THE USE OF WEB TOOLS IN FRENCH COMPANIES

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**SUMMARY OF THESIS**

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<td>Key words:</td>
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<td>Purpose:</td>
<td>Describe and explore how French companies having a Website/homepage use Web tools and their Website/homepage.</td>
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<td>Method:</td>
<td>The authors have gathered primary data through a quantitative research method. The research method chosen is the checklist observational method. The checklist used for this paper is composed of 29 items that have been observed on a sample of 20 French companies.</td>
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<td>Theoretical framework:</td>
<td>In the literature review, the theories of an e-marketing strategy are deeply developed. Then, it is explained with more details the opportunities of the Website, the interactive marketing communication tools, the e-CRM and the specificity of e-commerce and Web 2.0. The conceptual framework of the paper is also presented: it uses two Web objectives classifications – the MAO theory and the 5’S theory – and the Website stages developed by Chaffey. This conceptual framework is called “the Web tools three stages model” and it elaborates that it exists relations between Web tools objectives of a company and the stage of its Website.</td>
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<td>Conclusions:</td>
<td>The authors conclude that French companies observed have a limited use of Web tools, that correlations exist between the three categories of Web tools – information, communication, sales and relationships – and that most of those French companies have developed a static Website. The observation has enabled to declare that those companies do not respect the conceptual framework. Then the question of the validity of the results is discussed and some hypotheses of further researches are proposed.</td>
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1. INTRODUCTION

This chapter introduces the subject of our research by explaining the background of the Web in the world and underlining the use of the Web in 21st century companies. The particular situation of the Web in France and in French companies is highlighted. Then, we present the purpose and the research questions of the paper. At the end of this chapter, the limitations and the audience are emphasized before introducing the structure of the paper.

1.1 INTERNET OR WEB

"Actually, it is almost twenty years ago when I wanted to reframe the way we use information, the way we work together: I invented the World Wide Web" (Berners-Lee, 2009)

With this sentence, Tim Berners-Lee (2009) explains his first vision of the World Wide Web (or Web) that he created in the 90’s. But still two decades after, in 2010, people are confused with this concept and term. They continue to use the word Internet when meaning the Web or vice-versa, whereas according to the W3C¹, a clear difference between Internet and the Web can be made. The common definitions of these two words can easily be found in famous dictionaries such as Larousse Encyclopédie. In this dictionary, Internet (abbreviation of INTERnational NETwork) is defined as the “international telematic network, which results from the interconnection of computers around the world using a common protocol for data exchange in order to communicate with each other via telecommunication lines”² (Larousse Encyclopédie). In parallel, World Wide Web (or Web or WWW or W3) is the system making Internet “accessible to the general public by presenting information in an interactive multimedia”³ (Larousse Encyclopédie). In other words, it is the common use of browsers – Firefox, Internet Explorer, Chrome – to navigate on Websites. In accordance to the previous definitions, the academic literature emphasizes also these differences. Chaffey, Ellis-Chadwick, Johnston and Mayer (2006) use those definitions: Internet is “the physical network that links computers across the globe” (ibid., p. 523). In parallel, the World Wide Web is defined as “a medium for publishing information on the Internet. It is accessed through Web browsers which display WebPages” (ibid., p. 533).

One of the reasons of the misunderstanding between those two words and concepts can be explained by the fact that the World Wide Web is the main application of Internet and could not exist without it.

In this thesis, we presume that people or companies connected to Internet are also connected to the Web. In regard to the scope we want to give to the thesis, we will use the word Web (and its synonyms that are World Wide Web or WWW or W3) and the meaning it refers to.

¹ W3C is the World Wide Web Consortium. It is an international community that works together to develop Web standards. The leader of this organization is Tim Berners-Lee, the Web inventor.
² « Réseau télématique international, qui résulte de l'interconnexion des ordinateurs du monde entier utilisant un protocole commun d'échanges de données afin de dialoguer entre eux via les lignes de télécommunication »
³ « Le Web rend l'Internet accessible au grand public en présentant les informations sous une forme multimédia et interactive »
1.2 THE EVOLUTION OF THE WEB

According to the International Telecommunication Union, i.e. ITU⁴ (September 2009), more than 1.5 billion people across the world were directly connected to Internet in 2009. All of them are so able to surf on the Web. In addition to that, Internet World Stats (September 2009) declares that the penetration of Internet in everyone’s homes is approximately of 25% in 2009. The number of users still increase each year: from 2000 to 2009, users have increased by 380% in the world (Internet World Stats, September 2009). By considering that the launch of the Web for private individuals happened less than 20 years ago in 1991, we observe that this world wide phenomenon is spectacular.

What is also really interesting is the use of the Web across the world. As we write (2010), there are more than 206 million of Internet Websites in the world (NetCraft, January 2010) – surely there are many more Websites but it is currently impossible to list them all because no one governs the Web and no one is obliged to declare his/her Website. In the European Union, an average of 64% of companies had their own Website in January 2008 (Eurostat, 2008). No publication from Eurostat has been released since January 2008 so we consider that in 2010, the percentage of European companies having a Website might be close to 2008’s value.

Apart from all these statistics showing that the Web is widely used across the world, it is relevant to explain how the World Wide Web has faced an evolution since its creation. This evolution can be illustrated through three phases described as the “three Internet generations”⁵ elaborated by Michel Cartier (Annet, 2008, p. 52), professor in UQAM-Quebec and based on the general user experience: the Web 1.0 represents the first stage of the Web in the early nineties, the Web 2.0 represents the years 2000’s Web and the Web 3.0 represents what is presumed to be the future of the Web. From this theory but also from other writings and thoughts (Anderruthy, 2009 ; Annet, 2008 ; Pisani & Piotet, 2008), we have realised figure 1 (page 3) that represents the evolution of the Web. But as Pisani and Piotet (2008) say “the changes on the Web in recent years […] are just the beginning of a future difficult to imagine”⁶ (ibid., p.231). Even for Web professionals, it is difficult to say when the new Web 3.0 will appear and what it will look like (Berners-Lee, 2008).

⁴ The ITU is a United Nations agency working on information and communication technology problematic.
⁵ « Trois générations Internet »
⁶ « […] les bouleversements survenus sur le Web au cours des dernières années, ils ne constituent qu’un début dont la suite est difficile à imaginer… »
1.3 THE WEB TOOLS

As shown in figure 1 above, the evolution of the Web has generated many changes for the users, and that concerns also companies Web habits. Each stage of the Web illustrated in figure 1 has been...
followed by a new way to use the Web implicating also new innovative Web tools. “Web tool” does not have an official definition but it is an expression frequently used in writings to describe a common perception of services, actions or uses that can be made through the Web (Richardson, 2008; Renard, 2008). With the Web 1.0, the task was easy for companies: they only needed to use one Web tool which is the Website/homepage in order to present their company and products. As Annet (2008) assures the Website is the subsistence level for any company and so it might be defined as the most important of the Web tools for companies. In the 2000’s, with the Web 2.0, companies have to deal simultaneously between different Web tools and tasks: the update of their Website (technology and content), the use of social networks, the monitoring of what is said about their company (customers’ complaints, competitors’ attacks or general opinions...), the use of communication tools (e-mailing, blog, affiliation...) and also if possible the use of the Web as a selling tool. Now, companies have to forecast than in some months or years, all this will change again with the Web 3.0 meaning the need for lots of time, investments and awareness.

1.4 WEB IN FRANCE

Now that the Web and its usage have been described in a general point of view, it is interesting to focus on a particular country and observe the integration of the Web on this one. Consequently, the case of France and French companies regarding the Web will be discussed as a core topic for this thesis because as it will be demonstrated, France has some particular characteristics concerning this domain.

First, one of the most important facts to know is that 37 million of French people were connected to Internet at the end of 2009 (Mediametrie, 2009). According to Mediametrie (2009), one third of the non-connected people plan to do it in the future: it should represent more than 5 million new users. Moreover, Fevad figures for 2008 underline the increase of the e-commerce in France: since 2006, more than 10 000 new French online shops are created every year and French e-commerce turnover increased of one quarter in 2008 (FEVAD, 2009). Considering the potential new users and the potential of e-commerce, we can consider the Web in France as a growing market of which companies should not underestimate the potential.

After looking at the global situation of the Web in France, the case of French companies has to be emphasised. In accordance with Figure 2 (page 5), France is the top second European country concerning the access of companies to broadband Internet. As indicated in Figure 2, almost all French companies with more than 10 employees are connected to Internet (Eurostat, 2008). One of the reasons of this high level of connexion could be explained by the fact that the majority of French companies might be conscious that their needs of information can be filled by surfing on the Web (see Web users’ motivations in Appendix 1).
Paradoxically, Figure 3 below shows that barely half of French companies have their own Website/homepage (Eurostat, 2008). This ranks France among the European countries where companies are the less present on the Web. By taking into consideration the result of a country like Sweden, the Web presence of French companies can be considered as late (Eurostat, 2008). This lateness with the use of the most important Web tool (see part 1.3), the Websites/homepages, leads us to think that French companies are also late in the use of all other Web tools.

By comparing the figures of French companies connected to Internet with those of French companies with a Website/homepage as well as with those of other European countries, we can thus notice that a gap exists in France. Indeed, by considering the high result of French companies connected to Internet, we could expect a similar result for French companies having a Website/homepage. This not being the case, some hypotheses could be made on why so few companies have a Website/homepage in France. Do they lack of information or knowledge about the Web tools? Are not they aware of the opportunities and potential of the Web as described previously?

Consequently, a comparison between the use of the Web by several European countries’ companies could have been done in order to explain the reasons of France’s Web delay but we have to keep in mind that different cultural factor and regional behaviours (see Figure 2 and Figure 3) exist. In fact, those differences between countries might cause misinterpretation and lead to a wrong analysis of the results. Because of this, the choice of France as unique centre of interest for this paper has been made. We will also focus on French companies having already taken the first step of developing a Website because we deem that those companies are more subject to use other Web tools. As a matter of fact,

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7 Sample group composed of 10 employees and more companies, not included: energy, catering, financial activities.
8 The cultural factor can be explained by the fact that for the moment the Web 2.0 is resolutely an English-speaking world (Anderruthy, 2007, p. 6). So, Anglophone countries’ companies might have more opportunities to interact on the Web.
we believe that, by taking a deep look at the French companies already having a Website, we can increase information and awareness concerning the use of the Web and therefore create new opportunities for reluctant French companies.

1.5 PURPOSE OF THIS THESIS

To achieve such goals of information and awareness, the purpose of this thesis is to describe and explore how French companies having a Website/homepage use Web tools and their Website/homepage.

1.6 RESEARCH QUESTIONS

In order to round out the previous purpose, this thesis concretely answers the following research questions:
(1) Do French companies use many different Web tools?
(2) What are the Web tools used by French companies?
(3) What are the most and the least used Web tools by French companies?
(4) How do they use their Website?

1.7 AUDIENCE

This paper aims to be a practical tool for companies – those already present on the Web or those reluctant to be. Managers or empowered staff will be able to find which Web tools they can use and for which objective. This paper is also for students and researchers who might be interested to explore the behaviours of French companies regarding their use of Web tools and Website.

1.8 LIMITATIONS

As a limitation to the purpose, the description of French companies is only made on their use of Web tools part of the “free Web”: that means those used by companies to present themselves to a wide audience (Annet, 2008) and not the Web tools used for internal or private purpose (Intranet, Extranet).

1.9 STRUCTURE OF THE THESIS

In chapter 2, we present the theoretical framework related to the topic of this paper: the literature review highlights the main academic theories about the use of the Web in companies and then from those theories, our conceptual framework is developed.

In chapter 3, the method is described: we explain the research method chosen, the reasons of this choice and the process to conduct the method. The sample is also presented.

In chapter 4, the results of the research are exposed in details with the help of figures and tables.
In chapter 5, the results of the research are analysed following the criteria of the conceptual framework.

In chapter 6, general conclusions of the research are drawn up and the validity of the results is discussed. Then, propositions are made for further researches and finally the two authors give their point of view.
2. THEORETICAL FRAMEWORK

“[…] data are of no value unless they can be structured and organized in a category, model or theory, which can later be applied in more than a single case” [Gummesson, 2002, p. 283]

This chapter presents the theoretical framework of the paper based on several theories about the Web and its use in companies. The topics particularly emphasised in the literature review are the e-marketing, the e-commerce and the classification of the Web tools depending on company’s objectives. At the end of the chapter, the conceptual framework is introduced. The latest exposes the categories of Web tools according to Web objectives that will lead the research and it highlights the role and the evolution of the Website in an e-marketing strategy. The relationships between the Web tools objectives of a company and the stage of its Website are also explained in this part.

2.1 LITERATURE REVIEW

An idea or vision emerging from a particular subject or problem is nothing until it is not validated by a complete theoretical framework composed of various reliable literatures supporting this idea or vision. That is why this part is devoted to the different marketing, Web and Web tools theories that could be found in the academic literature to illustrate the research.

As already mentioned in the introduction of this paper, the confusion is often made between the two words “Internet” and “Web” and so is in the academic literature. Consequently, most of the following theories utilise the word “Internet” instead of “Web”. In order to respect the writings of the different authors quoted, we have kept the use of the word “Internet” but the readers of this present paper have to keep in mind that our interest is on the “Web”.

2.1.1 THE WEB AS AN OPPORTUNITY FOR COMPANIES

“Internet represents a tremendous opportunity” (Chaffey et al., 2006, p. xiii): that is the first sentence of the book Internet Marketing Strategy, Implementation and Practice which is essentially directed to managers and future deciders. Chaffey et al. show the opportunity of the Web for the customers who have the possibility to choose between a larger range of products, offers, suppliers... But above all, they show the opportunities that the Web represents for companies which can “expand into new markets, offer new services and compete on a more equal footing with larger businesses” (Chaffey et al., 2006, p. xiii). Not only can the large corporations take advantage of the Web but also the small or medium-sized enterprises. Renard (2008) affirms that “it is absolutely necessary to have an Internet presence giving access to the largest possible number, for a relatively modest cost in comparison to the population reached” (ibid., p. 45). To take advantage of the Web opportunities does not simply imply the technical equipment of the companies. As Porter (2001) declares: “the key question is not whether to deploy Internet technology – companies have no choice if they want to stay competitive – but how to deploy it” (ibid., p. 3). The way how Internet is deployed in a company could be linked with which Web tools are used and how.

