The Importance of Web Page Design:
A Case Study of Four Business School Websites

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1. Introduction

The objective of this thesis is to look at four business school websites in detail, and evaluate the functionality of these web pages based on their structure and content, their overall web design, their usage as marketing tools and how they have taken into account internationalization in their site content. Two of the evaluated business schools, Oulu Business School and Aalto University School of Business, are situated in Finland and two in the United States, Harvard Business School and the Bryan School of Business and Economics, which is a part of the University of North Carolina at Greensboro. Due to the homogenized business school environment and the globalized world in which business schools operate nowadays (Engwall, 2007, p. 28), it is possible and advantageous to compare business schools from different countries and even continents.

The structure of a web page, the ease of functions and navigation on a website are all functions that we as World Wide Web users take mostly for granted. However, when a site we are visiting is lacking in one of these aspects or something else hinders its functionality, it causes immediate and very apparent frustrations and problems to the user, and it becomes glaringly obvious how much we rely on certain logical user interfaces and navigational steps. Especially when the websites are utilized as marketing tools, the need for a practical and functioning web page structure becomes unquestionable. This thesis aims to discover in its evaluation of the four business school websites whether the studied organizations have realized the importance of the aforementioned qualities and have taken them into consideration in the construction of their Internet presence.

One point of interest for this thesis was how the idea of academic business studies as a product to be sold to prospective students and the private sector was visible in the construction and functionality of the web pages of these schools, as well as, how the heavy competition in the present day field of business schools has affected the utilization of these websites as marketing tools – if, indeed, it has at all.
Another question I wanted to address was website internationalization. As has already been mentioned, the world of business schools is a global and homogenized one (Engwall, 2007, p. 28) but still culturally specific items may well be unfamiliar to someone looking in from a vastly different world. Therefore, this thesis will assess whether the different national cultures of the users have been taken into consideration when generating content for the websites, i.e. have the business schools taken the global users of their webpages into account? Have possible local educational terms and requirements been explicitly explained?

In this work I have elected to use the same definition for business school as Kerttu Kettunen utilized in her thesis, *Development of the Finnish Business School Institution*. This means that only those business schools that offer higher, university-based business education and grant bachelor's, master's, licentiate's and doctor's degrees in the discipline of business administration will and could be included in this study (2010, p. 12). This was a sensible definition for this thesis, as well, since the comparability of the evaluated business schools would have suffered excessively if I had included other types of business schools in my studies. Hence, although many business-related schools nowadays offer different executive programs and other business education programs, such as MBAs or eMBAs, these programs were not valid for the comparative study in this thesis.

In choosing the business schools for this study, the more obvious or self-explanatory choices were selected. Oulu Business School was a self-evident choice since I study in the aforementioned institution. A natural continuum to that was to study and discover how Oulu Business School’s website compared to Finland’s number one business school, Aalto University School of Business. Because of the strong current of Americanization occurring in business schools worldwide, choosing American business schools as the other subjects of comparison seemed prudent and fruitful. From the United States I once again wanted to see what the best of the best had to offer and, hence, chose Harvard Business School. The Bryan School of Business and Economics has a Double Degree Partnership agreement with Oulu Business School and was, therefore, the other obvious choice for an American business school.
This thesis will first trace the history of business schools and then further introduce the four business schools whose websites will later be evaluated in more detail. The criteria that have been used to evaluate the websites as well as the theory behind the concepts will then be discussed in its own section. The methodology used, the analysis of my findings and the conclusion drawn from this analysis will then follow.

With the commercial and financial success that business schools have enjoyed in the past decades and having myself obtained a degree in Management Accounting and Finance from the Oulu Business School, I was interested in studying more comprehensively the web pages of these four business schools.
2. The Business Schools

During the past hundred years the popularity of business schools has increased tremendously and business management has strengthened its position as an academic discipline (Kettunen, 2010, p. 10). Today, despite the diverse political and religious systems in different countries, business studies are a well-represented subject in a majority of universities and university colleges around the world (Engwall, 2007, p. 5). Due to this significant growth and the prominence of business schools nowadays, these organizations have become the success stories of the modern day academia.

2.1 An overview of the history of business schools

Since it is impossible to fully understand the present day situation of business schools without looking into their histories first, it is prudent to spend a few moments reviewing the past and seeing how we have ended up in the present day situation of business school prevalence all over the world.

The roots of the business school institution can be found in Europe (e.g. Kokko, 2003, p. 45; Durand & Dameron 2008b, p. 21; Spender, 2008, p. 9). Although management as an academic discipline did not come into existence until the late 19th century, the economics discipline had already been introduced to universities a century and a half earlier in the form of chairs created for such a purpose in Germany and later in Sweden (Kettunen, 2010, p. 17; Engwall, 2007, p. 10). The time of these early forms of higher business education in the early to mid-18th century is labeled by Engwall (2007, p. 10) as the early stages of management education.

Due to the difficulty in determining the academic standards of the first business schools, researchers have not been completely unanimous in naming the world’s first actual business school. But no matter which school or exact date is considered the
establishment of the very first business school, the period from roughly 1850 to the First World War is considered the establishment phase of business schools (Engwall, 2007, p. 11). The decades from around 1890 to 1910 were the most active for the establishment of business schools both in Europe and in the US (Kettunen, 2010, p. 18). For example, Harvard Business School was established during this phase of growth in 1908 and the Aalto University School of Business, then called the Helsinki School of Economics, was founded in 1911. The real expansion phase of management education and business schools, however, did not occur until after the Second World War during the stabilization era of business schools (Engwall, 2007, p. 11; Kettunen, 2010, p. 72). Both Oulu Business School, established in 1958 and the Bryan School of Business and Economics, established in 1969, were a product of this phase of expansive growth.

