providers.

Empirical research has found that consumers come to rely on such signals in information asymmetric environments [29], [74].

Figure 1 presents our proposed unified model of the antecedent factors and mitigating influences that create an e-image. These various factors largely come from an amalgamation of the research listed in Table 1. The information content, security, and website characteristics factors are related to website quality. While website quality is certainly an important set of electronic signals, the components of the e-image construct also incorporate electronic signals that are not commonly associated with website quality. The mitigating influences, represented in the figure by dashed arrows, are: efficiency, company name recognition and brand name recognition, and lastly cultural and personal influences on individual e-consumers. These are considered mitigating since they have been shown to influence e-consumer attitudes, but may not directly rely on electronic signals.

Cultural and personal demographic factors include cultural, social, and personal beliefs that the individual holds about themselves (e.g., computer self-efficacy). These personal attributes have been demonstrated to influence the e-commerce decision making of individuals [11], [46], [51], [69]. Additionally, a user's national culture may also influence their e-commerce decision making and research has demonstrated variations between cultures [34], [68]. However, similar to the inconsistent findings of research on reputation systems, similar inconsistencies have been discovered for the cross-cultural influences on e-consumers [62].

The concept of an e-image is similar in many ways to brand images from marketing. Nandan [52] has put forward the idea of a web image for organizations utilizing a marketing perspective. The web image construct includes hardware and network factors, such as download speed. These factors are not included in our model of e-image because network speeds are not controlled by the organization (with the exception of having very large graphic or animated images on the website) and additionally are not related to business capabilities. The web image constructs also include trustworthiness, which is an outcome of an organizations' e-image as opposed to a factor contributing to e-image formation (the focus of our study).

While the proposed e-image model is based on existing research, it is necessary to determine if all the factors identified have a significant impact on overall impressions of the e-business and what factors are deemed most important when evaluating businesses online.
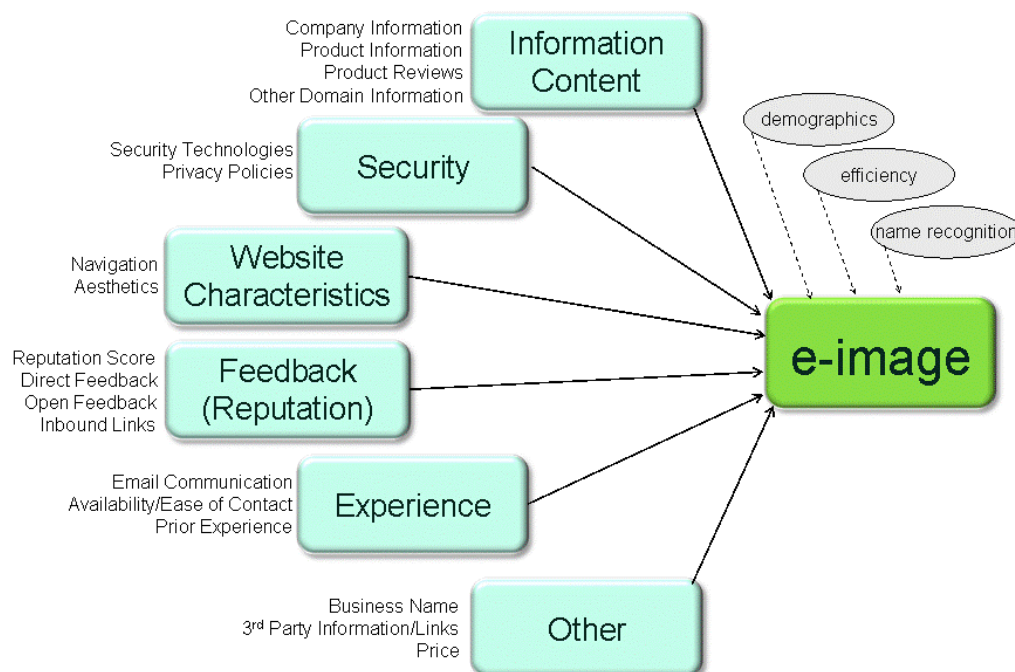

Figure 1: E-Image Model

3   Research Methodology

A survey was developed to assess what information respondents consider important when making a variety of decisions about businesses online. The survey instrument is shown in the Appendix. Many of the questions are taken directly or with only slight adjustment from [3] and [70]. However, additional questions were added to address e-mage factors not covered by these website quality instruments. The survey asked respondents to specify the importance of each e-image factor using a 7-point Likert scale. The survey was administered in December 2007 to graduate and undergraduate students in the Information Systems discipline at a medium-sized western United States university. The survey was administered both in classroom settings and online.

