

Website Quality and Tasks to Be Performed: The Consumer Perspective

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Abstract: This article concerns consumer evaluations of website quality when they perform informational and transactional tasks. Overall, 304 consumers participated in assessments. The results demonstrate that consumers evaluate website quality differently depending on the task which they have to complete. Furthermore, this study identifies website quality elements preferred by consumers for each of the tasks studied. This article discusses these results in relation to previous studies of website usability, and highlights the main contributions and avenues for future research.

Key words: website quality; task performance; online consumer behaviour; website usability; electronic commerce

JEL code: M31

1. Introduction

Even after close to two decades of presence on the Web, with sales growing every year (Netcraft.com, 2012), business websites still face a serious problem: scarcely 47% of consumers manage to achieve what they wanted to do when they visit a website (eMarketer, 2010).

In studies identifying the reasons for giving up, a significant percentage is associated with the fact that certain tasks to be performed appear to be too long and complicated, especially information searches and the order process (Thomason, 2004; Janakiraman, 2009; Goldwyn, 2010). This reality indicates the existence of major deficiencies in website quality. By not living up to consumers' expectations when they want to perform informational or transactional tasks, online retailers lose a lot. These deficiencies generally have a harmful impact on the reputation of their site, on the visitor and conversion rates, on the time that consumers spend finding out about offers, and of course on total revenues and return on investment. For example, it has been claimed that the phenomenon of shopping cart abandonment may cause online retailers to lose an amount equal to as much as 100% of their revenues each year (Ouellet, 2010). In this regard, it is interesting to note the proliferation of products created to "recover" a portion of the sales related to abandoned shopping carts during online shopping sessions, such as Sale Cycle, Pinnacle Cart, VeCapture, etc.

Although theoretical and practical studies of website quality and usability have burgeoned since the creation of the Web, they do not seem to have improved the situation. A closer look at the topics examined reveals that the

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authors of these studies do not rank the tasks that consumers perform on the Web. Although such publications often formulate recommendations to make websites more effective in many respects (content, visual aspects, hyperlinks, downloading speed, navigation, etc.), these are generic in nature and generally apply to the site as a whole (see the literature review by Chiou, Lin, and Perng (2010)) or to major categories of sites such as informational sites, transactional sites, portals, etc. (Agarwal & Venkatesh, 2002; Tarafdar & Zhang, 2005a).

Some studies are exceptions to this generalisation, such as those by Kalcynski, Sénécal and Nantel (2006), Nantel and Sénécal (2009) and Aljukhadar and Sénécal (2009). The first two of those studies showed that website designers would be well advised to concentrate on recommendations enabling consumers to successfully complete the tasks they want to perform. The third specifically revealed the convergence between the website qualities perceived by consumers and the time needed to perform a task. However, no study of that kind has yet explored the relationship between the task to be accomplished and the functional and ergonomic characteristics of the website that would best contribute to its success, from the consumer's point of view.

This study therefore aims to partially fill this gap by attempting to answer two specific questions. First of all, to confirm the relevance of considering task as a key variable, the following question was formulated: (1) Does consumers' evaluation of the quality of a website vary as a function of the task to be performed? If the answer to this question is yes, a second question then follows: (2) What are the main qualities that consumers judge to be important in performing three specific tasks on a website, namely (i) searching for information on a procedure, (ii) buying a product or service, and (iii) providing all the information necessary to obtain a quote.

The next section will briefly review the literature on the concept of task performance. The third section will present the methodology retained to answer the two research questions, and the fourth will reveal the results. In the fifth section, the results will be discussed and the main contributions summarized. Finally, the conclusion sets out the limitations of this study and possible future research avenues.

2. Literature Review

2.1 The Role of Tasks to Be Performed

Like the characteristics of users, of the environment, and of the information system used, many information systems and marketing specialists have highlighted the fact that the tasks a user needs to perform are directly associated with the usability of an information system. Although some researchers define usability without specific reference to the tasks to be executed (ISO, 1998; Preece, 2001; Benbunan-Fich, 2001; Tarafdar & Zhang, 2005a), others claim that tasks are the very essence of usability and thus define this concept as users' ability to easily perform the tasks related to their use of an information system (Nielsen, 1999; Guenther, 2003).