Regardless of Europe’s relatively long tradition in management education, the past decades in European business schools have been strongly affected by the US model of management education (Engwall, 2007, p. 13). This American orientation in European management education is primarily a post-World War I phenomenon. After the Second World War the US orientation started to truly win ground in business schools (Engwall, 2007, p. 19-20; McGlade, 1998, pp. 50-51).

Today business is undeniably one of the world’s most popular and fastest growing segments of higher education (Antunes & Thomas, 2007, p. 382). Especially the US style business school model that is focused around MBA programs has often been referred to as a global leader, benchmark, the strategic reference point and the role model for business schools all around the world (Crainer & Dearlove, 1999, p. 138; Antunes & Thomas, 2007, p. 387; Engwall, 2007, p. 13; Durand & Dameron 2008a, p. 8; Kettunen, 2010, p. 20). Imitation and follow-the-leader behavior have appeared to be strong mimetic forces that have resulted in homogenization among the world’s business schools. Moreover, various forces such as governments, media, professional associations, business communities and their evaluations, accreditations and rankings have created external pressures that have pushed business school institutions in different parts of the world towards the adoption of the models that are regarded as successful (Engwall, 2007, p. 17).
Furthermore, according to Engwall (2007, pp. 19-24), the two activities that appear to be particularly significant in reinforcing this convergence are the professional exchanges that occur through study trips, various kinds of professional associations, organizations and networks and quality assessments, such as national evaluations and rankings. Since the American business schools are strongly represented in these professional exchanges and quality assessments, what we see now – and are likely to see in the future – is the strengthening of the convergence towards the American model.

An area that might be interesting for further study is the public image of these schools and their websites, as well as all business school websites, in general. What is the view that their users really hold of the organizations and how far spread is their reach in actuality. This subject matter had to be left out from the analysis of this thesis to limit the size and expanse of this study but it has potential to be an area that would yield interesting findings and further our understanding of the real scope of the influence that business schools have.

2.2 Aalto University School of Business

Aalto University School of Business (AUSB) was established in 1911 under the name *Kauppakorkeakoulu*, in English Helsinki School of Economics (HSE). This was the first Finnish-speaking business school in Finland. (Kettunen, 2010, p. 59.) Today, AUSB is considered the best and most prestigious business school in Finland, being no. 76 in Financial Times’ 2015 Global Business School Rankings list. This was the highest placement for any Finnish business school.

According to Westerlund (1984, p. 12), changes in the political environment starting from 1880's had a significant impact on the development of Finnish business education. Towards the end of the 19th century, Finland's autonomy was increasingly pressured by the Russian government. In these circumstances. Finland considered it
necessary to reinforce free and independent industry and commerce. Hence, HSE was first established as a private institution without strong ties to the government. (Kettunen, 2010, pp. 59-60)

The objectives of the new business school were heavily focused on serving Finnish business life. Shops, banks, insurance companies, industry and administration needed trained experts and the school was committed to respond to this need (Michelsen, 2001, p. 28). Another important task that HSE set for itself was to educate academically qualified teachers to fill the needs of lower level educational institutions in business (Michelsen, 2001, pp. 28-29). Even though these first ambitions of the new business school were considered rather practical, right from the start the long term objective of HSE was to raise its academic standards to the level that would equal the University of Helsinki (Kettunen, 2010, p. 61).

Because HSE began its life as a private, stand-alone business school, it did not enjoy the same government protection as the University of Technology and the University of Helsinki. Thus, the first decades of the school's history were marked by a continuous struggle of finding adequate funding to keep the school afloat (Saarsalmi, 1961, p. 40). The demand for business education was growing rapidly, especially during the economic boom of the 1920's and 30's (not counting the few years of depression in the beginning of the 30's), and this was attracting a growing number of new students to business schools – yet funding lagged behind (Saarsalmi, 1961, pp. 50, 65). The inadequacy of government funding in the beginning of the school's history meant that good relationships with business life became crucial (Michelsen, 2001, p. 30). Unfortunately, both the World Wars and the Finnish Civil War all occurred during the first few decades of the school's history, which made finding private funding extremely difficult (Saarsalmi, 1961, p. 37; Westerlund, 1984, p. 25; Michelsen, 2001, p. 50).

HSE's change from a commercial school to a genuine academic institution did not happen overnight. Gaining academic legitimacy in the Finnish higher education system required both time and effort (Kukkonen, 1995, p. 29). During the first decades, Finnish business schools were first and foremost educational institutions. Research was almost non-existent. For example, the first doctoral thesis from HSE was not published until 1937 (Kettunen, 2010, p. 66). It was only through the academic merits
and credibility of its first professors, especially HSE's first rector, Professor Kyösti Järvinen, that Helsinki School of Economics was able to get access to the academic resources of the University of Helsinki and, thus, was able to start gaining academic credibility as an institute of learning (Saarsalmi, 1961, p. 42; Michelsen, 2001, pp. 33-34; Kettunen, 2010, pp. 66-67).

An important step in making business school degrees more comparable to the other university level degrees was the founding of the master's degree in business administration in 1920 (Kettunen, 2010, p. 69). The final important milestone that made HSE a full-scale academic business school was the state's authorization to grant doctoral degrees received in 1931 and the doctor promotion right received in 1945 (Saarsalmi, 1961, p. 59; Kettunen, 2010, p. 70; Korhonen, 2010, p. 59).