Zwass [85] defined e-commerce as "sharing business information, maintaining business relationships, and conducting business transactions" electronically. This definition goes beyond the commercial or selling view of e-commerce common in much Web-based research. Consistent with this broad view of e-commerce, the e-image construct should be applicable to any online business activity. Thus, in order to adequately assess the applicability of the e-image construct it is necessary to evaluate the e-image factors more than one online activity. Each respondent answered questions for two scenarios: 1) choosing an e-business to purchase a product from; and 2) evaluating a business to seek employment from. Additionally, respondents were asked to rank order their two most important factors for each of the decision making scenarios. These online activities were selected because they fall under Zwass's broader definition of e-commerce and because they are also activities that are within the scope of the respondent's experience. The dual evaluation (purchasing and employment) provides an opportunity to identify proposed e-image constructs that span multiple e-commerce utilizations and to also evaluate any changes to the significance of the constructs for varying e-commerce activities.

A total of 63 surveys were returned, with 62 percent of respondents being male and having an average age in the mid to late 20's. All respondents were college students and had prior education ranging from high school through Master's degrees. The majority of respondents indicated they spent an average of 10 or more hours a week online and had a high level of familiarity with both the Web (5+ years) and with making purchases online (10+ purchases). In fact only one respondent indicated minimal web experience. The use of student subjects does represent a convenience sample, however, the students are fairly representative of the subpopulation of Internet users that are both e-commerce shoppers and online job hunters. As such, the use of student subjects for the purpose of this study was deemed acceptable.

4   Empirical Data and Discussion

Table 2 summarizes the data collected for the e-image factors that respondents felt were most important for establishing a relationship with an organization for both of the decision-making scenarios. The mean response for every factor, except for the availability of open forums and other domain information, is significantly above the Likert scale midpoint of 4 ($p < 0.05$) for both decision-making tasks. This suggests that individuals do use a wide variety of information when making judgments about the credibility and trustworthiness of businesses online. Other domain information and open forums are not significant for both the buyer and employment tasks. Although Garrett [14] suggests that having links to other relevant sites promotes return visits by web users, the empirical results indicate that this may not be relevant to forming an e-image and developing a trusting relationship with a business or may be more relevant to other e-commerce activities (e.g., supply chain management or development of collaborative business relationships).

The presence of accurate or believable information is the most significant e-image factor for e-commerce success for both tasks, supporting the idea that e-commerce users are foremost information seekers. The range of responses reported for each factor supports our earlier claim that individuals forming an e-image for a business will utilize different electronic signals. Each e-image factor had at least one respondent indicate that that factor was extremely important. In fact the minimum quantity of extremely important ratings for any factor is 4 (6.3%) and occurred for the other domain information factor for the buying task. The factor with the narrowest range of responses is the product information factor for the online buying task with all responses indicating importance or higher values, which makes intuitive sense for the buying task.

One thing it is important to note is that there are significant differences in the importance of different e-image factors between the two different e-commerce decision-making scenarios. Paired sample t-tests were used to compare responses for the buying versus the employment information seeking tasks. This comparison shows that, while some e-image factors are important across multiple e-commerce tasks (as implied by [85]), e.g. accurate and understandable information, ability to communicate with the business, and business reputation, other factors are much more important for one of the e-commerce scenarios. For example, the price, security, and product information factors are significantly more important for the e-commerce purchasing decision than for the employment decision ($p < 0.05$). Only the availability of company information was more important for the Web-based employment decisions than it was for the buying decision and this difference was marginally significant ($p=0.074$).

Table 2. Survey responses evaluating e-image factors that lead to success of e-commerce

Factor	Buying Mean, median, mode (range)	p^*	Employment Mean, median, mode (range)	p^*	p^{**} Buying vs. Employment
Navigation	5.97, 6, 7 (2-7)	0.000	5.24, 6, 6 (1-7)	0.003	0.003
Attractive appearance	4.74, 5, 5 (1-7)	0.003	4.77, 5, 5 (1-7)	0.009	0.889
Appropriate design	4.95, 5, 5 (2-7)	0.000	4.82, 5, 6 (1-7)	0.001	0.546
Accurate information	**6.68**, 7, 7 (4-7)	0.000	**6.21**, 7, 7 (1-7)	0.000	0.005
Believable information	6.65, 7, 7 (4-7)	0.000	6.10, 7, 7 (1-7)	0.000	0.004
Timely information	6.24, 7, 7 (2-7)	0.000	5.66, 6, 7 (1-7)	0.000	0.009
Understandable info.	6.02, 6, 6 (1-7)	0.000	5.74, 6, 7 (1-7)	0.000	0.163
Relevant information	6.26, 7, 7 (2-7)	0.000	5.84, 6, 7 (1-7)	0.000	0.043
Right level of detail	6.08, 6, 7 (3-7)	0.000	5.61, 6, 7 (1-7)	0.000	0.024
Appropriate format	5.52, 6, 6 (1-7)	0.000	5.08, 5, 6 (1-7)	0.011	0.057
Security measures	6.55, 7, 7 (3-7)	0.000	5.15, 6, 7 (1-7)	0.000	0.000
Open forums	4.15, 4, 4 (1-7)	0.034	4.39, 5, 7 (1-7)	0.373	0.334
Appropriate prices	6.40, 7, 7 (3-7)	0.000	4.55, 5, 7 (1-7)	0.048	0.000
Convenient	6.40, 7, 7 (4-7)	0.000	4.98, 6, 7 (1-7)	0.005	0.000
Product information	6.32, 6, 7 (5-7)	0.000	5.31, 6, 6 (1-7)	0.001	0.000
Company information	5.50, 6, 6 (2-7)	0.000	5.94, 7, 7 (1-7)	0.000	0.074
Service information	5.92, 6, 7 (3-7)	0.000	5.13, 6, 7 (1-7)	0.003	0.001
Direct feedback	5.39, 6, 7 (1-7)	0.001	4.61, 5, 7 (1-7)	0.745	0.009
Other domain info.	3.92, 4, 5 (1-7)	0.053	4.18, 4, 5 (1-7)	0.438	0.340
Reputation rating	6.00, 6, 7 (3-7)	0.000	6.03, 7, 7 (1-7)	0.000	0.860
Easy communication	5.98, 6, 7 (2-7)	0.000	5.74, 6, 7 (1-7)	0.000	0.263
Response to emails	6.16, 7, 7 (1-7)	0.000	5.84, 7, 7 (1-7)	0.000	0.169
Business name/id	4.42, 4, 4 (1-7)	0.034	4.87, 5, 6 (1-7)	0.123	0.112
Well known brand/company	5.15, 5, 7 (2-7)	0.010	5.24, 6, 7 (1-7)	0.024	0.701
3rd Party Links/info.	4.82, 5, 5 (1-7)	0.123	5.05, 5, 6 (1-7)	0.038	0.316