9 « Il est absolument nécessaire d’avoir une présence sur Internet qui donne accès au plus grand nombre, pour un coût souvent relativement modeste en regard de la population touchée »
In order to understand how a company can deploy Internet technology, it is also important to deepen the understanding of e-business and the notions that follow from it. According to Chaffey & Smith (2008), e-business is part of the three e-terms essential and important to define for a company dealing with the Web. The two other terms are e-marketing and e-commerce. E-business is the broadest of the three concepts: “it involves the automation of all the business processes in the value chain” (Chaffey & Smith, 2008, p. 12) and it determines the “ability [for a company] to run a business online” (ibid., p. 12). E-marketing is the core concept: it involves the incorporation of the Web in the marketing of the company. In a general view, marketing can be defined as “an organizational function and a set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stake-holders” (American marketing association, 2004). From this general concept appeared the term e-marketing or Internet marketing meaning the achievement of marketing goals using electronic communications technology (Chaffey et al., 2006, p. 9). E-marketing is a “way of thinking, a way of putting the customer at the heart of all online activities” (Chaffey & Smith, 2008, p. 13). E-commerce refers to “all electronically mediated transactions between an organization and any third party” (Chaffey, 2004, p. 7) like financial transactions and information transactions. Both notions e-marketing and e-commerce involve different practices of the Web and so the use of different Web tools.

The distinction between those three terms is also made by Kotler, Armstrong, Saunders and Wong (2005). They define e-business as “the use of electronic platforms – intranets, extranets and the Internet – to conduct a company’s business” (ibid., p. 134). E-commerce refers to a “buying and selling process that is supported by electronic means” and it includes e-marketing referring to “company efforts to communicate about, promote and sell products and services over the Internet” (ibid., 2005, p. 135).

Figure 4 below proposes three alternatives that companies can envisage concerning the relationships between e-business, e-marketing and e-commerce (Chaffey & Smith, 2008, p. 13). In this thesis, the relationship (c) is the most representative of all because we will give more importance on e-marketing than on e-commerce.

![Figure 4: Three theories about the relationships existing between e-business, e-marketing and e-commerce (Chaffey & Smith, 2008)](image-url)
As said previously, the paper is more focused on e-marketing practices, that is why it is important now to understand how the Web and Web tools can achieve marketing objectives.

First, in a general perspective, the Web is able to support the strategic direction of the company. Let us take the example of the Product-market growth matrix (Ansoff, 1957). In the case of a market penetration strategy defined as “an effort to increase company sales without departing from an original product-market strategy” (Ansoff, 1957, p. 114), the Web can be used to sell more in the existing markets (Chaffey et al., 2006). The market development is a “strategy in which the company attempts to adapt its present product line to new missions” (Ansoff, 1957, p. 114): in this case, the Web is useful to reach new geographic markets thanks to the cheap advertising and infrastructure needed (Chaffey et al., 2006). For a product development strategy, the company aims to keep the same mission but to develop products having new and different characteristics (Ansoff, 1957): so the Web can help to distribute the new products launched. And finally, when a company wants to diversify – that means “a simultaneous departure from the present product line and the present market structure” (Ansoff, 1957, p. 114), it can use the Web to support its sales of the new products in new markets.

Now, in order to support the general marketing objectives of the organization, it is strongly needed to integrate an e-marketing strategy in the corporate marketing strategy. Porter (2001) affirms that “only by integrating the Internet into overall strategy will this powerful new technology become an equally powerful force for competitive advantage” (ibid., p.19). According to Chaffey et al. (2006), an e-marketing strategy has the same characteristics as a traditional strategic marketing planning including “goal setting, situation review, strategy formulation, resource allocation and monitoring” (ibid., p.209). In figure 5 (page 11), follows how an Internet marketing strategy\(^\text{10}\) can look like:
By formulating and implementing a clear e-marketing strategy, companies are more able to determine Web objectives but also to decide which actions have to be made and which Web tools have to be used to achieve those objectives.

### 2.1.3 THE WEBSITE SUPPORTING THE E-MARKETING STRATEGY

Most of companies consider that the only way to be present on the Web, to define their online presence and more generally to do e-marketing is to have a Website (Kotler et al., 2005, p. 145). Indeed, the Website represents a large range of possibilities for a company: “by establishing one or more Web sites, a company can list its products and services, its history, its business philosophy, its job opportunities and other information of interest to visitors” (Kotler & Keller, 2006, p. 17). The functionalities of this Web tool can be wide but its utilisation depends on the choices and objectives set by the company. In order to support this idea, Chaffey et al. (2006, p. 162) define a 6 levels model representing several types of Websites for a company in a chronological view:

**Level 0:** The company has no Website.

**Level 1:** The company is present in Websites listing companies so that people can be aware of its existence.

**Level 2:** The company has a static Website composed of information about the company and the products.

**Level 3:** The company has a simple interactive Website where users can search information and ask for it.

**Level 4:** The company has an interactive Website where transactions can be made: sometimes, products can be sold directly and a customer-service can be provided.

**Level 5:** The company has a complete interactive Website that improves relationships with customers and supports other marketing functions.
Kotler et al. (2005) give a simpler classification of the Websites composed of corporate Websites and marketing Websites. A corporate Website is a “site set-up by a company on the Web, which carries information and other features designed to answer customer questions, build customer relationships and generate excitement about the company, rather than to sell company’s products and services directly” (Kotler et al., 2005, p. 145). On a corporate Website, the customer can find information about the history, the values, the mission, the products and services of the company. In another hand, a marketing Website is a “site on the Web created by a company to interact with consumers for the purpose of moving them closer to a purchase or other marketing outcome” (ibid., p. 145). On this type of Website, the customer can find “a catalogue, shopping tips, and promotional features such as coupons, sales events or contests” (ibid., p. 145).

The Website is definitely the most important and efficient use of the Web for companies but nevertheless it is important to consider that “Internet marketing [i.e. e-marketing] strategy involves much more than the narrow focus of a strategy to develop Web sites services” (Chaffey et al., 2006, p. 153). Indeed, an e-marketing strategy involves other uses of the Web such as, for instance, communication tools and relationship-building tools (ibid.).

| 2.1.4 THE INTERACTIVE MARKETING COMMUNICATIONS |

We will first take a look at the Web communication tools because the communication on the Web has faced recently a strong evolution. In fact, changes in media consumption in the ten last years have made the Web becoming more and more important for customers and also to support all product categories (Chaffey et al., 2006). The Web is now used to “increase awareness of [...] products and brand values” (ibid.). What must not be ignored by companies is the difference of communication brought by the Web: “Internet is a pull-medium” (Charlesworth, 2009, p. 17) meaning that the customer requests the information and the communication from the company.

In view of this new situation in communication, the authors of Internet Marketing Strategy, Implementation and Practice (Chaffey et al., 2006) devote a full chapter to the interactive marketing communications, i.e. communications on the Web. It divides online communication tools into 6 categories:

1. The search engine marketing
This tool is essential for companies because it “seeks to promote Websites by increasing their visibility in search engine result pages to make people visit the company’s Website” (www.sempo.org). This implies to be present in the search engines (Google, Bing...) but above all to be well ranked in the search results. Atlas Solutions’ report (Chaffey et al., 2006) shows that it is more efficient to be ranked in the three first positions of the search page. To realise such a thing, three techniques are available for companies: the SEO (Search Engine Optimisation), the PPC (Pay-Per-Click) and the paid inclusion.

According to the Search Engine Marketing Professional Organisation (SEMPO):
- The SEO can be defined as a “process of editing a Web site’s content and code in order to improve visibility within one or more search engines” (www.sempo.org).
- The PPC is “a model of online advertising in which advertisers pay only for each click on their ads that directs searchers to a specified landing page on the advertiser’s Web site” (www.sempo.org). This technique is really important to improve the visibility of a company on the Web when it is in a competitive market (Chaffey et al., 2006).
- The paid inclusion is the “process of paying a fee to a search engine in order to be included in that search engine or directory” (www.sempo.org).
2. The online Public Relations (or PR)
The PR are defined by the UK Institute of PR as “the management of reputation – the planned and sustained effort to establish and maintain goodwill and mutual understanding between an organization and its public” (IPR, 2003). In parallel, online PR are defined by Chaffey et al. (2006) as the activity of “maximizing favourable mentions of your company, brands, products or Web sites on third-party Web sites” (ibid., p. 385). The online PR consist in several activities such as the communication with online medias, the link building (i.e. to link the company’s Web site content to other quality contents and vice versa), the publication of information and news through blogs, social networks and RSS (i.e. Really Simple Syndication), the managing of company’s image on other Web sites and the creation of buzz (Chaffey et al., 2006, p. 386).

3. The online partnerships
Companies need to be integrated in an active network because as it has been proven “no firm is self-sufficient” (Awuah, 2008, p. 64 ; Håkansson & Snehota, 1995) and this is the same on the Web, companies need an online network of partners. To build this network, companies can use what is called the link building (explained in the previous paragraph) and the affiliate marketing: this technique is known as low-risk advertising. Besides that, companies have also at their disposal the online sponsorship. In a general way “sponsorship” is defined as “the provision of assistance either financial or in kind to an activity by a commercial organization for the purpose of achieving commercial objectives” (Meenaghan, 1983 in Schumann & Thorson, 2007, p. 212). The benefits of online sponsorship defined by Sweeney (2008) are the possibilities for the company to target a precise audience and to acquire a good visibility for its own Web site. For instance, lots of cooking blogs are sponsored by companies retailing food or domestic appliances: they provide money to improve the blog or offer free products so that bloggers can try them and write articles promoting them.

4. The interactive advertising
Interactive advertising has suffered of bad results since the 2000’s due to the weariness of Web users: for example in France the average of click-through rate (CTR) on interactive advertising – banners, pop-up – is about 0,12% (Double click, 2009). Despite this situation, new innovative techniques enable companies to increase their brand awareness: the rich media ads which objective is more to provide an experience to the user – through videos, animation, audio – rather than to measure CTR, are an alternative that focus more on the interaction with the user (Double click, 2009).

5. The e-mail marketing
Managers have to deal with outbound e-mail marketing – e-mail campaigns used as direct marketing – and inbound e-mail marketing – enquiries from customers’ e-mails. Companies can use several techniques as traditional e-mail campaigns or newsletters (Chaffey et al., 2006, p. 397).

6. The viral marketing
The name of this online communication indicates the advantage it provides: it enables the company to communicate and reach a large number of people very quickly as the virus do. The viral marketing also called buzz marketing is defined as “a word-of-mouth marketing in which customers promote a product or service by telling others about it” (Turban, King, Viehland, & Lee, 2006, p. 172). The buzz can take the appearance of many different things such as an article, a video, a picture...

11 That means that only 0,12% of French users click on the banners.
In *Electronic Commerce: a managerial perspective*, Turban et al. (2006) add a complementary interactive communication category:

### 7. The online events, promotions and attractions

Companies can use several techniques to attract people to their Website or to get themselves talked about. The online contests and quizzes and the online events such as online concerts, interviews, debates are part of this category (ibid.).

To conclude this part dealing with online communications, we will quote Doyle and Stern (2006) declaring that marketing communication has four objectives: to inform, to persuade, to create image and to reinforce. Through this part devoted to interactive marketing communications, the different authors quoted have proven that these four objectives are also fulfilled by communication on the Web.

### 2.1.5 THE E-CRM

On top of the communication uses of the Web, it is also relevant to emphasise the role that the Web plays in the customer relationships. Indeed, one of the most important objectives of a business is to satisfy the needs of its customers better than competitors (Doyle & Stern, 2006). To be able to understand, analyse and answer better those needs, it has been proven that a durable relationship with customers is more efficient (Doyle & Stern, 2006). To implement this new way of thinking in companies, the Customer Relationship Management (CRM) has become “a nonnegotiable in today’s business environment” (Anderson & Kerr, 2002, p. 2). What is CRM? It is the practical application of relationship marketing with a particular emphasis on the relationships with customers (Gummesson, 2002). The general concept of relationship marketing has been defined as “marketing based on interaction within networks of relationships” (Gummesson, 2002, p. 3). A more precise definition is given by Doyle and Stern (2006): “Relationship marketing is a long-term, continuous series of transactions between parties. This occurs when each trusts the other to deal fairly, reliably and helpfully” (ibid., p. 34).

With the Web, customers are acquiring more and more bargaining power so it is essential for companies to satisfy them to retain them (Porter, 2001; Turban et al., 2006). As an example, customers can easily compare different companies’ prices and offers only by surfing on the Web from their personal computers. For this reason, the Electronic Customer Relationship Management (eCRM) has been integrated in CRM to adapt to the new behaviour of customers (Gummesson, 2002). Turban et al. (2006) even affirm that “in the Internet-connected world, eCRM has become a requirement for survival, not just a competitive advantage” (ibid., p. 550). Indeed, the Web opens new opportunities for CRM. For instance, e-mail is one of the easiest and cheapest ways to develop, maintain and personalize relationships with customers. The Website is a huge source of information about customers for companies; the forms customers can fill in provide precious data about what they need and what they want. The satisfaction of customers is also fulfilled through online customer service as Frequent Asked Questions and forums (Chaffey et al., 2006) and the social networks where the company can answer directly to customers (Brooks, 2010).

### 2.1.6 E-COMMERCE

After having defined and described in a deeper way the notion of e-marketing, it is time now to understand the last notion that is e-commerce.

Turban et al. (2006) have a broad definition of e-commerce: “Electronic commerce is the process of buying, selling, transferring or exchanging products, services, and/or information via computer
networks” (ibid., p. 4). In parallel, e-commerce transactions refer to “transactions in the trading of goods and services conducted using the Internet and other digital media” (Chaffey et al., 2006, p. 520). Different types of e-commerce exist including the Business-to-Business e-commerce and the Business-to-Customer e-commerce (Turban et al., 2006).