After the disruption of the Second World War, began the era of stabilization and HSE reached academic maturity during the following two decades. Doctoral studies began to increase their popularity at the turn of the 1950's and research was conducted actively. (Michelsen, 2001, p. 146; Kettunen, 2010, pp. 72-74) A new generation of professors brought with them new ideas on how to develop HSE into a genuine academic institution. The school's emphasis switched from educating to research and from teaching practical skills to understanding and analyzing broader economic phenomena (Kettunen, 2010, pp. 76-77).

The German influence in Finnish business schools was replaced by the American tradition after the end of the Second World War. The American influence started to flow into Finnish business schools, with HSE a major recipient among them, through two main channels: firstly, through American professors visiting Finnish business schools and vice versa, by Finnish business school professors visiting the US schools (Vironmäki, 2007, pp. 113-114); secondly, through American teaching literature that Finnish schools were able to acquire into their libraries' book collections (Perälä, 1975, p. 42; Sandström, 1977, p. 60).

HSE's change from a privately funded business school to a government subsidized institution of higher learning came about in the 1950's, as well. With the economic growth of the time and the government's interest in keeping the industry and trade
running by increasing the volume of education, business schools faced pressure in increasing their student intake (Michelsen, 2001, p. 175). This meant building new facilities, into which HSE moved in the early 1950's (Saarsalmi, 1961, p. 85; Westerlund, 1984, pp. 54, 63-64). These changes impoverished HSE, however, and they had to turn to the government for support (Westerlund, 1984, p. 52). As a consequence, a new law of government subsidy for all business school's in Finland (four at the time) was passed in 1950 and applied for the first time in 1951. The new law guaranteed HSE, as well as the other business schools, a subsidy from the Finnish government that covered 70 percent of the school’s annual expenses (Kettunen, 2010, pp. 80-81). This law secured both the legal and financial position of the business schools (Kukkonen, 1995, p. 37). However, unlike the University of Helsinki and the University of Technology whose costs were covered 100 percent by the government, business schools, with HSE among them, were still required to cover 30 percent of their costs themselves with tuition fees and private funding (Luohivuori, 1951, p. 75; Kettunen, 2010, p. 81).

For HSE the focus to become the best business school in Finland came with the advent of competition, especially the Finnish-speaking kind. When the Turku School of Economics was established in 1950, HSE was faced with the reality that after nearly forty years of existence, it was no longer the sole-producer of Finnish-speaking higher business education in the country (Kettunen, 2010, p. 84). However, the benefits of the new situation were soon realized; the school directed its focus on improving its research activities and study programs through the development of its international relations. Despite no longer being the only Finnish-speaking business school, HSE concentrated on becoming number one (Michelsen, 2001, p. 169; Kettunen, 2010, pp. 84-85).
2.3 Oulu Business School

Towards the end of the 1950's, demand for higher education and research-based knowledge increased in the Finnish society (Westerlund, 1984, p. 75; Autio, 1990, pp. 18-22). With the dramatic increase in student numbers that came about in the mid-1960 when the post-war baby boomers reached the age of twenty, higher education soon became an important political issue (Westerlund, 1984, p. 75; Michelsen, 2001, p. 218; Kettunen, 2010, p. 88).

The dramatic increase in the student numbers increased the political importance of the universities and institutions of higher education in the Finnish society. The continuously rising student numbers started to also increase pressures in the business schools. (Kettunen, 2010, pp. 88-89) In order to match the student intake with the resources and job market needs, business schools were forced to use numerus clausus (Michelsen, 2001, p. 218). This was done in order to insure that their facilities and teaching staff were able handle the influx of new students. However, numerus clausus were against the democratic ideals of the Ministry of Education (Kettunen, 2010, p. 90).

One solution to the problem would have been building new facilities and then increasing the student intake in the existing universities and institutes of higher learning but doing this would have accelerated the migration of the educated population to the growth centers in Southern Finland (Kettunen, 2010, p. 91). Especially the Centre Party of Finland was concerned with the development of rural Finland, and in the 1960's decentralization of the Finnish higher education became a part of their regional political strategy (Michelsen, 2001, pp. 218-219). The first step in the decentralization process was the University of Oulu. The plans for this university were implemented in the mid-1950's (Michelsen, 2001, p. 220; Kettunen, 2010, p. 91).

Upon the founding of the university in 1958, business administrative studies were organized under the Faculty of Humanities. In 1988 Economics became its own department under the Faculty of Technology and in 2000 the Faculty of Economics and Business Administration was established. In 2008 the Martti Ahtisaari Institute of
Global Business and Economics was further established to strengthen the academic credentials of the school. (Kettunen, 2010, p. 122)

Oulu Business School further raised its academic prestige and profile in 2013, when it received accreditation from the AACSB International (The Association to Advance Collegiate Schools of Business), which is the premier accreditation body for business schools (Kaleva, 2013, November 6). According to the OBS homepage, only 5% of the world’s business schools have earned the AACSB Accreditation.

2.4 Harvard Business School

According to the Harvard Business School website, the school was established under the humanities faculty of the Harvard University in 1908 but quickly received independent status in 1910, with the school becoming a separate administrative unit in 1913. The first dean was historian Edwin Francis Gay (1867–1946).