* Significance was computed using a 1-tailed chi square test (assesses whether answers were random)
** Significance was computed using a 2-tailed paired sample students' t-test

The survey also asked respondents to rank the top two e-image factors for each of the two decision making tasks. The results, shown in Table 3, are consistent with the results for the importance rating task. The factors that received the most responses for either task are listed in Table 3, with the top two overall responses for each task highlighted. The other information quality row includes rankings for the information quality attributes: relevant, believable, timely, understandable and appropriate level of information. These empirical findings show that the quality of the information on a website is very important for different types of e-commerce tasks. However, in addition, e-consumers want to be economical, safe, and prefer sites that are easy to use (navigate). The reputation and communication of the e-business is also a very important e-image factor, especially for individuals considering forming a long-term relationship with the company. The fact that some of the e-image factors which promote e-commerce success are interrelated across differing e-commerce tasks, while others appear to have different importance in perceptions of the e-business based on the specific e-commerce task is illustrated in Figure 2.

Table 3. Summation of survey respondents' selection of most important e-image factors

| Factor	Buying Rank 1	Buying Rank 2	Buying Total	Employer Rank 1	Employer Rank 2	Employer Total	Overall Total
Accurate Information	12	8	20	19	5	**24**	44
Appropriate Price	12	17	**29**	1	4	5	34
Secure	17	7	**24**	1	3	4	28
Navigation	10	7	17	5	3	8	25
Other Information Quality	0	5	5	6	10	**16**	21
Reputation & Feedback	4	2	6	8	5	13	19
Communication & Prompt Email	0	1	1	5	8	13	14
Company Information	0	0	0	7	3	10	10

S. Walczak
D. G. Gregg
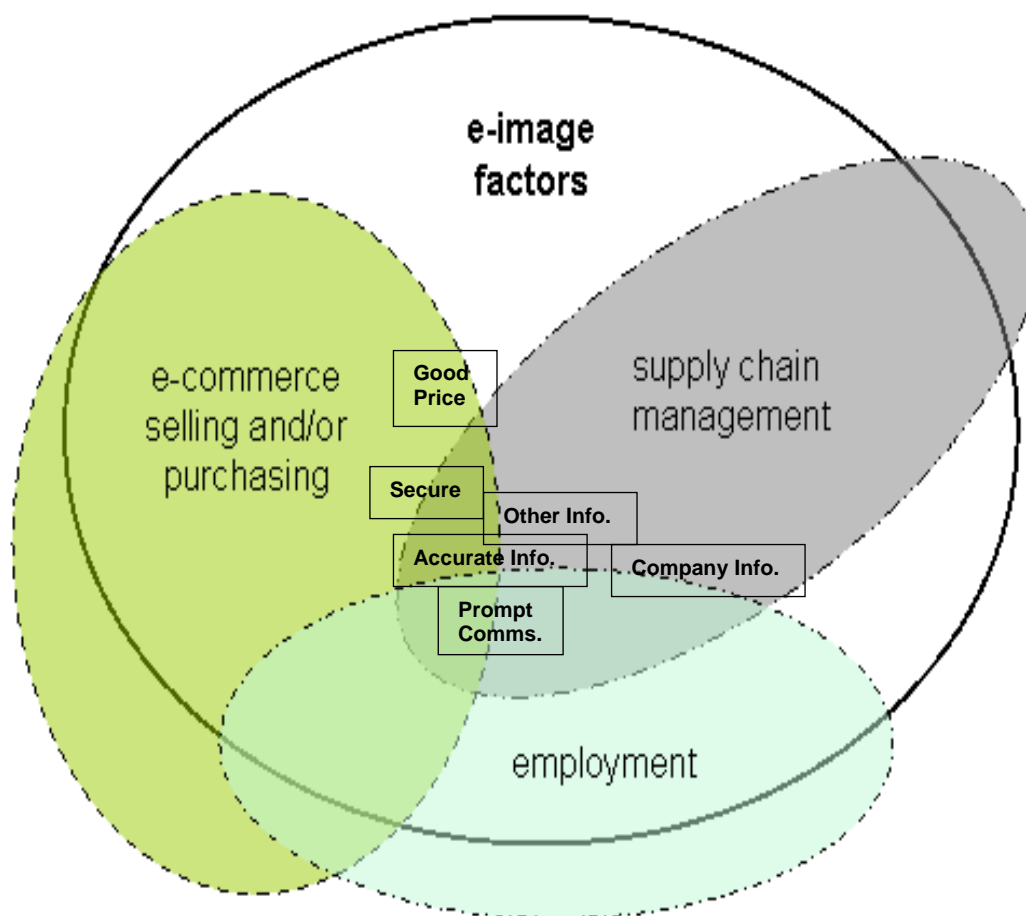
Figure 2. Relation of (some) e-image factors for various e-commerce tasks