Turban et al. (2006) and Chaffey et al. (2006) define different e-tailing business models. The two most important are the pure-play e-tailers which are companies selling directly on Internet without physical stores and the click-and-mortar retailers which are physical retailers conducting also business on the Web.

E-commerce implies responsibilities from the company. First of all, the company has to assure the security of its Website and of the transactions. The company has to deal with several issues: 
authentication – controlling the identity of the participants; 
authorization – controlling that a person has access to the system or data; 
auditing – knowing who has taken a particular action; 
confidentiality – not spreading the information to third-parties; 
integrity – protecting data; 
availability – controlling that the service is available when needed; 
nonrepudiation – limiting parties refuting that a legitimate transaction occurred (Turban et al., 2006).

Then, the company must also deeply control the electronic payment systems it uses. Due to the risk of fraudulent transactions – according to the last figures of UK Payments Administration (www.ukpayments.org.uk), the card fraud losses have increased by 14% in 2008 – more and more companies use trusted third-parties as PayPal (Turban et al., 2006).

Kotler et al. (2005) emphasises the most important advantages for companies to set up a shop online: 
such initiative enables companies to “reduce[e] costs and increase[ ] speed and efficiency” (ibid., p.136).

2.1.7 SPECIFICITY OF WEB 2.0 FOR COMPANIES

For companies willing to take advantage of the whole of opportunities of the Web explained in the previous parts, it is essential to take into account the Web stage that we are facing. As explained in the introduction, the Web is at the evolution stage called Web 2.0 since the beginning of the 2000’s. Companies developing an e-marketing strategy have to take into consideration this factor in order to “integrate Web 2.0 applications” (Chaffey & Smith, 2008, p. 112).

Chaffey and Smith (2008) define the characteristics involved by the Web 2.0. Here follow the characteristics that companies have to consider according to the authors (ibid.):

- Support community participation
- Encourage users to generate content: blogs, Wikipedia, Youtube
- Involve data exchange: RSS feeds through which companies can send update of their Website
- Use interactive applications: photo sharing services (Flickr), mapping services (Google map), social networking services (blogs, Facebook, Twitter...)

The most important characteristic of Web 2.0 is probably the high development of social networks. According to the research from Experian Hitwise (2010), “Facebook is the second most visited Website in France, accounting for 6.83% of all French Internet visits” (ibid.).

Figure 6 (page 16) shows that Facebook is the first Website in the world concerning the number of visits. It shows also that three Websites in the Top 10 of the most visited world Websites are social networking Websites.
Those new trends concerning the social networks change the habits of consumption of people: they can discuss the brands and products, exchange opinions. This is highlighted by Forrester (2007): “83% of people are influenced by the opinion of a friend or acquaintance who has used the product or service” (ibid.). According to Chaffey and Smith (2008), e-marketers have adapted to these new practices “plan[ning] for more open conversations with consumers, listening carefully and then responding” (ibid., p. 120).

2.1.8 WEB OBJECTIVES CLASSIFICATIONS

The previous parts have shown that the Web has been developed in such a way that it can offer a wide range of utilities and tools for companies and marketers, completing its first significant function as a “provider of information” (Charlesworth, 2009, p. 7). But most of companies still do not know why they go online, for which objectives or what are the advantages they expect (Chaffey & Smith, 2008). According to Chaffey and Smith, the objectives of e-marketing have to be clear “so that the appropriate resources can be directed at achieving these objectives” (2008, p. 24).

Some classifications of these Web objectives have already been made. Laurent Renard (2008) classifies them through the MAO theoretical concept. He defines three primary motivations for a company to be present online: “financial motivation (Money), seek of reputation (Awareness) and diffusion of a message (Opinion)” (Renard, 2008, p. 54). The Money motivation includes the sale of products or services if they are only sold online or also by physical distribution (ibid.). The Awareness motivation means the development of knowledge about a product or a service (ibid.). The last one, the Opinion motivation consists in promoting an idea, a vision or a concept (ibid.).

Chaffey and Smith (2008) use another classification named the 5S’ – Sell, Serve, Speak, Save and Sizzle – also based on different types of objectives: Sell – use Internet as a sales tool: “Companies must be able to sell or transact online to meet these customers’ new online needs” (Chaffey & Smith, 2008, p. 25) and to have the possibility of reaching new markets.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Website</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Facebook</td>
<td>8.50%</td>
</tr>
<tr>
<td>2</td>
<td>Google</td>
<td>7.16%</td>
</tr>
<tr>
<td>3</td>
<td>Yahoo! Mail</td>
<td>3.77%</td>
</tr>
<tr>
<td>4</td>
<td>Yahoo!</td>
<td>3.73%</td>
</tr>
<tr>
<td>5</td>
<td>YouTube</td>
<td>2.43%</td>
</tr>
<tr>
<td>6</td>
<td>MySpace</td>
<td>1.82%</td>
</tr>
<tr>
<td>7</td>
<td>Windows Live Mail</td>
<td>1.94%</td>
</tr>
<tr>
<td>8</td>
<td>Yahoo! Search</td>
<td>1.30%</td>
</tr>
<tr>
<td>9</td>
<td>Bing</td>
<td>1.06%</td>
</tr>
</tbody>
</table>

Figure 6: Top 20 world most visited Websites – Week ending 15/05/2010 (Experian Hitwise, 2010)
Serve – use Internet as a customer-service tool: “A Web presence can be used to add value for customers at different stages of the buying process, whether pre-sales, during the sale or post sales support” (Chaffey & Smith, 2008, p. 33). This includes providing information to answer customers’ questions, improve the relationships with customers, increase their implication…

Speak – use Internet as a communication tool: The Web is used to increase awareness about the company, the brand and the products, to communicate news, offers… Through many tools (see part 2.1.4), the Web enables the company to get closer to its customers, to speak with them but also to listen to them (Chaffey & Smith, 2008).

Save – use Internet to reduce costs: An efficient use of the Web makes the company save money, time and efforts (Chaffey & Smith, 2008).

Sizzle – use Internet as a brand-building tool: That can be achieved through increasing and improving the customer’s experience thanks to interactive facilities but also through maintaining a trust-worthy and safe image (Chaffey & Smith, 2008).

2.2 CONCEPTUAL FRAMEWORK

From the different theories exposed and detailed in the literature review (see part 2.1), we have been able to develop the conceptual framework that will be used to answer the purpose and the research questions of this thesis.

2.2.1 THE WEB TOOLS CLASSIFICATION

In relation with the purpose of this paper, it is necessary to focus on the different categories of Web tools a company can use in order to achieve its marketing objectives. Inspired by the classification of Renard (2008) and the one of Chaffey and Smith (2008), we have developed a classification of the Web uses and tools composed of three categories based on different objectives for the company. This classification is named as the “Web tools objectives model” (see table 1, page 18). The title and the content of the three Web tools categories are explained and detailed below:

Exchange of Information: By “information”, we mean the actions conducted by the company in order to provide information to customers about the company’s history, vision, values, activity, and news. It includes also the information the company collects about customers through forms or surveys. A characteristic that cannot be ignored is that “Internet permits a company to transmit an almost unlimited amount of information” (Kotler & Keller, 2006, p. 17).

Communication: This part includes the seven interactive communication categories listed and explained in part 2.1.4, that are the Search Engine Marketing, the online Public Relations, the online partnership, the interactive advertising, the email marketing, the viral marketing and the online events, promotions and attractions. The term “communication” involves the aim of increasing the awareness of customers about the products and the brand.

Sales and relationships: By “sales”, we mean the different ways a company can encourage a financial transaction with the customer. That involves all the stages of the buying process, from the advice to the payment and the after-sale service. By “relationships”, we refer to all the activities of eCRM: collect information from the customers, satisfy and answer better their needs, provide online customer-service. It involves also for the company to prove its trustworthiness and integrity in order to reassure the online-buyer.
Table 1 summarizes the two previous Web objectives classifications presented in part 2.1.8 compared to the three Web tools objectives developed in the conceptual framework. Examples of Web tools are given for each of the three categories of Web tools objectives. Concerning the 5S model, it has been decided not to take into consideration the objective “save” because it is an objective not possible to measure as part of this paper.

<table>
<thead>
<tr>
<th>MAO Model</th>
<th>5 S’ Model</th>
<th>Web tools Objectives Model</th>
<th>Web tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion</td>
<td>Communication</td>
<td>Search Engine Marketing: Search Engine Optimization, sponsored links, commercial links Online Public Relations: social networks (Facebook, Twitter, Youtube channel), blogs E-partnership: affiliation (Commission Junction, Zanox), online sponsorship, link building E-advertising: Web campaign, event Website, banners, video commercials Email marketing: newsletters, emailing campaign Viral marketing (buzz) Events: E-contest, e-show</td>
<td></td>
</tr>
<tr>
<td>Money</td>
<td>Sell</td>
<td>Sales and relationships</td>
<td>Catalogue Online shop/order Online payment: PayPal, Ogone, Paybox... Customer service: product FAQ, support centre Price comparison service: Kelkoo, Shopzilla, Twenga... Trusted third-parties: Fia-net, Thawte...</td>
</tr>
</tbody>
</table>

Table 1: Web tools list for companies according to Web objectives

2.2.2 THE WEBSITE: BEGINNING OF THE E-MARKETING STRATEGY

As stated by Chaffey et al. (2006) and by Kotler et al. (2005), the Website is the most important and efficient Web tool companies can use. That is why it is specified in the purpose of this paper that the research will be focused on companies having already a Website. The Website is the starting point for the e-marketing strategy implementation: it corresponds to the step “create/update online presence” (Chaffey et al., 2006, p. 158; Figure 5).

By combining the Website’s 6 levels process exposed by Chaffey et al. (2006) and the different types of Websites given by Kotler et al. (2005), we could create the different stages of Websites a company can use. Three stages of Website are emphasised (see also table 2, page 19):

1. The static Website: the company only provides information about itself and its products.

13 Some specific Web tools have not been defined in the theoretical framework, their definition can be found in the glossary of this thesis.
2. The interactive Website: the interaction between the company and customers is more important.

3. The marketing Website: the Website supports all the marketing tasks, the buying process and improves the relationships with customers.

<table>
<thead>
<tr>
<th>Website classification from Kotler et al.</th>
<th>Website levels from Chaffey et al.</th>
<th>3 Website’ stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Website</td>
<td>Level 2</td>
<td>Static Website</td>
</tr>
<tr>
<td></td>
<td>Level 3</td>
<td>Interactive Website</td>
</tr>
<tr>
<td>Marketing Website</td>
<td>Level 4</td>
<td>Marketing Website</td>
</tr>
<tr>
<td></td>
<td>Level 5</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Comparison of Website stages model

It is important to consider that the notion of time is present, that means that the basic evolution of company’s Website would be to start being a (1) static Website, then becoming an (2) interactive Website and finally being a (3) marketing Website. For instance, a company having an interactive Website will not move back to the stage of the static Website.

2.2.3 THE WEB TOOLS THREE STAGES MODEL

In order to answer more precisely the purpose of this thesis, we have decided to create our own conceptual framework by associating the three stages of the Website explained in part 2.2.2 and the three categories of Web tools objectives introduced in part 2.2.1. This association leads to our conceptual framework represented in Figure 7 below that we have decided to call the “Web tools three stages model”. This stage model presents the three Web tools objectives of the e-marketing strategy – exchange of information, communication, sales and relationships – and the three Website stages – static, interactive and marketing – associated to each of these Web tools objectives. There is a chronological notion of time which means that a company will first have information objectives, then communication objectives and finally sales and relationships objectives. Moreover, a company which objective is the exchange of information will focus on a static Website, a company willing to do communications through the Web will develop an interactive Website and finally, a company ready to sell and create relationships on the Web will have a marketing Website.

![Figure 7: Our conceptual framework: the Web tools three stages model](image-url)
3. METHOD

“The major purpose of the method section is to describe the study in such detail and with such clarity that a reader could duplicate it”
(Thomas, Nelson, & Silverman, 2005, p. 22)

In line with this quotation, we explain in this chapter the reasons of choosing to seek for quantitative data and then primary data. Afterwards, the alternatives of research methods are presented and the one chosen, the simple observational checklist research method is precisely defined and explained. Finally, we give the details on how the sample group has been chosen and the way the method was used for the research is clarified step by step.

3.1 CHOICES FOR THE METHOD

The authors’ general idea for this research was to deepen the knowledge concerning the relations between Web tools and companies. Alternatives had to be chosen, in order to answer the main purpose of the thesis being to “describe and explore how French companies having a Website/Homepage use Web tools”.

3.1.1 QUALITATIVE OR QUANTITATIVE

The first alternative for the researchers was to decide the kind of material needed for the study. Once completed, a research can end in the production of “either quantitative material (numbers) or qualitative material (words)” (Fisher, 2007, p. 62). Two methods of research are then possible: the quantitative method and the qualitative method. They both have their pros and cons, but as Silverman (2006) explains "[...] the choice between different research methods should depend upon what you are trying to find out" (ibid., p. 34). In regards to our purpose, the intention was to collect data that could facilitate the description and exploration of the use of Web tools. Those data should, for example, assist the description of how many Web tools are used in our population, or what is the percentage of our population using a specific Web tool.

The qualitative method results in words which can help to draw a theory out of the research, and researchers are highly involved with participants in order to see through their eyes (Bryman & Bell, 2007). On another hand, the quantitative method creates numerical data that are useful to verify an existing theory about behaviour through a research where researchers have no contact with the participants (Bryman & Bell, 2007). Considering that “quantitative research simply objectively reports reality, whereas qualitative research is influenced by the researcher’s political values” (Silverman, 2006, p. 35) and because of the other characteristics explained previously, the authors chose to develop a quantitative research. By getting numerical data that only represent the reality of a behaviour, subject to no influence, this study could completely fulfil its purpose of description. Researchers were then able to present the way French companies having a Website use Web tools.