Esther Yogev (2001, p. 52) states that the school of business and public administration was originally conceived as a school for diplomacy and government service on the model of the French *Ecole des Sciences Politiques*. The goal was an institution of higher learning that would offer a Master of Arts degree in the humanities field, with a major in business. In discussions about the curriculum, the suggestion was made to concentrate on specific business topics such as banking, railroads, and so on. It was decided that the school would train qualified public administrators whom the government would have no choice but to employ, thereby building a better public administration. In this the Harvard University and under it what would in the future become Harvard Business School were blazing a new trail by educating young people for a career in business, just as its medical school trained doctors and its law faculty trained lawyers.
From the beginning the school enjoyed a close relationship with the corporate world. Within a few years of its founding many business leaders were its alumni and were hiring other alumni for starting positions in their firms. (Yoge, 2001, pp. 52-71)

Harvard Business School (HBS) is the most prestigious of the four business schools evaluated in this study. It is consistently ranked among the foremost business schools in the world being ranked, for example, second best in the U.S. News and World Report ranking and first in the QS Global 200 Business Schools Report. Internationally, HBS is number 1 in the world by the Financial Times 2015 *Global MBA Rankings* –issue. The 2014 Eduniversal Business School Ranking ranks Harvard Business School as third best in the world after Copenhagen Business School and London Business School.

2.5 The Bryan School of Business and Economics

The youngest business school out of the four, The Bryan School of Business and Economics, operates under the University of North Carolina Greensboro (UNCG). The Bryan School is the largest of UNCG's seven professional schools. It was founded in 1969 and was named after Joseph M. Bryan, who was a prominent figure in North Carolina’s business and philanthropy scene.

It is accredited by The Association to Advance Collegiate Schools of Business, and is in the top 10% of schools in the nation that have earned this accreditation for business and economics. The school is organized into four different departments; Accounting, Business Administration, Economics, and Information Systems and Operations Management. A new degree in Marketing was added in the Fall of 2006. The entrepreneurship concentration became a full major in January 2010. (Wikipedia, 2015)
3. Website Evaluation Criteria

The World Wide Web has been developed following three principles: code, word and image. Code refers to the behavioral side of the web pages and computer engineers build this part of the equation. Word relates to the structure of the site and information architects are the ones who are in charge of the structure. Image is connected to the presentational side of web pages and is developed by designers. (Veen, 2002, pp. 17-29) In this thesis the main focus will be on the structural and presentational side of websites, i.e. in word and image.

The usual purpose of the website of a company or an organization is, more than likely, to introduce the company to an audience and provide the audience with as much information about it as possible (Saarinen, 2008, p. 19). How well a website succeeds in this depends on number of features.

The criteria used in this thesis to evaluate the four business school websites are the structure and content of the websites, as well as their usage as marketing tools for the business school itself and whether global users have been taken into account. In discussing web design, structure and content and relating the theory, the researchers quoted often refer to companies. In the case of this thesis, perhaps it would be more accurate to define the Business Schools as organizations – and academic organizations at that. However, the same theory applies to them no matter the moniker in the theory. Hence, for the purpose of the discussion in this thesis, these business schools will be referred to as both organizations and companies.
3.1 Structure and content

Structure is the way in which the content is presented to the user (Veen, 2002, p. 18), and as mentioned before, it is provided by information architects (Veen, 2002, pp. 26-29). The act of structuring a website can be called information architecture. Wikipedia (2012) notes that the goal of information architecture is to create an effective organization of information that will be easy to retrieve at a later date. Basically, the structure defines what information is given on which page and how it is given, i.e. having extra information presented in a pop-up window opened by a click on a link, having the kinds of commands in HTML-language which describe the matter inside the tags, etc. (Saarinen, 2008, p. 10)

According to John Shiple (1998), information architecture is the science of figuring out what people need for their website and then constructing a blueprint before diving in and putting the website together. In Veen’s (2002, pp. 79-80) opinion, an information architect must understand both the content and the needs of the target audience in order to perform the job successfully. It is the job of an information architect to ponder on the links between facts and to decide on what matters to bring forward and pay special attention to. In order to achieve this, an understanding of the target audience’s needs is crucial since this perspective is what affects the structure the most.

To this end, Veen (2002, p. 94) mentions that information on the website should be situated so that the location is foreseeable. On an intuitive level this is easy for us to understand. We, as proficient users of the Internet, are faced with the need for functional websites every day. We all know the frustration of having to try and guess where some piece of information may be found on a certain web page.

Furthermore, according to John Shiple, the very first thing that should be done by those designing a website is to define the website’s goals. Shiple (1998) states that when defining the purpose of a website the primary question should be “what is the mission or purpose of the organization?” After finding an answer to this question, one should ponder on the short-term and long-term goals of the website, the intended audience and the reasons why people come to the website.
The Illustrated Handbook for Web Management Teams (2002) mentions that the identification of the website’s place in the organization’s overall communications strategy affects the purpose of the website and thus the structure. After deciding what the website is for, one should ask who it is for. Shiple (1998) suggests that defining the audience includes defining the audience’s goals and objectives.

One piece of advice that Shiple (1998) gives for defining the target audience is to examine the websites of the competitors. The competitors’ websites will give good hints as to whom the website should be aimed at. Shiple continues by stating that once the purpose of the website and the audience has been defined, the next step, quite a logical one, is to pay attention to the content that the website needs and the sorts of functionality that will be required. The content should be thought of before starting the actual structuring of the website, and a good structure should always be combined with an effective visual design. This enables users to construct a mental map of the website, which means that they know where they are, where they have been, and how to get to where they want to be (Saarinen, 2008, p. 12).