Some specialists would go still further, considering that this measure is critical to website success (Levitt, 2009; Anderson, 2010; Eizans, 2011). Based on the data from an iPerceptions survey of the perceptions of consumers who shopped online, Anderson emphasised to website managers that information regarding task performance is just as important as information regarding satisfaction, if not more so. Although the task performance rate varies depending on the type of task to be done (85% success rate in finding out more about products compared to 65% for purchasing products), the level of satisfaction is much more stable (76% and 75%, respectively, for the two tasks mentioned).

The following sections will describe the concept of tasks, their impacts and their background.

2.1.1 User Tasks and Their Characteristics

In the context of information technology use, the concept of tasks in information systems has generally been defined as actions undertaken by individuals with the aim of transforming inputs into outputs to meet information needs (D'Ambra & Wilson, 2004). Researchers soon became interested in task complexity and its relation to individual performance. In the view of Campbell (1988), objective task complexity is related to the number of results desired, the number of methods to be considered to reach a desired result, the interdependence or conflicting aspects of these methods, and finally a certain degree of uncertainty. The more elaborate a judgment and decision-making process a task demands in relation to these factors, the more complex it is and the more chances there are that it will not be completed.

As Fang and Holsapple (2011) point out, numerous objective characteristics can be associated with the concept of tasks. This is shown clearly in the third column of Table 1, which includes the domain associated with the task's subject, level and function; the magnitude associated with the task's complexity, volume and duration; the constraints related to time and degree of accuracy; and finally, the qualities associated with the task's content and novelty. The right-hand column presents our application of these factors to the domain of shopping on the Web. Thus, referring to its domain, a task may be related to a specific phase of a consumer's decision-making process such as information searching or evaluation of alternatives or it may be related to several phases ranging from research to the final purchase of a product or service. Referring to its level, a task to be performed on a website may be superficial, such as navigating only on the home page, or it may go deeper, requiring navigation on several pages. As for function, a task may be specific, related to a single motivation such as finding out about a particular brand's product or service or it may be much less specific because, for example, it has a hedonic motivation such as checking out one or more websites for the pleasure of finding gift ideas. As for magnitude, and more specifically complexity, a task can be simple, with well-identified steps that facilitate linear navigation (step 1, step 2, etc.) or it may be complex, with few indications on the site, sometimes causing users to go around in circles or reach dead ends. For the volume factor, a task may require handling very little information, such as finding a business's telephone number on its website, or it may require processing a lot of information such as buying a product or service online. Regarding duration, one task on a website may require much more time than another. In fact, so-called expeditious tasks can be accomplished much faster than exploratory tasks (Isaac and Volle, 2008). Referring to constraints, a task may or may not be associated with a time constraint. For example, some online payment forms must necessarily be sent within five minutes or the connection is broken and the task must be started again; however, other forms are not subject to any time constraints. A task may also be associated with a so-called accuracy constraint, requiring a high degree of precision in data entry. For example, in requesting an automobile insurance quote online, the entry of accurate personal data is an absolute necessity for obtaining an accurate online insurance premium; this contrasts with entering information in an online conversation on a social network. Finally, referring to quality, a task may be considered to be new in the Web landscape and for the user, or it may be an established habit for Web users. As for content, a task on a website may differ depending on whether the information to be processed is in the form of text, images or videos.

2.1.2 Impacts and Background of Task Performance

Many studies have empirically examined the impacts of task performance on an information system, whether in an individual or a group context. Inspired by the Task/Technology Fit model proposed by Goodhue and Thompson (1995), it has been shown that, when the characteristics of the tasks to be performed are appropriately matched with technology, the use of the information system on which the task has been executed increases (Goodhue, Littlefield & Straub, 1997). The same is true of the perceived ease of use of an information system (Mathieson & Keil, 1998) and individual or group performance (see the literature review on the topic by Cane 2009). In this research stream, performance has been operationalised in several ways: effectiveness, productivity, work performance, precision, satisfaction, quality of group work, etc.