3.1.2 PRIMARY OR SECONDARY

One other alternative consisted on the provenance of the data. Data could be from primary or secondary research. The secondary research consists to analyse “data and other piece of information that were first collected for another purpose” (Patzer, 1995, p. 5). This implies that researches on the topic have already been made, or that material from other studies could be used and helpful for the
current research. Those data could be found in books, articles and any other exploitable supports. On the other hand, “when you [the researcher] experience […], you [the researcher] have collected primary data” (Blankenship, Breen, & Dutka, 1998, p. 15). This case of primary data collection refers to the analysis of data that have only been “collected for the purpose of the current marketing research project” (Patzer, 1995, p. 5). Primary research is usually done because the "needed information might not exist in secondary sources” (Kotler, Armstrong, Wong, & Saunders, 2008, p. 358). As explained, the purpose of this thesis is to describe and explore the use of Web tools by a specific group of the population, the French companies with a Website. Concerning this issue, secondary data have been easily found on governmental or industrial organizations’ reports (Eurostat, Fevad …), but they only concern the use of few Web tools like the Website or some social networks. The data collected have been helpful to “define the research problems” (Amstrong, Harker, Kotler, & Brennan, 2009, p. 121) but could not be used to answer the purpose as no distinction was made in those reports between companies with or without a Website – our main criterion of research.

Also those reports were most of them two or three years old, as Patzer (1995) explains, this is an usual problem with secondary data: they might be not still accurate for the present research. As we have explained, the Web is a fast changing universe so in order to make an accurate, up-to-date description (i.e. of 2010) of the use of Web tools by French companies with a Website, it was decided to collect primary data by doing our own study.

3.1.3 RESEARCH APPROACH: A CHECKLIST OBSERVATIONAL METHOD

To realise a primary research and obtain quantitative material, many kinds of research methods are possible: interview, questionnaire, panel, observation (Bryman & Bell, 2007 ; Dillman, Smyth, & Christian, 2008 ; Fisher, 2007)…

But all the same, “the most common descriptive research technique is the survey, which includes questionnaires and interviews” (Thomas, Nelson, & Silverman, 2005, p. 284). This research method would have been particularly adapted for the purpose of our thesis in order to collect data from the companies themselves. Though, the following paragraphs present some negative aspects of this method and some of their consequences that had to be taken into consideration for our research:

Get to the respondents

One problem is that, in the past 15 years, involvement and control over the survey process have changed (Dillman, Smyth, & Christian, 2008). For instance, it is harder since the 90’s to access respondents, due to “call blocking, e-mail filters” (ibid., p. 2). No mode of coverage – mail, email, phone – is sufficient anymore to reach respondents on its own. The necessity of using many coverage modes for one survey is highlighted by Dillman, Smyth & Christian (2008): “one of the most significant changes within survey methodology in the past 15 years has been the shift from using predominantly single-mode surveys to using multiple modes in the same data collection effort to compensate for the inadequacies of each” (ibid., p. 10). This statement implied for the researchers to use the telephone, mail, and email to reach respondents. By being physically in Sweden, this multi-channel procedure to get to companies in France would have represented high financial costs and time consuming that the research budget or planning could not permit.

Problem when questioning on behaviour

In Business research method, Bryman and Bell (2007) propose a list of some problems encountered by researchers when they investigate behaviour through a survey: problems of meaning with the question, problems of omission of key elements in the question, problems of memory, problems of social
desirability effect (answer that respondents think would be accepted as good answers), question threat, influence of the answers by interviewer characteristics and gap between stated and actual behaviour. Those problems could have had many bad effects on our research considering that we are studying companies’ behaviours on a subject (i.e. the Web) they are not necessary conversant with.

Even though, we have considered trying the survey in the early stage of the study in order to profit from its advantages. Web focused French organizations were contacted – such as Fevad – to help providing an email database of French companies with a Website – the authors being physically in Sweden with a very restricted research budget, contacting companies by email was a necessity. Failure in obtaining such database, meaning the need of financial investment to contact companies, but also all other negative factors of survey have pushed the authors to aim for another research method with the following criteria: the need of not getting in contact with companies employees (collect data without their assistance), the possibility to monitor the research on French companies from being physically in Sweden and the respect of the restricted research budget and available time.

The problems described earlier concerning the survey research method have, following Bryman and Bell (2007), one alternative: “observe people’s behaviour directly rather than to rely on research instruments like questionnaires to elicit such information” (ibid., p. 282). We then decided that the observational research method would be used for this paper. This research method is relevant for business and management study by the fact that it is “seen as having the potential to provide researchers with far greater insight into the issue of what managers actually do” (Bryman & Bell, 2007, p. 281). Observation research method includes behaviour to be observed and a place to observe (Thomas, Nelson, & Silverman, 2005). In the case of this research, the behaviour observed was the use of the Web tools by French companies already having a Website and the place to observe this behaviour was the World Wide Web.

In order to use the full potential of the observation, it has been decided to use two possible characteristics: the checklist observation to record data, and the simple observation technique. A checklist observation method consists on the creation of a reminder list. The observer has the checklist at his/her disposal during the observation to check that he/she observed everything he/she had to and did not miss what he/she “might be looking for” (Fisher, 2007, p. 163). In the case of the present research the reminders in the checklist were items aiming to check if the observer observed or not the use of a Web tool (more information in part 3.2). A simple observation in Unobtrusive Measures: Nonreactive Measures in the Social Sciences (Webb, Campbell, Schwartz, & Sechrest, 1966) is defined by an observer being unobtrusive and not viewed by the ones being observed.

To summarize, the observational method helped this study to observe through the Web the use of Web tools by French companies having a Website. The companies were not aware that they were being observed and the researchers did not interact in the companies’ behaviour. A checklist of items was made in order to be sure that all the Web tools we wanted to focus on were observed. This checklist was also used by the researchers as a recording material (more information in part 3.2).

### 3.1.4 SAMPLE PLAN

The research method once defined, there were then some sample issues to keep in mind.

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14 For more information look Business research method (Bryman & Bell, 2007) : “Tips and skills: Problems with using social survey research to investigate behaviour” (ibid., p. 282).
15 Fevad is the French federation of e-commerce and mail order trade
On the first hand, the observed subject had to be identified. For this thesis what was observed were behaviour – the use of Web tools – and the entity having this behaviour, that is to say a company. We did not focus on the employees of the company as observed subjects, but on the company as a whole. As we stated, the subjects of the research are French companies that already have a Website. We have explained before that this population represents more than the half of all companies in France, a population of thousands of companies. As an entire population usually cannot be studied, the research was made on a sample (Gorard, 2001).

As explained in part 1.2 no Website owner has the duty to report to anyone the fact that he/she created a Website and neither does a company. It was so impossible to find a census list – enumeration of the population (Bryman & Bell, 2007) – of French companies with a Website for this study. The decision was taken to find a partial census of French companies – not the entire population – from which only companies with a Website would be kept for the sampling frame. The "sampling frame is the list or quasi list of elements from which a probability sample is selected" (Babbie, 2009, p. 208). A partial census of French companies could be found on the magazine L’entreprise. This census represents a “Top” of French companies in regards to their profitability but without distinction of industrial sector. Because using Web tools is an implication of investments for companies and can be done by companies of any industrial sector, we considered that this census was relevant to answer the purpose.

This Top was composed of 230 companies listed from 1 to 230 – the number 1 being the most profitable. From this partial census, it has been decided that the first 60 companies having a Website would be defined as the sampling frame (see Appendix 2). As Babbie (2009) states, the sampling frame "must be consonant with the population we wish to study" (ibid., p. 209) and that is why we selected only the companies having a Website. From the sampling frame, a sample of 20 companies has then been established using simple random sampling method (all the process is deeply explained in Appendix 2) to reduce the sampling error (Bryman & Bell, 2007 ; Gorard, 2001). We have decided to focus on a small sample to be able to provide a quality observation and to observe the entire sample in a short period of time – determined in next paragraph. Moreover, we have considered that 20 (10% of the partial census) was the ideal minimum size of the sample allowing us to observe in depth each company while respecting time restrictions. A bigger sample would have reduced the quality of the observation and results. It appears obvious that the size of the sample might not allow this research to generalize the description to the entire population, but for time and resource reasons, generalization will not be the aim of this research. As Bryman and Bell (2007) explain, “most of the time decisions about sample size are affected by considerations of time and cost” (ibid., p. 194).

The sample list composed of the 20 companies observed in this research can be found in part 2 of Appendix 2.

The second issue of the sampling plan for observational research method is time, as an observation should be defined in time (Bryman & Bell, 2007). So for the validity of this research, it has been decided to do a single observation of each company of the sample during a one week period. Thus no seasonal factors might jeopardize the observation and its results (e.g. period as Christmas could affect companies’ behaviours on the Web).

### 3.2 APPLYING THE METHOD

Now that the research method has been chosen and presented in the previous part, it is now necessary to see and understand how it has been applied during the research.
In order to develop a simple observational checklist research method, it was necessary to define a checklist. The checklist for this research in Table 3 below is used as reminder, not to forget one observation, but also as data recorder.

<table>
<thead>
<tr>
<th>Observational Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of RSS feeds</td>
</tr>
<tr>
<td>Presence of a press centre</td>
</tr>
<tr>
<td>Presence of an integrated search engine</td>
</tr>
<tr>
<td>Presence of a company FAQ</td>
</tr>
<tr>
<td>Presence of contact forms</td>
</tr>
<tr>
<td>Presence of a forum</td>
</tr>
<tr>
<td>Use of tagging</td>
</tr>
<tr>
<td>Use of a personal wiki</td>
</tr>
<tr>
<td>Use of customers’ surveys</td>
</tr>
<tr>
<td>Validation of company’s form on Google Map</td>
</tr>
<tr>
<td>Presence on Wikipedia</td>
</tr>
</tbody>
</table>

- **Exchange of information**
  - On the Website: Link to Facebook company's page (yes/no), Link to Twitter company's feeds (yes/no), Link to Youtube company's channel/videos (yes/no), Link to the company's blog (yes/no), Inscription to newsletters (yes/no).
  - On the Web (but not on the Website): Presence of an online products catalogue (yes/no), Presence of a customer service FAQ (yes/no), Presence of an online support centre (yes/no), Ability to get or do an online estimate (yes/no), Presence of an online shop (order) (yes/no).

- **Communication**
  - On the Website: Use of a company's page on Facebook (yes/no), Use of a company's account on Twitter (yes/no), Use of a company's channel on Youtube (yes/no), On Google 1st page (yes/no), In Google 1st result (yes/no), Use of a blog (yes/no).
  - On the Web: Presence of a forum (yes/no), Presence on Wikipedia (yes/no).

- **Sales and relationships**
  - On the Website: Presence of an online support centre (yes/no), Ability to pay online (yes/no), Use of trusted third parties (yes/no).
  - If presence of an online shop: Ability to pay online (yes/no), Use of trusted third parties (yes/no).

Table 3: Checklist for observational research

The checklist is composed of items, each item representing a questioning about the use of a distinct Web tool (e.g. presence of RSS feeds on the Website: Yes? or NO?). The items have been elaborated thanks to Table 1 (page 18) summarizing a list of Web tools according to company’s Web tools objectives. The categories of items follow the three Web tools objectives: exchange of information, communication, sales and relationships. In each category, the items are classified between the ones that can be observed on the Web and those that can be observed on the Website. Both types of items helped us to define the Web tools objectives of the companies observed during the analysis. In parallel, items that can only be observed on the Website have been used to define the Website stage of the companies observed.

Because it was decided to do a simple observation, there should be no interaction between the observees and the observers (Webb, Campbell, Schwartz, & Sechrest, 1966). For this reason the checklist relates only to Web tools that could be observed on the Web without the intervention of the company. For instance, it is possible to find a company on Facebook, but it is impossible to know if a company has an online advertising campaign going on without the observees’ help. From this consideration, 29 items have been made in order to observe the behaviour and describe how the companies of the sample use Web tools.
For each item, the observation could only result on two options: Yes the Web tool is used or No it is not used. During the observation, the researchers had to check each item and record Yes if he/she could observe the use of the Web tools, or No if he/she could not. This system had revealed itself really useful to make a description of the use of the Web tools: all companies that had Yes recorded for a specific item would then be described as using the Web tool observed and companies that had No recorded would be described as not using the Web tool observed. The coding is described in the next part, so that the observers can really determine on their own if they can record Yes or No in every case they might be confronted to.

For the sales and relationships category, two conditional items were needed to be observed only if the item “Presence of an online shop (order)” was recorded as Yes – used. The last two items are Web tools that can only exist if the online shop is used.

### 3.2.2 CODING THE OBSERVATION FOR INTER-OBSERVER CONSISTENCY

With the intention of using the present checklist with most efficiency possible, it was also necessary to strictly determine a coding scheme to guide the observation and help the decision of the observers. The coding is also essential to bring reliability to the observation. As defined by Bryman and Bell (2007), the reliability is “the degree to which two or more observers of the same behaviour agree in terms of their coding of that behaviour on the observation schedule – that is inter-observer consistency” (ibid., p. 291).

For the current research, coding the checklist had a mean to find strict conditions to enable the authors to declare without any hesitation and ambiguity that a criterion was fulfilled or not by the company observed. More precisely, that enabled the researchers to declare if an item of the checklist deserved a Yes or else a No.

To be able to correctly redo this research it is important to first list the material needed by the observers. The checklist observation of this research cannot be done without the following elements:

- a computer with an Internet connexion (broadband is preferable);
- the Web browser Mozilla Firefox version 3.6 (or later version) installed\(^ {16} \);
- a Facebook member account\(^ {17} \);
- a Twitter member account\(^ {18} \).

Consequently, we have detailed for each item of the checklist what were the different conditions that could be observed to validate this item (i.e. record Yes), and also the way how the observers have to search. It is anyhow important to specify that in the following description the company’s Website refers to the main or corporate Website of a company.

**Exchange of information:**

Concerning the observations that can be done on the Website, we have validated:

- the presence of RSS feeds if, first the following logo \(RSS\) (i.e. the official RSS feeds logo) appeared in the URL bar of Mozilla Firefox while navigating on the company’s Website. If no RSS feeds were automatically detected on the Website, the researchers then went through all the pages of the Website, to seek for a RSS feeds linked logo or a simple link leading to a subscription for RSS feeds. Only if no link was found, the observers could state that the company does not use this Web tool.