Homepage is one company’s face to the world. This is the starting point for most user visits, and according to Nielsen (2002), the homepage is the most important page on most websites as it gets more page views than any other. Increasingly, potential customers look at a company's online presence before doing business with them – regardless of whether they plan to close the actual sale online. (Saarinen, 2008, p. 22)

Of course, users do not always enter a website from the homepage. A website is like a house in which every window is also a door: people can follow links from search engines and other websites that reach deep inside the website. However, one of the first things these users do after arriving at a new site is go to the homepage. (Saarinen, 2008, p. 22)

According to The Illustrated Handbook for Web Management Teams (2002), referred to as The Handbook from here on out, the minimum content requirements on the homepage are the organization’s full name, the organization’s logo and e-mail contact address. The Handbook also has a list of requirements that should be met by the website. These include, for example, the organization’s aims and objectives, addresses,
the responsibilities of different departments, and the requirement processes. In addition, a statement of the organization’s purpose, new section, terms and conditions, FAQs (frequently asked questions), help facility and search facility should be found. Fox, Nielsen & Schemenaur (1999) reveal that 79 percent of users scan pages instead of reading it word-for-word. They say that reading from computer screens is 25 percent slower than reading from paper. For this reason web content should have only 50 percent of the word count of its paper equivalent. They also advise web designers to break up the text into easily scanned bullet-pointed lists and to divide the text with unambiguous headings and subheadings. Further, Horton & Lynch (2002) state that documents written to be read online must be concise and structured for scanning, which means using headings, lists and typographical emphasis for words or sections one wishes to highlight.

Horton & Lynch (2002) advise that the best way to present online information is by using short segments of text written in a clear, concise style and with ample use of editorial landmarks. They particularly recommend frugality. One must make sure that the text one presents is worth something to the reader. Empty chatter should be avoided and users should be able to determine who you are by the navigation and page design, the interface should be clear so that it does not require instructions. A very important point made by Horton & Lynch is that one should think globally when writing for the Internet. This means, for example, that one should use the international date format and avoid metaphors that might make sense only in the context of one’s own language and culture.

Since users can enter the website at any page and move between pages as they choose, both Fox et al. (1999) and Horton & Lynch (2002) recommend that every page should be made independent and the topic should be explained without assumptions about the previous page seen by the user. Horton & Lynch (2002) state that in order to help the user understand why a particular page is important, even before they see the text, the topmost head on the page should be worded carefully in order to indicate the content of the section. Fox et al. (1999) also suggest that the most important information should be found at the top of the page. Horton & Lynch (2002) refer to this as the inverted pyramid style: the conclusion appears at the beginning of the text.
Since users often only scan the page (Fox et al., 1999) it is crucially important to make the website scannable. To make the keywords stand out, one should use highlighting liberally (perhaps even three times as much as when writing for print). Ways of highlighting include bold or colored font, however, one should not use blue for this purpose since it is often associated with hyperlinks. Entire sentences should not be highlighted since a scanning eye can only pick up two or three words at a time (Saarinen, 2008, p. 15). Fox et al. (1999) also recommend the use of bulleted and numbered lists since a list slows down a scanning eye and draws attention to important points.

Fox et al. (1999) refer to navigation as a very important detail in the content design of a website. Their argument is that one should think of linking as the quickest means to get the user to the most relevant information. Links should be used as guideposts in scanning and thus should not be allowed to become distractions. One way of ensuring this is to position less relevant but meaningful links of additional information in the web page’s margin or at the end of the document under a “See also” label. Horton & Lynch (2002) remind the reader that one should be aware of too much markup in paragraphs. Too many links and too many styles of typeface will destroy the homogenous flow of reading. Hence, one should avoid getting the page too cluttered or stuffed, i.e. the aforementioned concept of frugality should be continuously kept in mind.

3.2 Web design

Veen (2002, pp. 103-104) states that a good design is not about decorating the website but about solving problems. This means that the website must be flexible and must adjust to different operational conditions. These changing factors may be for example the size of the screen and definition, color settings, fonts (not all fonts are set up on all computers), the browser and the operating system (Saarinen, 2008, p. 13).
Horton & Lynch (2002) say that the first thing users see is the overall pattern and contrast of the page. According to them, margins provide an important visual relief in a website. Margins as well as other space can be used to delineate the main text from the other page elements. When used consistently, margins provide unity throughout the website by creating a consistent structure. Horton & Lynch (2002) draw attention to the choice of margin: left-justified is usually the best choice. This is due to the fact that justified text in the Internet often suffers from poor spacing and excessive hyphenation, thus requiring manual refinement. Centered, as well as, right-justified text blocks are difficult to read in the West because we scan from left to right, anchoring our tracking across the page at the vertical line of the left margin, which causes the ragged left margins produced by centering or right-justifying a text to make the scanning much harder since the eye needs to search for the beginning of each line.

3.2.1 Mistakes in web design

Nielsen’s Top Ten Mistakes in Web Design (2011) lists some of the most common and serious mistakes a web designer can make. The complete list can be found in Appendix 6, but only those significant for the purposes of this thesis will be introduced here.

According to Nielsen (2011) one of the worst mistakes is having pdf files for online reading. This is due to the fact that a pdf file destroys the flow of online browsing. In addition, layouts are often optimized for a sheet of paper which rarely matches the size of the user’s browser window. However, Saarinen (2008, p. 17) states that she has noticed that different tables and statistics are sometimes in pdf-format and she suggests that in these cases the pdf-format works quite well.

Another mistake which Nielsen (2011) discusses at length is not having the color of a visited link change. Since a good grasp of past navigation helps the browser understand their current location, knowing which links one has already visited is crucial here. Users can exclude links that have proved fruitless in earlier visits or revisit links that
were helpful in the past. Most importantly, knowing which pages they have already visited frees the user from unintentionally revisiting the same pages over and over again. This can be quite crucial especially with websites that contain huge amounts of information and pages. Thus, one can understand how frustrating it can be if this helpful information is absent from the design.