		Examples from Fang and Holsapple (2011)	Examples from the authors (2012)		
Domain	Subject	Operations management, physical management	Online shopping: information search, evaluation, comparison, purchase and final decision		
	Level	Elementary, advanced	Superficial/in depth (funnel navigation)		
	Function	Broad, narrow	Specific (utilitarian)/non-specific (hedonic)		
Magnitude	Complexity	Simple, complex	Linear (simple)/circular or dead end (complex)		
	Volume	Number of characters	Little information to be processed/lots of information to be processed		
	Duration	Seconds, minutes and hours	Little time to execute/lots of time to execute		
Constraints	Time	Presence of limits	Initial distance Description Presence/absence of time limits		
	Accuracy/Demands	Degree of trust, completion	High/low in data entry or form sending		
Qualities	Novelty	One-time, routine, repetitive	Seen on the Web before or not		
	Content	Digital, text, graphic	Text/image/graphics/video/sound		

Table 1 Characteristics Associated with the Concept of Tasks

The few empirical studies of online shopping that have examined the impacts of task execution have confirmed the positive correlations between use and performance. In their study of online automobile purchasing, Sismeiro and Bucklin (2004) established that the sequential performance of certain tasks represented an element that predicted purchasing performance more accurately than repeat visits or the presence of decision assistance tools on the site. Using the fit perspective, Hong et al. (2007) found that, in situations where the format of the information and the shopping task were well matched, consumers' performance improved. Thus, when information is presented in list format, a task consisting of browsing for all information search task was more effective, whereas if the information was presented in matrix format, an information search task was more effective. In an experimental study of commercial websites, Fang and Holsapple (2011) revealed a positive relationship between the information acquisition task, whether simple or complex, and performance when navigation was structured in a usage-oriented hierarchy rather than in a subject-oriented hierarchy.

Recognizing the crucial role of task completion, more studies have investigated the factors that influence performance. These factors include the arrangement and structure of information, description of hyperlinks, types of menus, navigation aids, interruptions, and navigation models (see literature review by Frick et al., 1999).

In the Web domain, empirical research has instead identified the following factors: type of information, animation of elements other than banners, and wasted time (navigation on pages that are not useful and download time for certain Web pages). In a study of online clothing shopping, Kim et al. (2007) examined 27 websites and found that certain kinds of information were more appropriate for the successful execution of particular tasks, according to the participants. The kinds of information considered to be "high task relevant", such as prices, photos of products, return policy, and order confirmation, had more effect than those judged to be "low task relevant", such as information on sales taxes, three-dimensional images, and a virtual model. In their study of the effect of non-banner animation on an experimental site concerning food, Hong, Thong and Tam Kar (2007)

concluded that these effects had a positive impact on consumer attention but a negative impact on completion of the task associated with browsing. As well, they showed that the negative impacts of animation were greater on the browsing task than on the information search task. Nantel and Sénécal (2009) carried out two studies of the impact of wasted time on consumer task performance. In their first study, which investigated shopping on sites owned by a travel agency and an electrical product supplier, the authors showed that it was not wait times associated with page downloading that affected the purchase process but rather time wasted navigating on pages considered to be of no value to the shoppers. In their second study, conducted on a site selling hardware, Nantel and Sénécal found that page download time did have an effect. When pages were considered to be useful, the download time had no impact. However, when pages were deemed to be useless, the download time had a negative impact on task performance.

2.1.3 Website Evaluation as a Function of Type of Site

As mentioned above, some studies have found correlations between the evaluation of a website's ergonomic characteristics and the type of site used. In a study of 21 websites in four different industries, with a sample of 1,475 participants, Agarwal and Venkatesh (2002) found that, in evaluating a website, consumers attributed different levels of importance to the dimensions of usability depending on what role they were playing (consumer or investor) and what type of site they were assessing. For example, online booksellers' sites received significantly better evaluations than sites for other industries. On the other hand, airlines' and car rental agencies' sites received similar evaluations. Moreover, investors considered the "website content" dimension to be more important than consumers, for whom "ease of use" was more important. For their part, Tarafdar and Zhang (2005b) noted that, based on an evaluation of the characteristics of 40 websites by experts, the importance attributed to different website dimensions varied as a function of site type. For online retailing sites, for instance, the most important dimension was security; for financial institutions, security and personalisation were the most important factors; while for informational sites, information quality, ease of use, and downloading speed were most important.