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\(^{16}\) The installation can be done on: [www.mozilla-europe.org/en/firefox/](http://www.mozilla-europe.org/en/firefox/)

\(^{17}\) The creation of a Facebook member account is possible on: [www.facebook.com/](http://www.facebook.com/)

\(^{18}\) The creation of a Twitter member account is possible on: [https://twitter.com/signup](https://twitter.com/signup)
- the presence of a press centre if it existed on the Website a page containing either press articles about the company or public relations contact of the company’s press releases.

- the presence of an integrated search engine if the Website proposed a search bar allowing the visitors to search the information they need by typing key words or sentences. Both search bars, presented in Figure 8, using Google or companies program, have been validated.

- the presence of a company FAQ if a page named “FAQ” or “Frequent Ask Question” or “About” could be found on the Website and if it contained general questions and answers about corporate information (i.e. historic, values, activity...). We have not considered as company FAQ, a FAQ giving information on how to solve a problem concerning orders or products.

- the presence of a contact form if the observers could find on the Website a form by means of which they could contact directly the company and transmit a message. This Web tool has also been validated if a simple contact email address was present on the Website.

- the presence of a forum if a page of the Website was called “forum” or “discussion boards” and if the visitors could interact with the company and with other visitors by creating and answering to threads (i.e. topics) of conversation. The observers have considered the respect of the definition of forum as “an online community where users read and post topics of common interest” (Jansen & James, 2002, p. 176) to validate the use of this Web tool. It has not been considered as a forum a static page of questions/answers without any interaction possible for the visitors.

- the use of tagging if key words were associated to each article published on the Website in order to facilitate the research of the visitors. The observers have looked for a list of Tags accessible on the Website or have looked in recently posted articles if they were marked with Tags to validate the use of the tagging.

- the use of a personal wiki if it was mentioned on the Website that the company detains an active wiki and if it was possible for the observers to reach it through a link from the company’s Website.

- the use of customers’ surveys if it was indicated on the Website that customers could participate to online surveys directly on the Website or through a link in order to communicate their opinions or some other information.

Concerning the observations that can be done on the Web, we have validated:
- the validation of company’s form on Google map if by searching the company’s name on Google Map (http://maps.google.com), it has been possible to observe that the company took the step of making its own personalized form by adding information about its products and activity. Those information were searched after clicking on “More information” next to the company’s name on the left side of the screen. The mention “☑ owner-verify listing” written in this company’s form was an essential condition in order to validate the use of this Web tool. As the presence and the localisation in Google Map is automatic for any company, it has not been accepted the simple fact of appearing on Google Map.
- the presence on Wikipedia if by searching on Wikipedia France\textsuperscript{19} (http://fr.wikipedia.org) the name of the company, it has been possible for the observers to find a dedicated article (i.e. page) giving some information about the history and the activity of the company. It has not been validated if the name of the company was only mentioned in an article that is not entirely dedicated to the company searched.

**Communication:**

Concerning the observations that can be done on the Website, we have validated:
- the link to company’s Facebook page if the observers could find in any page of the Website a link or a linked logo, such as this one \texttt{Find us on Facebook}, that leaded to a Facebook fan page of the company or products that has been created by the company itself. This Web tool has not been validated if the company’s page was created by fans and not by the company itself.

- the link to company’s Twitter feeds if the observers could find on the Website a link to the company’s Twitter account, or if a box with the last Tweets could be observed on at least one page of the Website.

- the link to Youtube company’s channel/videos if a link was proposed on the company’s Website to either the channel or a video of the company on Youtube. This Web tool was also accepted if a Youtube embedded video about the company or its product could be found on the company’s Website.

- the link to the company’s blog, only if a link could be found on the company’s Website redirecting the visitors to a corporate blog.

- the inscription to newsletter, in the case that the possibility on at least one page of the Website was given for the observers to register their email address in order to receive a newsletter from the company.

Concerning the observations that can be done on the Web, we have validated:
- the use of company’s page on Facebook, only if by searching on Facebook (www.facebook.com) the name of the company, a fan page for the company or products was found. If the company was present on Facebook through a person profile, then the Web tool was considered as not used.

- the use of a company’s account on Twitter, only if by searching on Twitter (www.twitter.com) the name of the company, a twitter account with at least two tweets from the company could be found.

- the use of a company’s channel on Youtube, if by searching for the company’s name on Youtube (www.youtube.com), a video about the company and posted by the company could be found. It has also been validated if the company already had an embedded video on its Website posted on Youtube via the official company’s channel.

- the ranking on Google 1st page if by searching the name of the company on Google France search engine (www.google.fr), the company’s Website was listed in the first page of results.

- the ranking on Google 1st result if by searching the name of the company on Google France search engine (www.google.fr), the company’s Website was ranked first in the first page of results.

\textsuperscript{19} We have chosen to focus the observation on Wikipedia France as we wanted to be in the position of lambda French Web users.
- the **use of a blog**, when searching the company’s name on Google Blogs (http://blogsearch.google.com) the choice was given to access a “corresponding blog” owned by the observed company. The blog should have at least one post in order for the observers to validate this Web tool.

**Sales and Relationships:**
Concerning the observations that can be done on the Website, we have validated:

- the **presence of an online products catalogue** when it was possible to observe on the company’s Website a list with all the products available to buy.

- the **presence of a customer service FAQ**, in the case where a dedicated space on the company’s Website was dedicated to questions/answers aiming to answer usual customers’ questions on products or to resolve order problems.

- the **presence of an online support centre**, when the visitors could access on the company’s Website a step by step process that could help them to resolve their problem (e.g. in the case of a computer manufacturer, the support centre would list the general problems encountered, and a step by step description to resolve the problems).

- the **ability to get or do an online estimate**, if it was possible to find an automatic price calculator on the Website, or if an email or a contact form was proposed to the visitors to reach the price calculating service of the company to get an estimate.

- the **presence of an online shop**, in the case where the visitors had the possibility to place an order of the company’s products through the Website.

In the case that the presence of an online shop was validated, then we have validated:

- the **ability to pay online**, when a credit card or an online banking system (e.g. PayPal) could be used to pay for the order from the company’s Website.

- the **use of trusted third parties** if it was possible to find logos or links to trusted organisms Websites (e.g. www.fia-net.com) that can assure the honesty of the seller (i.e. that the company can be trusted for a payment online).

This coding part represents a map of what the authors/observers of this research have achieved during the observation of 20 French companies on the Web. The results that could have been recorded are presented in next chapter and can also be found in Appendix 3.

### 3.3 Method to Analyse the Results

As the purpose of this paper is to describe and explore, we believe that the use of descriptive data is sufficient in order to make the most of the results we obtained through the observation. Anderson and Arsenault (1998) affirm that a “description may be quantitative or qualitative” (ibid., p. 100). In our paper, we deal with quantitative results which so imply a quantitative description. This quantitative description “is based on counts or measurements which are generally reduced to statistical indicators such as frequencies, means, standard deviations and ranges” (Anderson & Arsenault, 1998, p. 100). What are mainly used in this paper are frequency, defined by the Oxford *Dictionary of statistics* (2008) as “the number of times that a particular data value is obtained in a sample” (Upton & Cook, p. 149) and average, “the numerical value that is a central point about which other values in a series get
dispersed” (Shah, 2005, p. 15). As it is exposed in the Empirical results chapter, those data are presented with graphs or charts (Brown & Rodgers, 2003).
4. EMPIRICAL RESULTS

In this chapter, we describe the research findings from the observation of Web practices and behaviour conducted on 20 French companies having a Website. First, we expose the data corresponding to each category of Web tools objectives defined in the conceptual framework: information, communication, and sales and relationships. Then, results on companies’ over-all Web behaviour are highlighted.

4.1 FINDINGS ON INFORMATION WEB TOOLS

The observation we have conducted enabled us to determine many results about the use of information Web tools by French observed companies. Below Figure 9 shows that, among the 11 information Web tools we observed, French companies of our sample use a range from 0 to 6 different information Web tools. In majority, French companies observed use 1 information Web tool whereas 5% of those companies use 6 different information Web tools. Moreover, it is important to consider that 5% of the 20 French companies observed do not use any of the 11 information Web tools of the checklist. With the help of Figure 9 and Appendix 3, it is possible to declare that in average one company of our sample uses 1.95 information Web tools.

![Figure 9: % of companies compared to the number of information Web tools they use](image)

Concerning the detailed results about the information Web tools, the observation has emphasised that some information Web tools are more used than others. The most used information Web tool is the contact form: figure 10 (page 31) shows that 85% of French companies observed use this Web tool. Two information Web tools are not used by any company: that are the company FAQ and the personal wiki. Between those two ends, the results for the other information Web tools are heterogeneous. Finally, we can affirm that, from the information Web tool the less used to the most used, the range is equal to 85%: that shows an important disparity between the results.
4.2 FINDINGS ON COMMUNICATION WEB TOOLS

In addition to the results on information Web tools, the observation has also depicted the use of communication Web tools by the 20 French companies of our sample. Figure 11 below gives an idea about how many communication Web tools are used by those companies, among the 11 communication Web tools chosen to be studied. For instance, more than half of the companies use two different communication Web tools (55% of companies observed) whereas 20% use either 4 or 5 different communication Web tools. In average, a company of our sample uses 2.75 communication Web tools.

Concerning the specific use of each communication Web tool, Figure 12 (page 32) lets us see that the two most used communication Web tools are the ranking of the company’s Website on Google first page and on Google first result. Five other communication Web tools are used by 5% to 30% of French companies observed. Finally, four of the communication Web tools present on the checklist are not used by any of the 20 companies. Figure 12 also highlights the difference existing between the most used communication Web tools and the less used ones (i.e. a difference of 100%).
We believe important to separately highlight the results of the three social networks considered in this study. Figure 13 below demonstrates that Facebook, Twitter and Youtube are barely used on equal level by the companies of the sample using social networks. Even though, Facebook and Youtube dominate with 37.5% each one. In complement to those results, Figure 12 shows that the links to those social networks from companies’ Websites are not used on the same proportions: for example, Youtube is used by 15% of companies observed but the link to Youtube is used by 5% of the companies.

After having given the results about information and communication Web tools, let us describe the last step that concerns sales and relationships Web tools. First of all, it is essential for the general understanding of this paper to precise that two conditional Web tools have been considered only if the company observed was possessing an online shop (i.e. without online shop, there is no necessity to use those two conditional Web tools). Those two additional Web tools presented in Table 4, are the “payment online” and the “use of trusted third parties”. In order not to distort the results of the research, those two additional Web tools have been studied separately in Table 4 and are not included in the general research findings on sales and relationships Web tools presented in Figure 14 and Figure 15. Table 4 shows that, 50% of the companies observed having an online shop use the payment online and none of them use trusted third parties.

4.3 FINDINGS ON SALES AND RELATIONSHIPS WEB TOOLS
Then, among the five general sales and relationships Web tools observed, Figure 14 enables us to declare that nearly half of French companies use one sales and relationships Web tool (i.e. 45%). Compared to the two previous categories of Web tools studied, the percentage of companies not using any of the sales and relationships Web tools is much more important: indeed, 40% of the companies do not use any of the five sales and relationships Web tools observed. In average, a company from our sample uses 0.8 sales and relationships Web tool.

Concerning the use of each sales and relationships Web tool, Figure 15 illustrates the fact that all the sales and relationships Web tools are at least used by 5% of the companies observed. The products catalogue is the most used (40% of companies) and the customer service FAQ is the less used (5% of companies).

<table>
<thead>
<tr>
<th>Additional sales and relationships Web tools</th>
<th>Among companies having an online shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online payment</td>
<td>50%</td>
</tr>
<tr>
<td>Trusted third parties</td>
<td>0%</td>
</tr>
<tr>
<td>None</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Table 4: Conditional Web tools of online shops
4.4 FINDINGS ABOUT THE OVER-ALL USE OF WEB TOOLS BY FRENCH COMPANIES OBSERVED

After having exposed the results recorded for each Web tools category, one by one, it is now essential to consider the whole results we could gather by making some relations and comparisons. Those relations between the three Web tools categories will surely enable the authors of the research to build, later, a stronger analysis.

Consequently, the Web tools categories have been compared to each other. Thanks to the results of the observation, it has been possible to create table 5 below that shows the average behaviour of an observed company concerning the use of Web tools. We can so declare that, in average, a company of our sample uses 1,95 information Web tools, representing around 17% of the total of information Web tools listed. Then, a company uses an average of 2,75 communication Web tools, that represents 25% of communication Web tools observed. Finally, a company uses around 0,8 sales and relationships Web tool, representing 16% of the total of sales and relationships observed.

Globally, thanks to the general results of the observation indicating the Web tools used by each company of the sample, we have been in position to calculate the average total of Web tools used by one company: among the 27 Web tools taken into consideration, one company of our sample uses approximately 5,5 Web tools.

<table>
<thead>
<tr>
<th>Web tools category</th>
<th>Average of Web tools used by one company</th>
<th>Total of Web tools observed</th>
<th>% of Web tools observed used by one company</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>1.95</td>
<td>11</td>
<td>17.73%</td>
</tr>
<tr>
<td>Communication</td>
<td>2.75</td>
<td>11</td>
<td>25.00%</td>
</tr>
<tr>
<td>Sales &amp; relationships</td>
<td>0.8</td>
<td>5</td>
<td>16.00%</td>
</tr>
</tbody>
</table>

Table 5: The use of Web tools by one company

In figure 16 below, we highlight the dispersion of the 20 French companies observed compared to the average of 5,5 Web tools used in total by those companies.

![Figure 16: Total of Web tools used for each French company observed](image-url)
By taking into consideration the whole 20 French companies of our sample, we can highlight some particular behaviour regarding the use of Web tools. Below, Table 6 lets us see that among the Web tools that have been observed, 100% of sales and relationships Web tools are at least used by one of the companies whereas the result is about 82% for information Web tools and 64% for communication ones.