Nielsen also recommends keeping the text on a web page scannable. Web designers should always write for an online environment, not print. To draw users into the text and support scannability, well-documented tricks should be used. These include subheadings, bulleted lists, highlighted keywords, short paragraphs, the inverted pyramid, i.e. where the conclusion appears at the beginning of a text, and a simple writing style.

When browsing through the Internet and visiting different websites, users develop quite a good idea of how “websites are supposed to work”. One of Nielsen’s (2011) guidelines relates to this explicitly. For him, consistency is one of the most powerful usability principles and signs of good design: when things behave in the same way, users do not have to worry about what will happen. Instead, they know what will happen based on earlier experience. Therefore, violating design conventions is one of the worst mistakes of web design. Nielsen’s Law of the Web User Experience states that “users spend most of their time on other websites.” This means that they form their expectations for the company’s website based on what is commonly done on most other sites. If designers deviate, their websites will be harder to use and users will leave.

Nielsen (2011) also recommends that web designers do not have links which open new browser windows. He states that because this disables the use of the back-button with which users normally navigate back to previous, it defeats the perceived advantage of keeping users on their sites. In my personal experience, though, I must add that having a new tag open from a link is useful, especially, if the link is to an external site. I do agree with Nielsen on how annoying pop-up windows can be.
3.2.2 Heuristic evaluation

Jakob Nielsen has composed ten general principles for user interface design, *Ten Usability Heuristics* (1994). He calls them “heuristics” because they are more in the nature of rules of thumbs than specific guidelines. Of these ten, those relevant to this thesis will be discussed here, the rest are listed in appendix 7.

Nielsen (1994) states that users often choose system functions by mistake and will need a clearly marked “emergency exit” to leave the unwanted state. Thus, the web design should support undo and redo -options. Another point that Nielsen (1994) makes is that users should not have to wonder whether different words, situations or actions mean the same thing. To avoid this kind of confusion, the design should consistently use the same term in similar situations to describe the same action.

Nielsen (1994) also recommends eliminating error-prone conditions or checking for them and presenting the users with a confirmation option before they commit to a certain action. In addition, dialogue should not contain irrelevant or rarely needed information. Every extra unit of information in a dialogue competes with the relevant units and diminishes their relative visibility.

3.3 Marketing

A company’s or organization’s website can be a very powerful tool for marketing. Online media can be updated constantly at virtually no cost compared to traditional media outlets, with the added bonus of it being easy to keep information up-to-date. Of course in this case it is imperative that the intended audience finds the website. In other words, a marketer must make the target market audience aware of the website (Saarinen, 2008, p. 8). It must also be decided whether the website is for promoting the business or whether it is the business (Marconi, 2004). The websites studied here may all have been construed as first and foremost places to share information regarding
the organizations behind them, but they do also have a secondary function as tools to market the schools and their know how.

It is important to recognize that when it comes to online marketing, i.e. the website, the actual purchase is not necessarily made on that site; the purpose of the site is to promote the services and provide information as to where the product can be purchased (Jokelainen, 2010, p. 14). In other words and in this case, the site is supposed to either spark the desire to start studying in a business school, to encourage those already interested to make the actual decision of applying or for those that have already done so, to promote and provide information on the courses and activities they can participate in during their studies. In addition, there may be outside parties, companies or other private bodies, with whom the business schools want to work in cooperation or from whom they want to attract donations.

Just like the marketing message itself, word of mouth can also now be spread electronically. On Internet message boards and social networking sites, word of mouth – if it still can be called that – can easily reach tens of thousands of people. If people’s opinion of the product is favorable, they can even be used to support one’s own marketing efforts. Similarly, if people are critical towards any aspect of a product, the provider can use this information as a guideline for improvement (Jokelainen, 2010, p. 7).
4. Methodology

The basis of this thesis, a comparative study of four business school websites with the evaluations performed by only the writer, of course means that this thesis is inherently by its nature a subjective case study. To counteract this to as great an extent as possible, the theory behind the evaluation criteria was carefully researched and chosen so that it would to provide objective parameters on which to base the evaluations.

To further ensure an impartial assessment of the websites, it was important that as the evaluator, I was not overly familiar with any one website over the others. The home pages of Aalto University School of Business, Harvard Business School and the Bryan School of Business and Economics I had not accessed before starting to write this thesis so they were not a problem. Howbeit, as I had myself been a student in the Oulu Business School, it meant that I had been an active user of their website for a couple of years already. Fortunately, however, the school’s website went through a major overhaul and redesign after my studies ended there a few years ago. Hence, upon starting the analysis of the website, I noticed that the site was completely new and unfamiliar to me again. Therefore, the evaluation of each website was began from even circumstances, from a point of unfamiliarity.

To perform the comparative evaluation of the four business schools, I gathered on a worksheet (see the sheet in appendix 7) the evaluation criteria and used that as a basis to start scrutinizing the web pages. The worksheet in itself was only utilized as a tool for better recall of the already analyzed elements and as a reminder of what still needed to be assessed based on the criteria that had been set before.

For the flexibility evaluations of the business school websites, I checked the website’s visual look when the screen was both full-sized and part-sized on my computer screen, which has a Windows 8.1 operating system. For a look at the web pages in a different operating system environment and to see how they behaved in an even more varied screen size setting, I looked at the websites on my smart phone, Huawei Honor 7 - model, which has an Android 5.0 operating system with an Emotion UI 3.1 software
skin. This also gave me a chance to evaluate the sites from the perspective of a smartphone platform.
5. Findings

This portion of the thesis will now delve into the analysis of the four websites and describe the findings and conclusions drawn from the assessments made.