While presenting the diverse characteristics of the tasks to be performed on an information system such as the Web, this literature review has demonstrated the role of task completion, revealing its impact on individual performance. This reality has incited certain researchers to try to understand what factors influence task execution in shopping situations. Information structure, navigation mode, download time and visit time on certain Web pages have been cited as important factors. On the other hand, some studies have shown that each type of website corresponds to a different kind of quality evaluation. In this regard, it is important to note that no study has yet explored the relationship between the different kinds of tasks to be executed and the evaluation of a website's quality.

3. Methodology

To answer the two research questions, an experimental methodology was retained. A total of 304 consumers participated in the study. This sample of Web users was composed of 51% women and 49% men, mostly aged between 25 and 34 years old; 44% of them worked full-time. The consumers were invited to take part in the study in return for financial compensation of \$50. Each participant was randomly assigned one of three tasks. Those who were assigned a transactional task had made at least one online purchase on a travel agency in the past, while those who were assigned the two informational tasks had already executed similar tasks.

The methodological approach comprised two steps. In the first step, participants in the laboratory were required to execute a very specific task on one of three selected websites, using a computer. Simultaneously, and

in coordination with their actions, the series of screens making up each participant's navigation sequence was recorded by a professional. The recording was transformed into a video file (AVI format) with Camtasia software¹. This approach enabled the experimenters to visually verify whether each participant was or was not able to execute the task assigned to him or her. The data gathered were then coded by two operators.

The three tasks to be executed were the following (Table 2):

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Tasks	Task characteristics
Search for information about a procedure (www.revenuquebec.ca).	Domain: information search, superficial navigation, specific objective Magnitude: simple, little information to be processed, little time to execute Constraints: no time limits, low accuracy Qualities: routine navigation landscape, textual information to be processed
Buy a travel product on Expedia (www.expedia.ca).	Domain: information search/evaluation, final purchase decision, in-depth navigation, specific objective Magnitude: complex, lots of information to be processed, lots of time to execute Constraints: no time limits, fairly high accuracy Qualities: routine navigation landscape; text, image and video information to be processed
Provide all the information necessary to obtain a quote (www.belairdirect.ca).	Domain: Information search/evaluation, comparison, somewhat in-depth, specific objective Magnitude: simple, lots of information to be processed, lots of time to execute Constraints: no time limits, very high accuracy Qualities: routine navigation landscape, textual information to be processed

Task 1: Find information on a procedure. More specifically, the participants who had to execute this task were asked to find information on declaring income taxes on Revenu Québec's website (www.revenuquebec.ca).

Comment: This task was simple according to the adaptation of Fang and Holsapple's (2011) classification made by the authors of this study. The information to be processed was textual, with very few images, and the degree of accuracy required in entering the data was not very high. As well, few clicks were needed to complete the task.

Task 2: Buy a travel service. More specifically, participants performing this task were asked to complete the necessary steps to buy a trip for two adults to Cancun, Mexico, on the Expedia website (www.expedia.ca).

Comment: This task was more complex than task 1 according to our adaptation of Fang and Holsapple's (2011) work. It included several steps, including information searches, the comparison of offers, and the final purchase procedure. Participants had to process several kinds of information that required some time to execute and a fairly high degree of accuracy. The information to be processed was in the form of text, images and video.

Task 3: Provide all the information needed to obtain a quote. More specifically, participants executing this task had to answer a series of questions on the Belairdirect site so they could receive a quote on automobile insurance (www.belairdirect.com).

Comment: This task was more complex than task 1 and as complex as task 2, according to our adaptation of Fang and Holsapple's (2011) classification. It required participants to evaluate their needs for the service required and to provide a full set of information, which often required a very high degree of accuracy. The information to be processed was textual only.