<table>
<thead>
<tr>
<th></th>
<th>Total of different Web tools used by companies</th>
<th>Total of Web tools observed</th>
<th>% of Web tools observed used by companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>9</td>
<td>11</td>
<td>82%</td>
</tr>
<tr>
<td>Communication</td>
<td>7</td>
<td>11</td>
<td>64%</td>
</tr>
<tr>
<td>Sales &amp; relationships</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Table 6 : The use of Web tools by the total of French companies observed**

In addition to the previous results, Figure 17 exposes a simple comparison that had been done between the three categories of Web tools. By comparing the percentage of companies using zero Web tool with the percentage of companies using at least one Web tool of each category, the figure underlines the fact that almost all the companies use at least one information and communication Web tool. On another hand, it also shows that barely half of them use one or many sales and relationships Web tools.

Figure 17 : Comparison of the use of the 3 Web tools categories by French companies observed

Figure 18 (page 36) takes a deeper look into the particular use of the Web tools that can only be contained in a Website (see Table 3, page 24). The companies we observed use in majority information Web tools in their Website (95%). Then it is followed by sales and relationships Web tools used by more than half of companies. On the other hand, Website communication tools are not used by 70% of the companies observed.
Below, Figure 19 gives a global view of the co-use of Web tools categories by the companies observed. The pie chart informs that more than half of the companies use at least one tool of each Web tools category. Companies using only one Web tools category represent 5% of the population observed and companies using a mix of two Web tools categories represent 35% of the population.

![Figure 19: % of companies compared to the number of Web tools categories they use](image)

Erreur ! Source du renvoi introuvable. (page 37) tries to explore the relations existing between the use of the three Web tools categories. That means that, through this figure, we try to know if, for example, the companies using information Web tools are more alike to use also communication Web tools or sales and relationships ones. To illustrate this idea, three curves are drawn in a tri-dimensional triangle in order to represent to which extent all companies using a special category of Web tools use the two other categories. Each curve starts from one of the apexes of the triangle: each apex has the name of one of the Web tools category, so that the curve corresponding to each apex represents the group where 100% of companies use this Web tools category. Starting from its main apex, each curve tries then to reach the other two apexes of the triangle representing the use of the two other Web tools categories: more the curve gets closer to one of the apexes, more the group of companies use the Web tools category associated. The data used to draw this figure are presented in table 7 (page 37).
Table 7 has to be read vertically as follows: “Companies using information Web tools, also use communication tools at 100% and sales and relationships at 47%”. The reading is similar for the two other columns of the table.

<table>
<thead>
<tr>
<th></th>
<th>Companies using information Web tools</th>
<th>Companies using communication Web tools</th>
<th>Companies using sales and relationships Web tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Also use Information Web tools</td>
<td>-</td>
<td>95%</td>
<td>100%</td>
</tr>
<tr>
<td>Also use Communication Web tools</td>
<td>100%</td>
<td>-</td>
<td>100%</td>
</tr>
<tr>
<td>Also use Sales and relationships Web tools</td>
<td>47%</td>
<td>60%</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 7: Data illustrated in [Erreur ! Source du renvoi introuvable.](Erreur ! Source du renvoi introuvable.)
5. ANALYSIS

The objective of this chapter is to explore the research findings introduced in the previous chapter. To do so, we analyse the results of our observation by relying on the conceptual framework we have exposed in chapter 2. More particularly, we discuss the Web behaviour of French companies observed by analysing how they use Web tools, which Web tools objectives they try to reach and which kind of Website they have developed. Finally, the relations between the Web tools objectives of the sample and the companies observed Website stage are analysed in order to declare if French companies observed respect the conceptual framework.

5.1 BEHAVIOUR OF FRENCH OBSERVED COMPANIES REGARDING THE USE OF WEB TOOLS

The results of our observation introduced in chapter 4 have given the opportunity to explore the general behaviour of French companies of our sample regarding their use of Web tools.

First of all, it is possible to map a general situation of their usage of all categories of Web tools. The research findings have shown that among 27 Web tools observed (i.e. the Web tools of the checklist without the two last conditional ones), only 21 were used by at least one of the companies of the sample. Though it is important to precise that the Web tools chosen to be observed are considered by academic and Web oriented literature as simple, basic, and common Web tools that companies could use (see chapter 2). The fact that more than 70% of the Web tools observed are used by the observed companies could be considered as a positive point, nevertheless we must take into consideration the information concerning the average use of one company. Indeed, table 5 in chapter 4 and Appendix 3 prove that a company uses only in average 5.5 Web tools of the 27 observed – one company uses in average 20% of the observed Web tools. In addition, Figure 16 (page 34) demonstrates that most of the companies observed are below this average (i.e. 11 companies of the sample use less than 5.5 Web tools). Those results seem weak considering that the French companies observed are established and profitable ones, and took the first step of having a Web presence.

In order to understand those results, it was essential to take a deep look into the most used Web tools, all Web tools categories taken together. The four most used Web tools are: the contact form (used by 85% of companies observed), the ranking on Google 1st page (100%) and on 1st result (100%), and the products catalogue (40%). They are Web tools easy to operate that do not need many technical, financial or human resources from the company. As said before, the other Web tools are not more difficult to implement, but not many companies have taken the step to develop them all. In Appendix 3, we learn that two companies are the top users of Web tools, by developing only nine different Web tools each (33% of all Web tools observed).

Another point can enlighten our understanding: according to Figure 19 (page 36), more than half of the selected companies use Web tools from the three Web tools categories while only 5% of them use Web tools from one Web tools category. That demonstrates that in spite of the fact that French selected companies use few different Web tools they still try to have a diversified use by mixing the three Web tools categories.

The conclusion we can draw up is that French observed companies have a simple and basic use of Web tools. They do not use a large range of Web tools so it is possible to affirm that few of the selected companies take the opportunity offered by all the Web tools available.
Furthermore we can explore Erreur! Source du renvoi introuvable. (page 37) in order to determine the correlation existing between the use of the three different Web tools categories. For example, in Erreur! Source du renvoi introuvable., the curve of the group of companies using communication Web tools is closer to the information tools apex than to the sales and relationships tools apex. That can be interpreted by the fact that all those companies using communication Web tools use more information Web tools than sales and relationships Web tools. Erreur! Source du renvoi introuvable. also enables us to say that all companies using sales and relationships Web tools use in addition information and communication Web tools. But, less than half of companies using information Web tools use sales and relationships Web tools whereas they all use communication Web tools.

In addition, table 7 (page 37) shows in a more clearly way the relations between the use of the Web tools categories. It highlights the fact that the use of information Web tools for a company seems to involves the use of communication ones and vice versa (i.e. the relation is almost equal to 100% in both ways). On the contrary, only 47% of companies using information Web tools and 60% of companies using communication Web tools use also sales and relationships ones. We so can understand that the use of information and communication Web tools slightly implies the use of sales and relationships Web tools. On the other hand, information and communication Web tools are used by 100% of the companies using sales and relationships Web tools: we so can recognize that for companies using sales and relationships Web tools the use of information and communication Web tools seems necessary.

From those comments, it is now possible to conclude that French selected companies have a weak and limited use of Web tools but nevertheless they try to diversify their use of Web tools by considering the three different Web tools categories we have defines. Globally we can also declare that those companies use, in majority, more communication Web tools. Then, the observation has shown that a strong correlation seems to exist between the use of information Web tools and the use of communication Web tools. Moreover, the use of sales and relationships Web tools highly requires the complementary use of information or communication Web tools. But on another hand, the use of information and communication Web tools does not provoke the use of sales and relationships Web tools.

5.2 WEB TOOLS OBJECTIVES OF FRENCH OBSERVED COMPANIES RELATED TO THE USE OF THEIR WEBSITE

5.2.1 WEB TOOLS OBJECTIVES OF FRENCH OBSERVED COMPANIES

By studying the results obtained for each category of Web tools, we are in position to highlight the Web tools objectives, presented in the conceptual framework (see chapter 2), of French companies observed.

Figure 17 in Chapter 4 emphasises the fact that almost all companies of the sample use one or more information or communication Web tools. Moreover the percentage of Web tools used for those two categories exceeds 50% (table 6 page 35). That leads us up to declare that French selected companies have two clear Web tools objectives. As Figure 7 in Chapter 2 presents it, those objectives are to “Exchange Information” and to “Communicate”.

The companies will to inform is illustrated by their use of a press centre on their Website, an integrated search engine and the validation of their information on Google Map. Once again those
Web tools are used by few companies, less than half of them. Furthermore some information Web tools though considered essential to provide information about 21st century companies are almost ignored by French observed companies. For instance, only 10% of the companies observed are present on Wikipedia, the ninth most visited Website by French Web users (Médiamétrie/NetRatings, octobre 2008). RSS Feeds that inform in real time Web users about the companies’ news are developed by only 5% of the companies observed. And forums that give the opportunity for visitors or customers to converse directly with the company is also underused by our sample.

We can so establish that even if most of French observed companies use information Web tools, their use is not diversified and not sizeable: among the 11 Web tools observed, finally a company uses only in average 1,95 information Web tool.

The communication objective of the companies observed is completed through the emailing of newsletters and the presence on different social networks. Those two kinds of communication Web tools have shown their efficiency in companies’ communication (see chapter 2), but even though they are still underused by our sample (Figure 12, page 32). Concerning the particular usage of social networks by the French companies observed, we could observe that Facebook and Youtube are the favourite ones above Twitter. That could be explained by the fact that Twitter is the most recent social network among the three (i.e. it has been created in 2006) and the less used in France, i.e. 5% of French Web users have a Twitter account while 37% have a Facebook account (IFOP, January 2010).

A surprising result is that none of the companies observed has developed a corporate blog which is an appreciated communication tool by Web users. To conclude with communication objectives, an important fact is that in average a company uses 2,75 different communication Web tools, among the 11 we observed, in order to communicate through the Web.

Now, let us have a look at the sales and relationships Web tools objectives pursued by French selected companies. Even if all sales and relationships Web tools observed are used by at least one company, Figure 17 (page 35) shows that only 60% of the companies observed use at least one of the sales and relationships Web tools. That leads to the important figure of 40% of companies observed that do not use any of those Web tools. It is important to notice that very few companies use the Web as a customer after sales service (support centre and customer FAQ) or as an additional distribution channel (online shop). And finally the most used sales and relationships Web tool, that is the products catalogue, leads more to information concerning the sales condition than to a real act of selling.

We can interpret this lack by the fact that sales and relationships objectives are not yet a priority for our sample’s companies as they appear to be focused on the two other Web tools objectives categories.

Globally, thanks to the observation and analysis made previously we can say that French companies observed use mainly information and communication Web tools with a focus on communication ones. One of the reasons of this phenomenon could be that the observation took place in the Web 2.0 era, where communication is very important (see chapter 2). We can so deduct that French companies observed have set two different Web tools objectives that are “exchange of information” and “communication”. On the other hand, we can add that sales and relationships are not yet an objective of the Web presence for French companies we studied.

5.2.2 STAGE OF FRENCH OBSERVED COMPANIES’ WEBSITES

As depicted in Figure 7 (page 19), a Website goes through three different stages – static, interactive and marketing. In the checklist, the Web tools related to the Websites have been separated from the ones being on the Web.
By mostly using information Web tools present on the Website such as contact form, press centre and integrated search engine, we can say that the Websites of the French companies observed have gone through the static stage of a Website (Figure 7). On the other hand, the fact that almost none of the communication Web tools that could be present on an interactive Website – such as link to social network or blog – are used by French companies observed brings us to believe that their Websites are not yet in an interactive stage. As explained in the theoretical framework of this paper, a simple interactive Website must enable the visitors to search information, but also to enter in relation in an interactive manner with the company in order to ask for information. By not giving links to the social networks where the company is present, the interactive relations between the company and the visitors of the Website are cut: only the possibility to write to the company by a contact form or email is a solution.

In addition with those facts, the study has also demonstrated that 10% of the companies observed use the online shop Web tool as presented in Figure 15 (page 33). That represents one of the essential Web tools to access the marketing stage of a Website. As explained in the conceptual framework of this paper, this marketing stage has to contain the necessary tools in order to support all the marketing activities from providing information to make the buying act possible. Consequently it would have been possible to affirm that only 10% of the French companies of our sample possess a marketing Website. But by taking a deep look to the results of the observation, we can notice that the two companies representing those 10% do not fulfil the exigencies concerning the two previous stages of a Website (static and interactive). Indeed those two companies only use respectively 43% and 14% of the seven essential Web tools that make a static Website, and both 0% of the five essential Web tools for an interactive Website.

From those observations we can make the following interpretation: French companies observed do not seem to follow the chronological aspect presented in the conceptual framework, that is to start with a complete static Website, then to have a complete interactive one and at the end, to develop a full marketing Website. By skipping one of the first stages of the Website, those companies do not create strong and long relations with their Website visitors. In fact, visitors have the opportunity to buy directly on the Website while having almost no access to the company’s information and almost no way to interact with it.

To conclude the analysis of the Website stages of French companies observed, we can argue that most of them have the basis of a static Website, all of them ignore essential elements of interactive Website, but even though more than half of those companies have already started to implement characteristics of marketing Website (Figure 18, page 36). Consequently, the chronological process concerning Website stages depicted in the conceptual framework of this paper is not respected by the French companies of our sample.

5.2.3 RELATION BETWEEN WEB TOOLS OBJECTIVES AND WEBSITE STAGES

In order to apply the conceptual framework of the paper, it is now necessary to explore the relations existing between the Web tools objectives and the Website stages of the French companies observed.

As demonstrated in part 5.2.1, French companies have two main Web tools objectives that are to inform customers about themselves and their activity and to communicate with their customers. This observation could lead us to believe that information and communication Web tools are the most developed on the Website of the French companies observed. But the reality (see part 5.2.2) shows that the Websites that are developed by French companies observed do not fully match with the companies’ Web tools objectives. Indeed, the Website which represents the companies’ window to the Web is mainly composed of information Web tools and sales and relationships ones.
As a conclusion of the part 5.2, we can declare that contrary to what we have demonstrated in the over-all theoretical framework (see chapter 2), results of the research on 20 French companies did not allow us to illustrate the relations highlighted in the conceptual framework. The observation made in our sample did not revealed the supposed link between Web tools objectives of a company and the stage of its Website.
6. CONCLUSION

This last chapter draws up the final conclusions of the research. The first part answers the paper purpose and research questions whereas the second part discusses the question of validity and generalisation of the results. In order to fulfil the lack of validity and generalisation, we propose, in the third part, further research hypotheses that could be conducted. The next part presents the point of view of the two authors of this paper regarding the results and finally the last part tackles a situation that companies should take into consideration: the fast arrival of Web 3.0.