Figure 2 shows some of the individual e-image factors as square boxes located within the overall e-image construct oval. The varying utilization of the individual factors for different electronic commerce tasks is shown by the shaded dashed ovals. Note that there is definite overlap of factor utilization between tasks, but also that certain tasks do not utilize specific factors (e.g., product price is not used as a image perception factor for potencial employment seeking with an organization). The employment and e-commerce purchasing ovals are based on feedback from the survey. The supply chain management task oval is hypothesized based on the information needs for successful supply chain management [5] and is displayed to show possible extensions to the current research.

This view of the interactions between e-image factors may serve business managers in helping them identify crucial information needs of different electronic commerce participants from consumers to suppliers and partners. Website components are under the direct control of the business and as such may be viewed as direct and hopefully reliable signals of the business's corporate identity. Businesses must also be aware of other third party and external information signals being utilized by electronic commerce participants and where possible address conflicting signals to consumers, employees, and partners to help maintain a consistent business image.

5   Conclusions and Future Research Directions

This article has presented a new construct, e-image, which represents the mental image of the qualities of a business constructed by individual e-commerce participants from various electronic signals. These signals include website components, email and other electronic interactions with the business, as well as other electronic information sources such as blogs and open feedback forums. An ontology for the e-image construct has been proposed to capture the factors that influence user perceptions of the e-business for a wide variety of e-commerce tasks.

Empirical evidence supports the importance of a wide variety of e-image factors when forming impressions of a business from online information resources and other online interactions. Consistent with prior research on website quality (e.g., [3], [32], [47], [61], [70]) this research shows that traditional website quality attributes like information quality, site aesthetics and navigation are important to individuals when assessing a company's credibility and

trustworthiness. However, this study also indicates that other factors like customer feedback forums, the company's responsiveness to emails and the number and quality of third party links into the website are also important things they look for when evaluating a company.

Although a plethora of possible e-image factors were presented to survey respondents, almost all of the factors were evaluated as being significant in determining the desirability of developing an electronic commerce relationship with an organization for at least one of the two commerce-related tasks. It is interesting to note that only the "other domain information" and "open forums" factors were not significant in influencing user perceptions of e-businesses for the two e-commerce tasks evaluated. Both of these factors refer to website attributes that are newer and perhaps less familiar to the survey participants. In addition, the "other domain information" question included references to outbound links, blogs, and white papers, and as such may have been too complex to measure the actual value of the individual components assigned to the factor. Future research is needed to further understand how users perceive these factors to determine if and/or when they might become important in developing an e-image.

Although this study has begun the process of understanding what factors are important to individuals when assessing businesses online, there remain a number of issues that need to be addressed further. First, this research examined e-image for a small set of e-commerce tasks. Given that this study shows that there is variation in responses based on the type of task being completed, the impact of e-image needs to be assessed for a much wider array of e-commerce related tasks. Second, this study expanded the range of factors contributing to e-image to many areas beyond the website but the list of attributes examined in this study is by no means exhaustive. For example, information on top executives can increasingly be found on sites like LinkedIn or Facebook. However, no research has yet examined how the online reputation of key company players impacts perceptions of the business, especially as you move beyond traditional business to consumer e-commerce activities into areas of business to business relationship building.

Future research is also needed to demonstrate how the e-image construct may be utilized as an antecedent factor to the development of various perceptual outcomes including: online trust, intention to transact, perception of business competency and perception of reliability, among others.