The second step of this approach involved participants evaluating whether the website had the necessary qualities to support the task they had to perform. To do this, they were asked, after their navigation session, to

¹ Camtasia screen capture software is a Techsmith product (www.techsmith.com).

respond to the Netqu@l questionnaire measuring the quality of an electronic service (Bressolles, 2004). This questionnaire, which is scored on 7-point Likert scales, has 19 items covering the five main dimensions of service quality in a Web context (Table 3), namely ergonomics and ease of use, quality and quantity of the information provided, aesthetic and design aspects, security of financial data and respect for privacy, and finally interactivity and personalization. This scale was retained for two main reasons. First of all, numerous empirical studies have shown it to be effective in assessing the quality of a website (Sénécal, Kalczynski & Nantel, 2005; Guertin & Nantel, 2005). Second, it generally respects widely accepted criteria for reliability and convergent and discriminant validity (Bressolles, 2006; Bressolles & Durrieu, 2010). This was also the case in our study, as a principal component analysis with orthogonal rotation (Varimax) of all the items in the scale highlighted five factors with good internal consistency (Cronbach's alpha ranging from 0.879 to 0.925) that explained 75.6% of the total variance.

Table 3	Netou@l Scale fo	r Measuring Electronic	Service Ouality

Factors	Items		
	1. This site is easy to use		
	2. It's easy to search for information on this site		
Ergonomics and ease of use	3. It's easy to move around and find what you're looking for on this site		
	4. The organisation and layout of this site make it easy to search for information		
	5. The layout of this site is clear and simple		
Information quality and quantity	6. This site provides detailed information on the product(s) or service(s) available		
information quanty and quantity	7. The information on this site is relevant		
	8. The information on this site is accurate		
	9. This site is pretty		
Aesthetics and design	10. This site shows creativity		
	11. This site is visually attractive		
Security of financial data and	12. Overall, I trust this site's security		
respect for privacy	13. This site guarantees that I can navigate securely		
	14. I think my privacy is protected on this site		
	15. I trust this site not to misuse my personal information		
	16. I can interact with this site to receive personalised information		
	17. This site is customised to my needs		
Interactivity and personalisation	18. This site has interactive functions that help me navigate		
	19. This site records my preferences and offers me additional services or information based on		
	these preferences		

Our approach to website evaluation was therefore based on evaluations made by consumers in real-life navigation situations and not by experts. Hasan, Morris and Probets (2011) showed that this method is the most effective and accurate for website evaluation. Their comparative study showed that expert testing identified a large number of usability problems on a website, most of which were minor, whereas tests by consumers identified fewer usability problems but most of them were major.

The next section presents the results in relation to the two research questions.

4. Results

4.1 Task Completion Rate and Overall Evaluation of Website Quality

Our results indicate that the task completion rate was 61% for the task that involved finding information on how to declare income taxes on the Revenu Québec site (100 participants), 41% for the task of buying a travel service on the Expedia.ca site (102 participants), and 31% for the task related to providing all the necessary information for an insurance quote (102 participants) (Table 4).

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Tasks	Number of respondents	Ergonomics and ease of use	Information quality and quantity	Aesthetics and design	Information security and privacy	Interactivity and personalisation	% task success
Search for information about a procedure (www.revenuquebec.ca).	100	4.75	5.70	4.52	5.64	4.39	56%
Buy a travel product on Expedia (www.expedia.ca).	102	3.80	4.25	4.09	4.17	4.16	41%
Provide all the information necessary to obtain a quote (www.belairdirect.ca).	102	4.92	4.64	3.96	4.55	4.19	31%
Mean		4.49	4.86	4.19	4.79	4.25	42.7%
Standard deviation		0.60	0.75	0.29	0.76	0.13	12.6

Table 4 Netqu@l Evaluation of Three Sites Based on the Task to be Executed and the Task Completion Rate

The 304 participants assigned a mean score ranging from 4.19 to 4.86 for each of the five dimensions measuring the quality of the website on which they executed their task. In percentages, these results are equivalent to 59.98% to 69.4%, respectively. The standard variation is higher for two dimensions, namely information security and privacy and ergonomics and ease of use (0.75).

4.2 Tasks to be Executed and Evaluation of the Dimensions of Website Quality

For the three tasks to be performed, a mean score was calculated for each of the five dimensions relating to the quality of the website on which it was executed (Table 4). The results indicate that the dimensions were evaluated very differently depending on the task to be performed. For example, for the task that consisted in searching for information about a procedure on the Revenu Québec website, the "information security and privacy" dimension obtained the best score, 5.64, compared to 4.17 for the task that involved buying a travel service on the Expedia.ca site. In the case of this task in particular, the "information security and privacy" dimension: for the task of buying a travel service on the Expedia.ca site, the score was 3.80 versus 4.92 for the task of providing all the information required for a quote on the Belairdirect.com site. In fact, this dimension obtained the lowest score for the task of buying a travel service and the highest score for the quote request task.