6.1 THE FRENCH OBSERVED COMPANIES AND THE WEB TOOLS

The purpose of this paper is to describe and explore the use of Web tools by French companies. With the intention of answering this purpose, a research has been conducted on 20 French companies. Here follow the final conclusions that can be made regarding Web tools and the French companies observed.

First of all, we can declare that French selected companies do not use a large range of Web tools, all categories of Web tools taken together. Indeed, the companies of the sample using the widest range of Web tools only use nine different ones out of 29. In average, one company of the sample uses 5.5 different Web tools of the checklist (see table 3, part 3.2.1). Moreover, it is quite essential to notice that on top of using few Web tools, French companies observed use very basic ones that do not need lots of investments to be implemented. But despite this limited use of Web tools, the observation also shows that the majority of French observed companies (60%) use at least one Web tool of each of the three Web tools categories we have defined – information, communication, sales and relationships. Only few of those companies have a use of Web tools limited to one of these three categories. That shows that French companies observed tend to diversify their use of Web tools by using few Web tools of each category.

To conclude the general comments about the use of the different Web tools categories by French companies observed, we can discuss the correlations existing between those three categories. In fact, the observation enables us to say that the use of communication Web tools is closely connected with the use of information ones: in the observation, almost all the selected companies using information Web tools use communication ones and vice versa. Concerning the use of sales and relationships Web tools, it requires the use of the two previous Web tools categories but on the contrary, the use of information and communication Web tools does not require the use of sales and relationships ones.

After those general comments, we are in position to state in details what is the particular behaviour of French companies observed regarding their use of Web tools. First, it is possible to say that among all the Web tools observed, the most used by our sample are the ranking on Google 1st page, the ranking on Google 1st result and the contact form. In parallel, the less used Web tools are the personal wiki, the company FAQ, the link on the Website to the company’s social networks page and the blog. The observation acquaints that globally those companies mainly use communication Web tools and then information ones. On the other hand, sales and relationships Web tools are only used by very few companies of the sample. That leads us to affirm that the companies forming a part of our sample are trying to reach two Web tools objectives that are to exchange information and to communicate. And we can add that the objective “sales and relationships” is not yet an objective pursued by French companies observed.
Let us now conclude about the specific use of the Website by the French companies studied. Our observation has shown that the majority of the companies observed were at the static Website stage by using essentially information Web tools, among the Web tools that can be present on the Website. Nevertheless, as already said at the beginning of this part, those companies only use few different information Web tools that can be present on the Website. A few of the companies observed have some characteristics of the marketing Website by having started an online buying process but a surprising information is that the intermediate stage – the interactive stage – is ignored by the majority of the companies observed. That is why we cannot say that those French companies have a marketing Website because they did not accomplish the requirements of the two other Website stages. That shows that the French companies of our sample do not follow a chronological process concerning the evolution of their Website.

Now that we have discussed the conclusions concerning the use of Web tools by French companies observed and the specific use of their Website, it is time to discuss the relations existing between the results of the observation and the conceptual framework of this paper. As said previously, the French companies of our sample have two Web tools objectives – exchange of information and communication – and most of them have only developed a static Website. Though our conceptual framework demonstrates that the Website stage depends on which Web tools objectives a company has. For instance, a company trying to reach an exchange of information Web tools objective will develop a static Website. But from the results of the observation, we can so affirm that French companies selected do not fully respect the conceptual framework: they try to reach a communication Web tools objective but do not have an interactive Website and they have developed some characteristics of the marketing Website but do not try to reach sales and relationships Web tools objectives. Consequently, for this observation, there is no link between the Web tools objectives of the companies selected and the Website they have developed. Furthermore, as stated in the previous paragraph, French companies observed do not respect the chronological notion presented in the conceptual framework.

That is why, we believe important and interesting to adapt our conceptual framework to the specific case of the French companies we have observed because they have specific characteristics. The new conceptual framework that can only be applied for this particular research is presented in Figure 21.
We can suppose that the fact that those 20 French companies observed do no respect totally the conceptual framework of this thesis can mean that they have not established an appropriate and solid e-marketing strategy as the academic literature recommends it.

### 6.2 VALIDITY AND CRITICS OF THE RESEARCH

The conclusion about the results presented in the previous part helps to answer the purpose of this paper, but the question of the validity of those results remains. “Validity refers to the issue of whether or not an indicator (or set of indicators) that is devised to gauge a concept really reassures that concept” (Bryman & Bell, 2007, p. 165). In the case of this study, the concept refers to our purpose to describe and explore the use of Web tools for French companies. The indicators that have been chosen to measure this concept were the use or not of Web tools by companies among a list of 29 Web tools. Those Web tools were chosen because of the theories developed in the literature review, and had to be representative of the three Web tools objectives that are exchange of information, communication, and sales and relationships. Moreover, the two authors decided to observe only Web tools that could represent objective indicators, in a meaning that they had a chance to be used by a French company. For this reason only well known or simple to implement Web tools have been kept as indicators. It is then possible to say that in the study, the Web tools used as indicators to measure the use of Web tools by French companies brought partial validity to the research.

The validity can be considered as partial because a characteristic element of the environment (i.e. the Web) could not be taken into consideration: this element is the time. A Web tool, like Facebook, is something that a company can start or even stop to use in a matter of minutes. Because it is the same for almost all the Web tools observed, it is possible to argue that depending on when the observation has been conducted the results could have been different. An option could have been to develop a long time observation by repeating the observation every day to be able to get valid results during a large period of time. Or it could have been possible for the authors to repeat the unique observation several times in order to confirm the first results or notice some change in the behaviour of the companies observed.

Because the sample used could be considered as small compared to the whole population, the question of generalisation can also be discussed. The main critic regarding the sample is its lack of categorisation. The sample might have given different results if considerations concerning the business relations nature of the company would have been made (i.e. Business to Customer or Business to Business relations), and considerations concerning the nature of the products sold (i.e. goods or services). For instance a BtoC relation might not imply the same use of Web tools compared to a company having a BtoB relation, and the buying act on a Website might be different for a company selling goods or services. For those reasons, results of this study might be taken with precaution.

Nevertheless the sample being composed of many kinds of companies thanks to a random selection, we can conclude that the results of this research might not be generalized to the whole population of French companies but still give an overview idea of what the use of Web tools by some French companies can be. For us, this overview idea is in accordance with the reality that we faced while surfing on the Web: it is rare to find a French company using a blog or having an interactive Website.

Those results can despite their lack of validity and generalisation be seen as a contribution for companies and also researchers and students. For companies, those results highlight that in France – where broadband Internet is almost in every company, some of the most profitable companies of the country still do not use Web tools at 100% of their possibility. This would then maybe push
companies’ managers to reappraise their own use of Web tools and improve their presence on the Web. On another hand, the results presented in this paper highlight a phenomenon that researchers and students might find interesting and useful to deepen. In addition to the description that is made here of French companies and the Web, researchers could now look for the reasons of such a use of Web tools in French companies, but also the consequences of this light use of Web tools.

Finally, we believe that in addition to this exploration of French companies’ use of Web tools, many possibilities open up for researchers or students who wish to deepen the understanding of this behaviour, but also who might want to present valid results to generalize to the whole population. Some of these possibilities are presented in the upcoming part of the paper.

### 6.3 FURTHER RESEARCHES

As explained in the previous part, we assume the fact that this research is not fully valid and is not meant to be generalised. For this reason, we think that it is interesting to add some hypotheses that could enable researches on the same topic to get validity and generalisation.

**Hypothesis 1:** Explore the use of Web tools by French companies by observing a larger sample of companies (e.g. 100 French companies) that would be more representative of the population. By not only focusing on profitable French companies we believe that this research can also gain in relevance.

**Hypothesis 2:** Explore the use of Web tools by French companies by taking into account a checklist composed of much more Web tools. In this case, the possibility of contacting directly the companies – through surveys – can be considered in order to have results concerning Web tools difficult to observe and explore without the help of the companies.

**Hypothesis 3:** Describe and explore the use of Web tools by French companies by comparing it with the behaviour of companies in other countries. For instance, we believe interesting to conduct a comparison between French companies and Swedish companies concerning their use of Web tools. The idea of Sweden crossed our mind because by only having lived during one year in this country and by having used the “Swedish Web”, we have been able to notice substantial differences between Swedish companies use of the Web and French companies one.

**Hypothesis 4:** Study more deeply, in association with the French companies and authorities, the reasons of the lack of French companies concerning the use of Web tools. Research purposes such as explaining the reasons why French companies do not use many Web tools or explaining why they do not have developed a complete marketing Website could be useful for practical applications. Concrete actions might then be undertaken by French companies.

Those hypotheses of further researches could be conducted in future studies wanting their results to be generalised and looking for a stronger validity.

### 6.4 PRACTICAL CONTRIBUTION

As we have started to introduce it earlier in the conclusion, the results that could have been observed during this research concerning the use of Web tools by French companies confirm our own experience. It is true that when we surf on the Web, the French companies’ Websites do not offer a
large possibility for visitors whatsoever to have information about the company or just to contact it. It is rare to have access to something more than a contact form, something like a forum or a Facebook page. Also, French companies are not often present on the Web through blogs or even banner ad campaigns. They seem to favour other classical communication channels like newspaper or television. We think that for the moment French companies are still money driven when they use the Web. They do not realise the awareness that the Web can create for their business because they only consider Web tools which can provide them a return on investment. It is certain than when a company decides to be on Facebook and allocates resources to it (human or financial), there are not any immediate or direct sources of income that can be perceived.

It has been possible for the two authors to both experiment this frame of mind inside French companies while being a collaborator inside their Web marketing department. We could notice that, when those companies in which we worked, were dealing with the Web, senior managers were the ones curbing projects as they were maybe not able to understand all the ins and outs of the Web. This is why we come to a hypothesis that could explain the poor use of Web tools by French companies: maybe French managers simply do not have the knowledge, the experience or the will to deal with the Web. This situation might be explained by the lack of importance given to the Web in courses of universities and business schools: for instance, the notion of e-marketing is often broached during marketing courses but its advantages, practices and risks are not deeply exploited.

In the next and last part of this paper, we would like to stress the necessity for French companies, French managers or companies with the same problems to evolve regarding the Web as the stakes become more and more important and can have an impact into the “real world”.

6.5 WEB 3.0: THE COUNTDOWN HAS STARTED

“Greenpeace VS Nestlé: time for the Web guerilla has come”
(Epelboin, 2010a)

In the Introduction chapter, we have put in piece a figure representing the evolution of the Web (Figure 1, page 3). As an explanation for the last evolution, the Web 3.0, we showed that no one was able to predict the beginning of it. What we did not imagine at that time was that it might start while we were still writing this thesis … The quote above refers to events that took place between the months of March and May 2010, between the activist company Greenpeace and the world wide food producer Nestlé and on a special battlefield: the Web.

The facts and events can be read on an article of the 2009 High-tech best French blog (Fontaine, 2009), ReadWriteWeb France (Epelboin, 2010b). Here follows a short recap based mostly on this blog article: at first Greenpeace, the worldwide environmental protection organisation, decided to publish in March 2010, a video on the Youtube platform \(^{20}\) to denounce Nestlé acts regarding their use of rainforest palm oil in their products (Armstrong, 2010). The video, afake commercial for the brand Kit Kat, was soon after removed from Youtube because Nestlé denounced an illegal use of their brand logo and slogan. The Web community saw in this act, an eviction of the right of free speech and of parody: ground rules of the Web. It was then an opportunity for Greenpeace to use all those angry Web users against Nestlé.

\(^{20}\) See the video on www.youtube.com/watch?v=VaJjPRwExO8
Web users have been directed to a dedicated Greenpeace Kit Kat Website with all kind of material to show protest against Nestlé. It was possible to send direct emails of protest to Nestlé United Kingdom board director, or find telephone numbers to call any Nestlé headquarters around the world … But the biggest part of the battle was on social networks like Facebook. Web users across the world decided to become “Facebook Fan” of Nestlé – in order to have the ability to post messages on the company’s fan page – and started to post angry messages asking Nestlé to stop using palm oil from the rainforest. What has been incredible and made the word of mouth spread around is the behaviour of Nestlé employee responsible to answer Facebook messages. He/she started to become rude to the people that were sending messages, and even deleting some of them. “Many experts in social media, who came to see what was going on, begin to give advice to the community manager [of Nestlé Facebook page]. A waste of effort as they have been curtly retort.”  

Finally, Nestlé apologised for this behaviour, but it was too late as an angry mob of Web users was in constant growth, and continued to post messages on the Facebook page of Nestlé and on other social networks. Greenpeace resumes this Web attack as follows: “with nearly 1.5m views of our Kit Kat advert, over 200 000 emails sent, hundreds of phone calls and countless Facebook comments, you made it clear to Nestlé that it had to address the problems with the palm oil and paper products it buys” (Jamie, 2010).

On May 17th 2010, after two months of battle of Greenpeace activists and simple Web users not related to the organisation, “Nestlé finally announced a break for the orang-utan – as well as Indonesian rainforests and peatlands – by committing to stop using products that come from rainforest destruction” (Greenpeace, 2010).

This successful attack of Greenpeace could be graved in the Web history for two reasons. First because it has shown that a world wide company like Nestlé was not ready to respond any sort of protest on the World Wide Web. They have been going on with mistakes, from Web censorship of the parody video to rudeness in social network Website and censorship of protesting messages. This made the protestor group growing bigger every day. The second reason is maybe that one of the elements of Web 3.0 presented in figure 1 (page 3) has come true: actions on the Web have a clear impact on the “real world”. Here protest on the Web (and some off line actions) has finally pushed Nestlé to change its policy regarding the use of palm oil of the rainforest.

This example of battle between Greenpeace and Nestlé is only the first one of many others to come as Figure 22, an image extracted from a Greenpeace press release, reminds it.