References

[1]   N. K. Austin, K. I. N. Ibeh, and J. Chow Choy Yee, Consumer Trust in the Online Travel Marketplace, Journal of Internet Commerce, vol. 5, no. 2, pp. 21-39, 2006.
[2]   S. Ba, and P. A. Pavlou, Evidence of the Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior, MIS Quarterly, vol. 26, no. 3, pp. 243-268, 2002.
[3]   S. J. Barnes, and R. T. Vidgen, Assessing the Quality of Auction Web Sites, in Proceedings of the 34th Hawaii International Conference on Systems Sciences, IEEE Computer Society Press, Los Alamitos, CA, 2001, pp. 1-10.
[4]   C. Bohen, Circuit City Ranks First In Customer Respect Study, TWICE: This Week in Consumer Electronics, vol. 21, no. 20, pp. 28, 2006.
[5]   Z.-G. Che, and Z. H. Che, T. A. Hsu, Cooperator selection and industry assignment in supplychain network with line balancing technology, Expert Systems with Applications, vol. 36, no. 7, pp. 10381-10387, 2009.
[6]   C. F. Chiang, and S. C. Jang, The Effects of Perceived Price and Brand Image on Value and Purchase Intention: Leisure Travelers' Attitudes Toward Online Hotel Booking, Journal of Hospitality & Leisure Marketing, vol. 15, no. 3, pp. 49-69, 2006.
[7]   R. Connolly, and F. Bannister, Consumer trust in Internet shopping in Ireland: towards the development of a more effective trust measurement instrument, Journal of Information Technology, vol. 22, no. 2, pp. 102-18, 2007.
[8]   J. Covert, Online Clothes Reviews Give 'Love That Dress' New Clout, Wall Street Journal – Eastern Edition, vol. 248, pp. B1-B4, December 2007.
[9]   F. D. Davis, Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology, MIS Quarterly, vol. 13, no. 3, pp. 319-340, 1989.
[10] C. H. Q. Ding, H. Zha, X. He, P. Husbands, and H. D. Simon, Link Analysis: Hubs and Authorities on the World Wide Web, SIAM Review, vol. 46, no. 2, pp. 256-268, 2004.
[11] W. Dutton, and A. Shepherd, Trust in the Internet as an experience technology, Information, Communication & Society, vol. 9, no. 4, pp. 433-451, 2006.
[12] A. J. Flanagin, and M. J. Metzger, The role of site features, user attributes, and information verification behaviors on the perceived credibility of web-based information, New Media & Society, vol. 9, no. 2, pp. 319-342, 2007.
[13] M. Fritz, E-commerce partnering due diligence: A methodology for trust in e-commerce in food networks, Food Economics - Acta Agriculturae Scandinavica, Section C, vol. 4, no. 1, pp. 13-20, 2007.
[14] J. J. Garrett. (2006, April) Want to Keep Customers? Set Them Free, Business Week Online. [Online]. Available: http://www.businessweek.com/innovate/content/apr2006/id20060414_710600.htm.
[15] J. H. Gilkeson, and K. R. Reynolds, Determinants of Internet Auction Success and Closing Price: An Exploratory Study, Psychology and Marketing, vol. 20, no. 6, pp. 537-566, 2003.

[16] P. Gogoi. (2007, February) Retailers Take a Tip from MySpace, Business Week Online. [Online]. Available: http://www.businessweek.com/bwdaily/dnflash/content/feb2007/db20070213_626293.htm.

[17] R. Govers, F. M. Go, and K. Kumar, Promoting Tourism Destination Image, Journal of Travel Research, vol. 46, no. 1, pp. 15-23, 2007.

[18] B. A. Gran, R. Fredriksen, and A. P.-J. Thunem, Addressing dependability by applying an approach for model-based risk assessment, Reliability Engineering & System Safety, vol. 92, no. 11, pp. 1492-1502, 2007.

[19] D. G. Gregg, and S. Walczak, Dressing Your Online Auction Business for Success: An Experiment Comparing Two eBay Businesses, MIS Quarterly, vol. 32, no. 3, pp. 653-670, 2008.

[20] A. Hamilton, *Net* Addictions, vol. 157, no. 12, Time, 2001, pp. 76.

[21] K. Hassanein, and M. Head, Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping, International Journal of Human-Computer Studies, vol. 65, no. 8, pp. 689-708, 2007.

[22] P. J. Haynes, and V. A. Taylor, An Examination of Strategic Practices in Online Retailing, Journal of Internet Commerce, vol. 5, no. 3, pp. 1-26, 2006.

[23] A. A. Hernández-Borges, P. Macías-Cervi, M. A. Gaspar-Guardado, M. L. Torres-Álvarez De Arcaya, A. Ruíz-Rabaza, and A. Jiménez-Sosa, User preference as quality markers of paediatric web sites, Medical Informatics & the Internet in Medicine, vol. 28, no. 3, pp. 183-194, 2003.

[24] Y. Hijikata, H. Ohno, Y. Kusumura, and S. Nishida, Social summarization of text feedback for online auctions and interactive presentation of the summary, Knowledge Based Systems, vol. 20, no. 6, pp. 527-541, 2007.