5.1 Structure and content

The structure and content of a website should be laid out in such a way that the information presented is organized effectively and displayed clearly in order that the details that are being sought can be easily accessed and just as effortlessly retrieved on a later time (Veen, 2002, p. 94).

The way a website is construed and the information organized affects the browsing experience in various ways. Information should be organized in a way which both makes for a logical surfing experience and allows individual pieces of information to be found easily. However, people have different ways of surfing, which should also be taken into account in the design process. It should be easy to “go forward” – that is, to find the next logical step, but also to go back to previously accessed information, if needed. Similarly, it should be possible to reload or refresh the page without being reverted into the opening page or receiving an error message. (Jokelainen, 2010, p. 15.)
5.1.1 Visual design and layout

As the homepage of an organization is their face to the world and the starting point of most visits to websites (Saarinen, 2008, p. 22), a special emphasis will be placed on the analysis of the visual design and layout of the four homepages in this case study. However, before delving deeper into each individual homepage, it should be shortly mentioned that all the websites here contained the minimum organizational information that was recommended to be included by *The Illustrated Handbook for Web Management Teams* (2002). Full name of the organizations and their logos as well as contact addresses, newest features and search boxes are visible on the homepages. Although, the contact addresses have been placed on bottom of the pages instead of on the top as is the case with the other features.

5.1.1.1 Aalto University School of Business

![Aalto University School of Business homepage, Oct. 7, 2015.](image-url)
The homepage of Aalto University School of Business (AUSB), as can be seen in figure 1 above, has an uncomplicated layout. There is slideshow front and center on the page, where three main news items alternate, and this is the feature which first draws the eye of the user when opening the homepage. Below that on the left hand side of the page is the main menu. Out of the four business school websites Aalto has the most menu headings and items on their main menu. Sub menus open up underneath the main items, and the menu selection remains unchanged even when browsing other pages of the website. Underneath the main menu is also a map to the main university campus in Etu-Töölö, Helsinki.

On the very top border of the page is a link to Aalto University, A?, the possibility for switching between the Finnish and English website versions, and the search box. Lastly is the main menu for Aalto University which can be accessed by clicking the image of the three white bars.

The color scheme of the business school’s website is centered on a white base with green used as the color of effect in the top borders and titles as well as in differentiating links from the main text. Otherwise, text is either in black or grey. Pictures are used as focal points of interest and are always situated on tops of pages to draw the eye way from the content in the margins (menus and links) and concentrate one’s view on the center of the page and the text below the pictures.

Underneath the featured items slideshow and one event advertisement (Arena2015), are the introductory paragraphs to the school. To access this segment and all the material after it requires a scroll down the homepage. Yet compared to, for example, Oulu Business School, AUSB advertises the school’s credentials and prestige quite candidly in this section. In addition to the home page, a longer segment on the school’s history and merits can be found under the ‘About us’-heading, which is the first main menu item.

Below the school introduction are more links to news items, events and articles. After these comes a site map (see figure 2 on the next page), which is delineated from the main page by a grey base color instead of the previous white.
Figure 2. AUSB site map.

The homepage for Aalto University School of Business ends with a red margin that contains general information about Aalto University. This information no longer only pertains to the business school but to the larger unit that is Aalto University and of which the school is just one department.
5.1.1.2 Oulu Business School

The Oulu Business School (OBS) website shares a similar visual color palette to AUSB’s in that it too has white as the base color for the website. However, instead of green, the OBS web pages utilize blue as the main color, as can be seen in figure 3 above. The main menu texts are in blue as well as the top border and the news segment in the left side margin; though, for further accentuations, yellow is also used. For example, the submenu bars under the main menu items open up as yellow and when one has clicked a main menu item, that specific menu heading remains yellow as long as one is browsing its content (see figures 4 and 5 below).
Figure 4. OBS submenu layout.

For the menu layout, the OBS web pages utilize a simple but practical design. The main menu is situated central to the page and on top of the main body of text; there are also only four main headings on it. Submenus pertaining to each main menu item only become visible when moving the mouse over a specific heading. When on the home page, separate segments for news and events are on the left-hand margin and on the right-hand side one can find quick links divided into two categories: one for the
business school’s links and another for general and useful shortcuts, e.g. student e-mail. However, once a main menu item is chosen – as has been done in figure 4 – the left-hand margin changes. The relevant submenu opens up left of the page instead of the ‘News’ and ‘Events’ segments, which disappear altogether. Only the right hand margin retains its familiar layout through-out the browsing experience.

In addition to the newest feature items (news and events), when on the homepage, the left-side margin contains a calendar and a truncated version of the main menu item ‘Cooperation’. However, these sections are not visible on first glance when opening the homepage and one needs to scroll down the front page to make them visible and, in addition, they, too, disappear when not browsing on the homepage.

On the very top of the homepage is a box with links to switch the language of the website. Similar to Aalto University, one can browse the web page in either Finnish or English. A search box and a link to Oulu University’s main page come after the language choices. A homepage icon and three menu items are the last features on the blue top bar. The ‘Business School Activities’ –heading contains more information about OBS – for example, its mission, vision, values, annual reports, and the dean's welcome to name a few. The same information is available on the right-side margin, as well, from under the 'Business School' heading. The ‘Contact’-heading directs one to the contact information pages of all the OBS’s departments and staff. The last item, ‘Internal’, is for the business school staff only as it is not accessible to casual browsers and one needs to sign-in to access the content there.

The main body of the OBS homepage consists of a picture and three compact paragraphs that contain an overview of the school and highlights of its credentials. More in depth information on school can be found from under the ‘Business School Activities’-link.