Figure 22 : Greenpeace next attack will be on HSBC (Jamie, 2010)

This example can really help for the general meaning of this paper: companies should not underestimate the power of the Web and should follow its evolution. It becomes now essential for French companies and any of the world to start thinking of their Web strategy, and mostly their use of Web tools like Facebook, to be sure it fits with the potential threats or opportunities of the current Web stage.

21 Original quote in French: « bon nombre de spécialistes des média sociaux, venus voir ce qu’il s’y passait, se mettent à donner des conseils au community manager. Peine perdue, ils se font sèchement rétorquer »
This appendix helps to understand the motivation of Web users when surfing on the Web. Figure 23 below is an illustration of the Top 100 most visited Websites in the world, presented on the BBCNews Website (BBCNews, 2010). It shows that Search/Portal and Media/News Websites were the most visited ones in January 2010. It is then possible to deduct that the intention of Web users behind most of their Web visits is to search and collect information.

The method used to create this illustration is the following one:
“The data used to generate the interactive treemap visualisation were collected by the Nielsen company and covers the UK, France, Germany, Italy, Spain, Switzerland, Brazil, US and Australia. The figures represent unique users for the month of January 2010. The categories – such as retail, social networks, search/portal – were defined by the BBC. Because some Websites have more than one use, they could fall within more than one category (e.g. Yahoo). However, the treemap only classifies them once. The maps were produced using the Prefuse Flare software, developed by the University of California Berkeley” (BBCNews, 2010).
PART 1. HOW TO SELECT THE SAMPLING FRAME

L’Entreprise Top 100 2009 list is elaborated thanks to the following method:
“L’entreprise has selected with the assistance of Coface-Services and in partnership with the INPI, 7000 companies whose 2007 figures correspond to the criteria of the Top 100. These companies received a questionnaire to return before April the 30th, 2009. To be part of the Top 100 2009, they had to meet the following criteria:
- have at least three years of existence,
- show a turnover in 2008 exceeding 10 million euros,
- show at least 20% of cumulative growth between 2005 and 2008,
- have 5% minimum profit before tax last year if the turnover is less than 100 million euros,
- show 15% growth,
- have 3% returns for companies with a turnover exceeding 100 million.
The leaders must control the capital with a minimum of 10%. Some companies that could have appeared in the charts do not communicate their results in order not to highlight their exceptional profitability. They are so absent from our classification.”

From this list of 230 companies – classified from the most profitable French companies to the least ones, the authors have manually searched companies’ name in Google search engine starting with company “number 1” and continuing in an ascending order.
If in the search results a Website of the company was found (e.g. presence of the company’s name in the URL), the company was added to the sampling frame. The action was repeated until the sampling frame was composed of 60 companies – each company being assigned a number from 1 to 60. This process is recapped in Figure 24 below.

Figure 24 : How the sampling frame has been established

23 Coface-Services is a subsidiary of Coface. Its objectives are to inform, evaluate and manage debts.
24 INPI is the National Institute of Industrial Property in France.
25 Original version in France : “L’entreprise a sélectionné, avec le concours de Coface-Services et en partenariat avec l’Inpi, les 7 000 entreprises dont les chiffres 2007 correspondaient aux critères du Top 100. Ces sociétés ont reçu un questionnaire de participation à renvoyer avant le 30 avril 2009. Pour faire partie du Top 100 2009, elles devaient satisfaire aux critères suivants : avoir au moins trois ans d’existence, afficher un chiffre d’affaires 2008 supérieur à 10 millions d’euros, au minimum 20 % de croissance cumulée entre 2005 et 2008 et 5 % minimum de rentabilité avant impôt sur le dernier exercice si le chiffre d’affaires est inférieur à 100 millions d’euros, et 15 % de croissance et 3 % de rentabilité pour les sociétés avec un chiffre d’affaires supérieur à 100 millions. Le ou les dirigeants opérationnels doivent contrôler le capital avec un minimum de 10 %. Certaines entreprises qui pourraient figurer dans le palmarès ne communiquent pas leurs résultats pour ne pas mettre en avant leur exceptionnelle rentabilité. Elles sont donc absentes de notre classement”.
26 Uniform Resource Locator.
PART 2. HOW TO SELECT THE SAMPLE

By following Earl R. Babbie (2009) method to do a random sample, a set of 20 random digits was generated as shown in figure 25 in order to get a sample of 20 companies with Website.

Here follows the method used to generate the random digits:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31</td>
</tr>
<tr>
<td>4</td>
<td>34</td>
</tr>
<tr>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>13</td>
<td>43</td>
</tr>
<tr>
<td>16</td>
<td>46</td>
</tr>
<tr>
<td>19</td>
<td>49</td>
</tr>
<tr>
<td>22</td>
<td>52</td>
</tr>
<tr>
<td>25</td>
<td>55</td>
</tr>
<tr>
<td>28</td>
<td>58</td>
</tr>
</tbody>
</table>

Step 1: Start at Number 1
Step 2: Add 3: e.g. 1+3 = 4
Step 3: Keep the result obtained and add 3 again: e.g. 4+3 = 7 ...
Step 4: Repeat the operation until you have 20 digits

Figure 25: Random digits to choose the sample from the sampling frame

It has been decided to add “3” every time because the sampling frame is composed of 60 companies and the sample should be of 20, i.e. 60/20 = 3.

Then, each company from the sampling frame associated with a number part of the random digits list has been selected to compose the sample as illustrated in Figure 26.

Choosing companies randomly with this technique and using a large dispersion give more diversification to the sample (e.g. some companies are highly profitable – close to 1 – and some companies are less profitable – close to 60).

The companies of the sample that were observed in the research are the following one, in table 8.

<table>
<thead>
<tr>
<th>GEOS</th>
<th>FONTANEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILLE MERCIS</td>
<td>MOOCK</td>
</tr>
<tr>
<td>BATILOR</td>
<td>HUOT</td>
</tr>
<tr>
<td>HITECHPROS</td>
<td>CETAL</td>
</tr>
<tr>
<td>PLAGE</td>
<td>THUASNE</td>
</tr>
<tr>
<td>FORTAL</td>
<td>SCMA</td>
</tr>
<tr>
<td>VENDEE LOCATION</td>
<td>OENOBIOL</td>
</tr>
<tr>
<td>DOCUMENT STORE</td>
<td>METROLOGIC GROUP</td>
</tr>
<tr>
<td>MGI FRANCE</td>
<td>FINANCIERE BERNARD</td>
</tr>
<tr>
<td>SILAB</td>
<td>SWORD GROUP</td>
</tr>
</tbody>
</table>

Table 8: The sample list used for the observation
## APPENDIX 3

| Observational Checklist | C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 | C17 | C18 | C19 | C20 | TOTAL |
|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|------|
| RSS feeds               | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 1    | 1    |
| Press centre            | 0  | 1  | 1  | 0  | 0  | 0  | 1  | 1  | 0  | 1  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 7    |
| Search engine           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 5    |
| Company FAQ             | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    |
| Contact forms           | 1  | 1  | 1  | 1  | 0  | 1  | 1  | 1  | 1  | 1  | 1  | 1  | 0  | 0  | 1  | 1  | 1  | 1  | 1  | 17   |
| Forum                   | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1    |
| Tagging                 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 1    |
| Personal wiki           | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0    |
| Customers' surveys      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0    |
| Google Map              | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 1  | 0  | 0  | 0  | 1  | 0  | 0  | 4    |
| Presence on Wikipedia   | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 1  | 0  | 0  | 0  | 0  | 0  | 0  | 2    |

**Table 9**: Observation checklist, with results YES or NO converted to 1 or 0 respectively (C + Number corresponds to a company observed)
In this thesis, many words and expressions might appear unfamiliar to many readers. The following glossary presents the most important concepts and words to understand. Because the Web is in nature fast changing, the concepts associated to it are also. It has then been decided to use, as major glossary resource, a dictionary that is in constant production, the Website netlingo.net (Netlingo, 2010) supported by its book version *NetLingo: the Internet dictionary* (2002). It has been found that general course literature books have not the most up to date definitions of certain concepts.

**A**

**Affiliation (or Affiliate Marketing):** A revenue sharing arrangement between online advertisers or e-commerce merchants and online publishers or Website owners, whereby payment is based on performance measures, such as the number of sales, clicks, or registrations that the affiliate refers. In other words, two companies agree to link to one another; if someone clicks from site A to buy something at site B, site A gets a commission on the sale. Amazon.com pioneered affiliate marketing by getting as many other Websites as possible to join its affiliate network and sell its products, thereby greatly extending its marketing reach.

**B**

**Banner (or banner ad):** Also known as ad banner or online ad, is a graphical Web advertising image usually placed at the top of content pages that links to the advertiser's content page.

**Blog:** A Website (or section of a Website) where users can post a chronological, up-to-date e-journal entry of their thoughts. Basically, it is an open forum communication tool that, depending on the Website, is either very individualistic or performs a crucial function for an organization or company. There are three basic varieties of blogs: those that post links to other sources, those that compile news and articles, and those that provide a forum for opinions and commentary.

**Browsers:** A program used to view, download, upload, surf, or otherwise access documents (i.e. Web pages) on the Internet. Browsers read pages that are "marked up" or coded, usually in HTML (and often with advanced scripts like PHP). These pages reside on servers. The browsers interpret the code into what we see rendered as a Web page.

**Buzz (or Buzz marketing):** Buzz marketing captures the attention of consumers and the media to the point where talking about your brand or company becomes entertaining, fascinating, and newsworthy (Hughes, 2005).

**C**

**Click-Through Rate:** The number of clicks that an ad gets, divided by the total number of times that ad is displayed or served (www.sempo.org).

**E**

**E-mail:** Mail that is electronically transmitted by a computer.

**E-mailing:** Action of sending a big quantity of e-mails usually with a commercial or information intention (see e-mail).

**Extranet:** The connecting of two or more intranets (see Intranet). If you think of an intranet as a company's internal Website which allows users inside the company to communicate and exchange information, now imagine connecting that virtual space with another company's intranet, thus allowing these two (or more) companies to share resources and communicate over the Internet in their own virtual space.

**F**

**Facebook:** A Website (referred to as a "social utility") that connects people with friends and others who work, study, and live around them. People use Facebook to keep up with friends, upload an unlimited number of photos, share links and videos, and learn more about the
people they meet. It is considered as a social networking site because it contains people profiles, semi-persistent public commentaries on the profile, and a traversable publicly articulated social network displayed in relation to the profile (which basically means you can view information about people, make comments to them, and see who their friends are).

FAQ (Frequently Asked Questions): A list of questions and answers related to a Website, newsgroup, software, company or any kind of product or service. Because these are "frequently asked" questions, most users can find the information they need on a FAQ

Forum (discussion forums, online forums): An online community where users read and post topics of common interest.

Google map: A Web mapping service application and technology provided by Google (definition from the authors).

Homepage: see Website

Intranet: A private network, within a company or organization, that serves shared applications intended for internal use only (although some may be found on the public Internet).

Network: Basically, it is a collection of two or more computers and associated devices that are linked together with communications equipment. Once connected, each part of the network can share the software, hardware, and information contained in the other parts.

Newsletter (in the meaning of online newsletter): An electronically distributed newsletter, most commonly sent via e-mail. Online newsletters are usually devoted to specific topics.

O

Ogone: see payment gateway

P

Paybox: see payment gateway

Payment gateway: An application that is resident on a merchant's server that accepts payment information, encrypts it and routes it across the Internet to a payment gateway.

PayPal: PayPal enables any business or consumer with an e-mail address to securely, conveniently, and cost-effectively send and receive payments online. It is a network built upon the existing financial infrastructure of bank accounts and credit cards to create a global, real-time payment solution.

Pop-up (in the meaning of pop-up ad): An online ad, such as an interstitial, it is displayed in a new browser window when you click from one page to another. This type of online advertising is annoying for most Internet users because it interferes with what you are doing, and it is something that appears without you wanting it or taking any action.

Price comparison service: A Website which proposes to visitors the prices of different Web stores. Usually search is made with a product name, and all the price offers are displayed on the same Web page.

Protocol: A specification that describes how computers talk to each other on a network. (Netlingo, 2010)

R

RSS (Really Simple Syndication -or- Rich Site Summary): A format for distributing and gathering content from sources across the Web, including newspapers, magazines, and blogs. Web publishers use RSS to create and distribute news feeds that include links, headlines, and summaries. In other words, it is a format (in XML) for syndicating Web content so as to allow Website owners and independent publishers the ability to easily share information.
S

Search engine: A Website (actually a program) that attempt to index and locate desired information by searching for the keywords a user specifies.

Social Network: An online community of people who are socializing with each other via a particular Website. Social networking Websites offer their users an online community to share and explore common interests and activities. They typically provide a variety of ways for users to interact: through chat, messaging, email, video, voice chat, file-sharing, blogging, forums, discussion groups, and applications.

Surf: To browse or look at information on the Web by pointing and clicking and navigating in a nonlinear way (meaning you can go to any site at any time you like).

T

Tagging (a.k.a. social bookmarking, social tagging, tags): A grassroots phenomenon whereby users label Websites with descriptive tags. Basically it is an intelligent method and tool for browsing and sharing the best Websites.

Trusted Third Parties: A security authority that is trusted by communicating entities for the purpose of authentication. Authentication is security measures designed to establish the validity of transmission, message, originator or a means of verifying an individual’s authorization. A TTP can be a bank, certification authority or an individual. TTP service providers called I-Brokers or “Bankers for data” facilitate the worldwide banking and credit card system with the exchange of sensitive forms of data and money. (Birds-Eye.Net, 2010)

Twitter: A free, real-time short messaging service (SMS) that delivers messages on computers and handheld devices.

W

Website (or Web site): A place on the World Wide Web that is comprised of files organized into a hierarchy. A site can contain a combination of graphics, text, audio, video, and other dynamic or static materials.

Webzine (or e-zine): Sometimes referred to as a “zine,” this is the name for an electronic magazine (a magazine published in an electronic format).

Wikipedia: A free, online encyclopaedia that anyone can edit.

YouTube: The world's most popular online video community, allowing millions of people to watch and share user-generated videos.
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