[25] S. Hudson, and D. Gilbert, The Internet and Small Hospitality Businesses: B&B Marketing in Canada, Journal of Hospitality & Leisure Marketing, vol. 14, no. 1, pp. 99-116, 2006.

[26] T. Iezzi, How to be a more creative marketer in four easy steps, Advertising Age, vol. 78, no. 42, 2007, pp. 23.

[27] S. Jo, The Effect of Online Media Credibility on Trust Relationships, Journal of Website Promotion, vol. 1, no. 2, pp. 57-78, 2005.

[28] S. Kamel, and A. Assem, Assessing the Introduction of Electronic Banking in Egypt Using the Technology Acceptance Model, in Annals of Cases on Information Technology Volume 5 (M. Khosrow-Pour, ed.). Hershey, PA: Idea Group Publishing, 2003, pp. 1-25.

[29] F. R. Kardes, S. S. Posavac, and M. L. Cronley, Consumer inference: A review of processes, bases, and judgment contexts, Journal of Consumer Psychology, vol. 14, no. 3, pp 230-256, 2004.

[30] R. J. Kauffman, and C. A. Wood, Running Up the Bid: Modeling Supplier Opportunism in Internet Auctions, in M. Chung (Ed.), Proceedings of the Sixth Americas Conference in Information Systems, 2000, pp. 929-936.

[31] M.-S. Kim, and J.-H. Ahn, Management of trust in the e-marketplace: the role of the buyer's experience in building trust, Journal of Information Technology, vol. 22, no. 2, pp. 119-132, 2007.

[32] S. Kim, and L. Stoel, Dimensional hierarchy of retail web quality, Information & Management, vol. 41, no. 5, pp. 619–633, 2004.

[33] Kiplinger's Staff, Walk-in Critics, Kiplinger's Personal Finance, vol. 61, no. 1, 2007, pg. 24.

[34] M. Kivijärvi, T. Laukkanen, and P. Cruz, Consumer Trust in Electronic Service Consumption: A Cross-Cultural Comparison between Finland and Portugal, Journal of Euromarketing, vol. 16, no. 3, pp. 51-65, 2007.

[35] Y. L. Konheim-Kalkstein, and P. Van den Broek, The Effect of Incentives on Cognitive Processing of Text, Discourse Processes, vol. 45, no. 2, pp. 180-194, 2008.

[36] V. S. Lai, and H. Li, Technology acceptance for internet banking: an invariance analysis, Information & Management, vol. 42, no. 2, pp. 373-386, 2005.

[37] K. LaRoche, Viewpoint: How to succeed in e-commerce, IEE Review, vol. 52, no. 3, 2006, pp. 49.

[38] T. Lauer, and X. Deng, Building online trust through privacy practices, International Journal of Information Security, vol. 6, no. 5, pp. 323-331, 2007.

[39] K. C. Lee, I. Kang, and D. H. McKnight, Transfer From Offline Trust to Key Online Perceptions: An Empirical Study, IEEE Transactions on Engineering Management, vol. 54, no. 4, pp. 729-741, 2007.

[40] Z. Lee, I. Im, and S. J. Lee, The Effect of Negative Consumer Feedback on Prices in Internet Auction Markets, in W. J. Orlikowski, S. Ang, P. Weill, H. C. Krcmar, and J. I. DeGross (Eds.), *Proceedings of the 21st International Conference on Information Systems*, 2000, pp. 286-287.

[41] L. N. K. Leonard, and C. K. Riemenschneider, What Factors Influence the Individual Impact of the Web? An Initial Model, Electronic Markets, vol. 18, no. 1, pp. 75-90, 2008.

[42] J. C.-C. Lin, Online stickiness: its antecedents and effect on purchasing intention, Behaviour & Information Technology, vol. 26, no. 6, pp. 507-516, 2007.

[43] J. Liu, and V. Issarny, An incentive compatible reputation mechanism for ubiquitous computing environments, International Journal of Information Security, vol. 6, no. 5, pp. 297-311, 2007.

[44] K. Mäenpää, Clustering the consumers on the basis of their perceptions of the Internet banking services, Internet Research, vol. 16, no. 3, pp. 304-322, 2006.

[45] R. N. Mayer, J. Huh, and B. J. Cude, Cues of Credibility and Price Performance of Life Insurance Comparison Web Sites, Journal of Consumer Affairs, 39, no. 1, pp. 71-94, 2005.

[46] J. C. McElroy, A. R. Hendrickson, A. M. Townsend, and S. M. DeMarie, Dispositional Factors in Internet Use: Personality Versus Cognitive Style, MIS Quarterly, vol. 31, no. 4, pp. 809-20, 2007.

[47] D. H. McKnight, C. J. Kacmar, and V. Choudhury, Dispositional Trust and Distrust Distinctions in Predicting High-and Low-Risk Internet Expert Advice Site Perceptions, e-Service Journal, vol. 3, no. 2, pp. 35-58, 2004.

[48] M. J. Metzger, Effects of Site, Vendor, and Consumer Characteristics on Web Site Trust and Disclosure, Communication Research, vol. 33, no. 3, pp. 155-179, 2006.