4.3 Dimensions of Website Quality and Task Completion

Table 5 presents the results of a discriminant analysis for the task that participants had to execute. For each of the three tasks, a mean score was calculated for each of the five dimensions of website quality. This score was then associated with the percentage of success and failure observed in task execution.

This analysis technique proved to be appropriate for determining which of the dimensions of website quality consumers consider when performing a task and what importance is attributed to each, depending on the type of site. It enabled us to determine the discriminant power of the various dimensions for task execution (success or failure) on each of the three sites analyzed. Task execution is considered to be the categorical group variable, and the five dimensions are the independent variables. Across the three websites we analyzed, no fundamental rule was violated regarding the robustness of the discriminant analysis, whether through Box's Test or through the normality of independent variables.

Thus, for the task that consisted in searching for information on how to declare income taxes on the Revenu Québec site, one single variable contributed significantly to the discriminant function between the two groups, "success and failure", namely "ergonomics and ease of use" (coefficient: 0.779), whereas none of the other four dimensions was significant. In addition, the analysis classified 74% of cases correctly.

For the task that consisted in buying a travel service on the Expedia.ca site, the results indicate that all five dimensions contribute significantly to the discriminant function between the two groups, in the following order: "information quality and quantity" (coefficient: 0.955), "interactivity and personalization" (coefficient: 0.865), "ergonomics and ease of use" (coefficient: 0.741), "site aesthetics and design" (coefficient: 0.621), and "data security and privacy" (coefficient: 0.467). Furthermore, 71.6% of cases were classified correctly.

Site	Sig. of discriminant function	Dimensions contributing to discriminant function in decreasing order	Discriminant Coeff./Score	Correct classification	Prediction success	Prediction failure
Search for information						
about a procedure (www.revenuquebec.ca).	0.000	D1	0.779	74.0%	83.9%	61.4%
	0.002	D2	0.955	71.6%	61.9%	78.3%
		D5	0.865			
Buy a travel product on Expedia (www.expedia.ca)		D1	0.741			
Expedia (www.expedia.ea).		D3	0.621			
		D4	0.467			
	0.003	D2	0.912	69.6%	34.4%	85.7%
Provide all the information		D5	0.684			
(www.belairdirect.ca).		D3	0.516			
(D1	0.410			

Table 5 Summary of Discriminant Analysis

Note: D1: Ergonomics and ease of use, D2: Information quality and quantity, D3: Aesthetics and design, D4: Security of financial data and respect for privacy, D5: Interactivity and personalisation.

Finally, for the task of providing the information needed for an automobile insurance quote on the Belairdirect site, the results reveal that four dimensions contributed significantly to the discriminant function between the two groups, in the following order: "information quality and quantity" (coefficient: 0.912), "interactivity and personalization" (coefficient: 0.684), "aesthetics and design" (coefficient: 0.516) and "ergonomics and ease of use" (coefficient: 0.410). And 69.6% of cases were classified correctly.

5. Discussion

In relation to the task completion rate, the results we obtained again confirm what several empirical studies and surveys have found: task completion on a website is not necessarily an exercise that occurs automatically. Even with a rather simple task like a search for information available on a site, nearly half the participants (44%) gave up before completing it. According to the results, the abandonment rate increases when the consumer must participate actively in a purchase process (59%) or provide personal information requiring a high degree of accuracy (69%).

These results contribute to answering the two research questions. The participants' evaluations of the quality dimensions of the websites on which they had executed their tasks varied as a function of the task they had to perform. Major differences in the scores attributed to the dimensions were noted. Moreover, what is most important for one task is not necessarily so important for another one. Thus, the "information quality and quantity" dimension obtained the best score when participants searched for information or when they purchased a service, but this was not the case when they had to provide information; in that case, they focused more on the "ergonomics and ease of use" dimension. As for the "site aesthetics and design" dimension, it was judged to be of lower quality for the task that involved providing information and for the one that aimed to search for information. These results may show

that this dimension is less important in more utilitarian tasks (whether simple or complex).