[49] J. W. Moon, and Y. G. Kim, Extending the TAM for a World-Wide-Web context. Information & Management, vol. 38, no. 4, pp. 217-230, 2001.

[50] J. Murphy, L. Raffa, and R. Mizerski, The Use of Domain Names in e-branding by the World's Top Brands, Electronic Markets, vol. 13, no. 3, pp. 222-232, 2003.

[51] D. C. Mutz, Social Trust and E-Commerce, Public Opinion Quarterly, vol.69, no. 3, pp. 393-416, 2005.

[52] S. Nandan, Managing Successful Online Brands: The Journal from Dot com to Web Brand Franchise, Journal of Website Promotion, vol. 1, no. 2, pp. 35-55, 2005.

[53] T. A. Ottoway, C. L. Bruneau, and G. E. Evans, The Impact of Auction Item Image and Consumer/Vendor Feedback Ratings on Electronic Auctions, Journal of Computer Information Systems, vol. 43, no. 3, pp. 56-60, 2003.

[54] S. Park, D. Choi, and J. Kim, Visualizing E-Brand Personality: Exploratory Studies on Visual Attributes and E-Brand Personalities in Korea, International Journal of Human-Computer Interaction, vol. 19, no. 1, pp. 7-34, 2005.

[55] P. A. Pavlou, and M. Fygenson, Understanding and Prediction Electronic Commerce Adoption: An Extension of the Theory of Planned Behavior, MIS Quarterly, vol. 30, no. 1, pp. 115-143, 2006.

[56] P. A. Pavlou, H. Liang, and Y. Xue, Understanding and Mitigating Uncertainty in Online Exchange Relationships: A Principal--Agent Perspective, MIS Quarterly, vol. 31, no. 1, pp. 105-136, 2007.

[57] M. Petre, S. Minocha, and D. Roberts, Usability beyond the website: an empirically-grounded e-commerce evaluation instrument for the total customer experience, Behaviour & Information Technology, vol. 25, no. 2, pp. 189-203, 2006.

[58] I. Pollach, What's Wrong with Online Privacy Policies?, Communications of the ACM, vol. 50, no. 9, pp. 103-108, 2007.

[59] V. Prabhu, C. Sutton, and W. Sauser, Creativity and Certain Personality Traits: Understanding the Mediating Effects of Intrinsic Motivation, Creativity Research Journal, vol. 20, no. 1, pp. 53-66, 2008.

[60] P. Pu, and L. Chen, Trust-inspiring explanation interfaces for recommender systems, Knowledge Based Systems, vol. 20, no. 6, pp. 542-556, 2007.

[61] C. Ranganathan, and S. Ganapathy, Key dimensions of business-to-consumer Web sites, Information & Management, vol. 39, no. 6, pp. 457–465, 2002.

[62] K. Ramus, and N. A. Nielsen, Online grocery retailing: what do consumers think?, Internet Research, vol. 15, no. 3, pp. 335-352, 2005.

[63] A. R. Rao, L. Qu, and R. W. Ruekert, Signaling unobservable product quality through a brand ally, Journal of Marketing Research, vol. 36, no. 2, pp. 258–268, 1999.

[64] P. Resnick, and R. Zeckhauser, Trust Among Strangers in Internet Transactions: Empirical Analysis of eBay's Reputation System, in M.R. Baye (Ed.), The Economics of the Internet and E-Commerce, Vol. 11 of Advances in Applied Microeconomics, Amsterdam: JAI Press, 2002, pp. 127-157.

[65] W. H. Reynolds, The Role of the Consumer in Image Building, California Management Review, vol. 7, no. 3, 1965, pp. 69-76.

[66] B. Rietjens, Trust and reputation on eBay: Towards a legal framework for feedback intermediaries, Information & Communications Technology Law, vol. 15, no. 1, pp. 55-78, 2006.

[67] V. P. Rindova, I. O. Williamson, A. P. Petkova, and J. M. Sever, Being Good Or Being Known: An Empirical Examination of the Dimensions, Antecedents, and Consequences of Organizational Reputation, Academy of Management Journal, vol. 48, no. 6, pp. 1033–1049, 2005.

[68] L. Robinson, Online Art Auctions à la Française and à l'Américaine eBay France and eBay USA, Social Science Computer Review, vol. 24, no. 4, pp. 426-444, 2006.

[69] J. A. Rosa, E. C. Garbarino, and A. J. Malter, Keeping the Body in Mind: The Influence of Body Esteem and Body Boundary Aberration on Consumer Beliefs and Purchase Intentions, Journal of Consumer Psychology, vol. 16, no. 1, pp. 79-91, 2006.

[70] C. Shchiglik, and S. J. Barnes, Evaluating Website Quality in the Airline Industry, Journal of Computer Information Systems, vol. 44, no. 3, pp. 17-25, 2004.

[71] K. L. Sidali, H. Schulze, and A. Spiller, The Impact of Online Reviews on the Choice of Holiday Accomodations, in W. Höpken, U. Gretzel, and R. Law (Eds.), Information and Communication Technologies in Tourism 2009: Proceedings of the International Conference in Amsterdam, The Netherlands, 2009, New York: Springer, 2009, pp. 87-98.

[72] J. Song, C. Koo, and Y. Kim, Investigating Antecedents of Behavioral Intentions in Mobile Commerce, Journal of Internet Commerce, vol. 6, no. 1, pp. 13-34, 2007.

[73] M. Spence, Job market signaling, Quarterly Journal of Economics, vol. 87, no. 3, pp. 355-374, 1973.

[74] M. Spence, Signaling in Retrospect and the Informational Structure of Markets, The American Economic Review, vol. 92, no. 3, pp. 434-459, 2002.

[75] T. Spring, How to Avoid the Biggest Web Shopping Annoyances, PC World, vol. 24, no. 12, pp. 151-158, 2006,

[76] S. S. Standifird, Reputation and E-commerce: eBay Auctions and the Asymmetrical Impact of Positive and Negative Ratings, Journal of Management, vol. 27, no. 3, pp. 279-296, 2001.

[77] S. S. Standifird, Online Auctions and the Importance of Reputation Type, Electronic Markets, vol. 12, no. 1, pp. 58-62, 2002.

[78] R. Stockdale, and M. Borovicka, Developing a Model for Supporting Quality in Restaurant Websites: A Pilot Study, Journal of Foodservice Business Research, vol. 10, no. 1, pp. 51-76, 2007.

[79] T. S. H. Teo, V. K. G. Lim, and R. Y. C. Lai, Intrinsic and extrinsic motivation in Internet usage, Omega International Journal of Management Science, vol. 27, no. 1, pp. 25-37, 1999.

Factors Influencing Corporate Online Identity: A New Paradigm

S. Walczak
D. G. Gregg

[80] H. Treiblmaier, Website Analysis: a review and assessment of Previous Research, Communications of the ASI, vol. 19, pp. 806-843, 2007.

[81] V. Venkatesh, Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model, Information Systems Research, vol. 11, no. 4, pp. 342-365, 2000.

[82] J.-C. Wang, and C.-C. Chiu, Recommending trusted online auction sellers using social network analysis, Expert Systems with Applications, vol. 34, no. 3, pp 1666-1679, 2008.

[83] C. A. Warden, W.-Y. Wu, and D. Tsai, Online Shopping Interface Components: Relative Importance as Peripheral and Central Cues, CyberPsychology & Behavior, vol. 9, no. 3, pp. 285-296, 2006.

[84] W.-Y. Wu, and C.-Y. Li, A contingency approach to incorporate human, emotional and social influence into a TAM for KM programs, Journal of Information Science, vol. 33, no. 3, pp. 275-297, 2007.

[85] V. Zwass, Electronic Commerce: Structures and Issues, International Journal of Electronic Commerce, vol. 1, no. 1, pp. 3-23, 1996.

Factors Influencing Corporate Online Identity: A New Paradigm

S. Walczak
D. G. Gregg

Appendix A
e-Image Survey

Problem Situation 1: You are considering making a major purchase and are trying to select which online vendor to order from.

(The first question asks respondents to rate each of the following factors from 1 to 7 with 1 representing not important and 7 representing extremely important. A second question asks each respondent to select the two most important factors from the 25 for making this decision.)

A. The site is easy to navigate.

B. The site has an attractive appearance.

C. The site has a design appropriate to the type of site.

D. The site provides accurate information.

E. The site provides believable information.

F. The site provides timely information.

G. The site provides relevant information.

H. The site provides easy to understand information.

I. The site provides information at the right level of detail.

J. The site presents the information in an appropriate format.

K. The site provides appropriate security measures.

L. The site provides a forum that allows users to discuss products and services.

M. The site has appropriate prices.

N. The site makes it easy and convenient to make purchases.

O. The site provides appropriate product information.

P. The site provides appropriate company information.

Q. The site provides customer service information.

R. The site provides customer feedback about products.

S. The site provides other domain information (links to relevant sites, white papers, and/or blogs related to the company's line of business).

T. The company has a good reputation rating (provided by former customers).

U. The company makes it easy to communicate.

V. The company responds promptly to email inquiries.

W. The company's online name is appropriate for the line of business.

X. The company name and/or brands are well known.

Y. The company is well known across the Internet (other sites/blogs discuss/link to them).

The above two questions (Likert scale perception from 1-7 and also the two most important) are repeated, but for the scenario: **Problem Situation 2: You are considering going to work for a company and are trying to find out if the company is one you would be interested in working for.**

These four questions are then followed by two open ended exploratory questions:

5. What things about an online site help create a positive impression of the site, its products and the company?

6. What things about an online site create a negative impression of the site, its products, and the company?

Which are finally followed by seven demographic questions that determine the respondents' gender, and approximate values for: age, familiarity with the Internet, average time spent online each week, familiarity with purchasing online, quantity of purchases made online, and education level.