In addition, the results indicate that the most discriminant website quality dimensions for predicting the success of a task vary as a function of the task itself. In a site where the user does not engage in a purchase process and does not provide personal information, the site's ergonomics and ease of use is the only discriminant dimension for task completion. The easier the site is to use, the greater the probability of success in performing the task. These results are in accordance with the work of Chung and Tan (2004), which indicated that ease of use is one of the most important characteristics in a site where one is looking for specific information. The organisation and layout of the site must allow for easy access to the information, whether through the menu structure, the tree structure of the links, the tabs, or use of the internal search engine.

Nevertheless, when a task is transactional, all the dimensions come into play. The consumer examines small details and continually evaluates the quality of the site, throughout the navigation process. Moreover, the quality and quantity of the information on the site is the most discriminant factor. Consumers also want the site to offer them the most satisfactory experience, which is why the "site interactivity and personalisation" and "ergonomics and ease of use" dimensions are important. The "aesthetics and design" and "security and privacy" dimensions come in last place. This result is not specific to any particular website. It emerged from the performance of tasks on two websites in the study: Expedia and Belairdirect.

Specifically for tasks with strong engagement, a transactional or informational site that handles data that are highly important to the consumer must be much more vigilant than any other kind of site regarding the quality of the information displayed and the different steps taken to get there. The more difficult the information is to understand, the greater consumers' frustration will be and the greater the chances that they will abandon the site without reaching a result.

6. Conclusion

6.1 Contributions

This study contributes to research into the role of tasks to be executed on a website that offers services. First, it presents an initial Web adaptation of Fang and Holsapple's (2011) classification of task characteristics. This classification highlights the diversity of tasks that may be performed in a Web context and presents the elements that characterize each one. Fang and Holsapple state that their classification was designed to enhance the usability of an information system. The proposed adaptation retains the same vocation in a Web context. Secondly, in relation to previous empirical research, this study makes two advances. It shows that the idea a consumer has of website quality may be determined on the basis of the task to be executed, and it also indicates which ergonomic and functional characteristics contribute most to the success of each of the three most common tasks. The nature of these advances is of direct concern to managers of commercial websites and their design teams. They should encourage designers to pay more attention to the importance of the tasks that consumers need to perform on their websites and integrate means into their sites to support users more when they execute these tasks.

6.2 Limitations

One of the main limitations on this exploratory study resides in the nature of the tasks that were performed on the websites we examined. Although the three tasks selected are the most common ones done on the Web, it is still true that several situations were not taken into consideration, in particular testing a single website with several tasks or testing several websites with each one of the tasks. A second limitation on this study is attributable to the individual variables that may affect each participant's navigation and evaluation. Indeed, participants' engagement with the tasks was not taken into consideration in this study, and nor were cultural origins. A third limitation is inherent in any laboratory-based experiment. Although all possible efforts were made to put the participants at their ease, lab conditions differ from real-life navigation conditions at home or in any other place the participants might prefer. Finally, the French-speaking sample limits the generalisability of this study's results.

6.3 Future Research Avenues

As mentioned above, this study considered consumers' execution of a small number of tasks in a single navigation context. A future study could well explore the impacts of website quality on several other tasks that might be accomplished in other contexts, such as participating in an online auction with the aim of buying a trip, making an impulse buy, buying a trip online by taking a long time and considering several products available in different places on the Web, etc.

With the phenomenal growth in the use of the Web on smart phones, a future study could take the specific features of this new platform into consideration. In general, mobile applications and websites are adapted to the size of a telephone screen. They prioritise graphic over textual design. The size and arrangement of buttons, images and text could have a different impact on task completion.

Finally, this study was focused on individual navigation. Nevertheless, during a purchase requiring strong engagement, such as a trip, for example, consumers often sit at the computer in twos (i.e., as a couple) to make their decision. Recent exploratory research on the subject (Mekki Berrada, 2011) showed that the specific characteristics of a two-person decision online could have consequences for the task to be achieved on a website, depending on which member of the couple has control over the keyboard and mouse. A future study could therefore study the different tasks to be done and their impacts in a context of joint navigation.

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