Similar to Aalto University’s layout, the very bottom of OBS’s homepage is also reserved for general university wide contact information. This segment is separated from the rest of the homepage by a grey line, as can be seen in figure 6 below. The difference between the two Finnish business school websites comes in the amount of
information provided here. OBS has less information on theirs compared to Aalto’s similar segment.

Figure 6. Bottom of the OBS homepage.

5.1.1.3 Harvard Business School

Figure 7. Harvard Business School homepage, Oct. 12, 2015.
In terms of visual design, the Harvard Business School (HBS) web pages have the most colorful scheme. When this analysis was began, the homepage for the business school had an orange, red orange and black color scheme, as can be seen in figure 7. However, it has become evident throughout the course of writing this thesis that the HBS website changes its color palate regularly. As of October 16, 2015 the page’s colors were updated and the visual layout became blue, green and black with title texts in the same maroon red hue as is their Harvard logo (see figure 8 below). Since then the pages have cycled through a couple more color configurations, though they do tend to alternate between the orange hued and the blue and green schemes.

Figure 8. HBS homepage, Oct. 16, 2015.

Out of the four business schools, the HBS website has also the greatest changes in color palettes between individual pages within their web pages. Thus, for example, the MBA pages are coral red, white and black (figure 9) while the Alumni pages are blue, grey and black with maroon red used as a highlight color (figure 10).
The top black border of the HBS homepage is reserved for the school’s official logo and name, which also acts as a link back to the homepage when navigating through the website, as well as the search box. Below this border and in top of the main portion of the page, i.e. the blue part in the updated color scheme, which draws the eye of the viewer in first, is the main menu. HBS has employed the same design ploy as Oulu Business School with their menu usage and layout, in that the submenus pertaining to
each main menu heading are not visible on the homepage. Instead the submenu replaces the main menu on top of the page once a particular menu item has been clicked and one has navigated to its individual page (e.g. see the differences in the menus on top of the pages between figures 8 and 9 or 10).

Underneath the main menu, in smaller font size and right-justified, is a submenu containing elements the HBS’s web designers have judged less important than the main menu items but relevant enough to need a place on the home page. These items include a link to a separate news features page, HBS’s recruitment pages, campaign page for the school’s fundraising efforts, and a link to HBS’s most notable publication, *Harvard Business Review*.

Most of the space on the HBS homepage is occupied by three news items, which are updated regularly (at least once a week throughout the duration of this thesis). The main article is given the most space and its background is in different color than the two other news features below it, which are also only half in size.

In addition to these news features and once one begins to scroll down the HBS homepage, one finds introductory elements from all of the main menu items. First a segment on the school’s MBA programs, then on Executive Education, Doctoral programs, and lastly a segment shared by the ‘Alumni’ and ‘Faculty & Research’ main menu items. To differentiate between each segment the background color once again changes between each section.

The background of the bottom of the homepage is black once again to mirror the top border of the page and it contains information on how to contact and find the school as well as links to HBS’s social media accounts (see figure 11 on the next page). At the very end of the page on gray background is the site map for the website, a link to the HBS employment pages, a link to the homepages of Harvard University and information on trademarks and privacy policies of the university.
5.1.1.4 The Bryan School of Business and Economics

The Bryan School of Business and Economics homepages are themed around the blue, yellow and white scheme as can be seen in figure 12.

Figure 11. Bottom of the HBS homepage.

Figure 12. The Bryan School homepage, Oct. 12, 2015.
Within the blue top border, one can find the logo for the University of North Carolina Greensboro (UNCG), some links to internal services, e.g. the university’s iSpartan e-mail, a search box and the main menu of the UNCG website. Additionally, the ‘Campus Links’ –heading contains quick links related to once again UNCG’s functions not just The Bryan School’s.

In much the same way as was with the OBS and HBS homepages, the main menu for the Bryan School’s website is situated top and center on the homepage. Above it on yellow background is the school’s full name, which also acts as a link back to the homepage while browsing other pages of the Bryan School site. Similar to OBS, submenus for each main menu item open up by navigating one’s mouse over the menu heading. However, unlike OBS, the Bryan School layout keeps the main menu fixed and the submenus are only revealed when the mouse is over their corresponding heading even when moving away from the homepage to browse the pages of a particular menu item. Figure 13 is a picture of the ‘Undergraduate’ main page and works as a good example for this design feature.

Figure 13. The Bryan School's Undergraduate main page.
The menu pertaining to the ‘Undergraduate’-heading, which is visible in figure 13, can only be seen when the mouse is over the main menu item – even when one has already navigated to the particular page in question.

On the homepage, below the main menu is a slideshow of newest news features about the school and articles the school has published. Aalto University School of Business had a comparable design layout on their homepage, as well. And furthermore, similar to AUSB, there are also three items rotating on the Bryan School’s slideshow. Beneath the rotating news features is a very compact, three-paragraph advertisement for the school. On the right-hand side of the homepage, beside the school introduction is a news article section and picture of the newest Bryan Bulletin, which when clicked, opens up a pdf-copy of the issue.

When scrolling further down the homepage, a fundraising banner becomes visible and beside it, on the right-hand margin, an ‘Events’-segment, which contains information on upcoming events in UNCG. Below it is a link to the UNCG’s Facebook pages.

On the very bottom on the page, separated by a yellow line from the homepage (figure 14), is the BSBE school address and a link to additional contact information as well as link to UNCG website policies.

Figure 14. Bottom of the Bryan School homepage.
5.1.2 Target audiences

As it has already been stated in previous chapters where structure and content was discussed, it is vital that the information on a website is organized effectively so that it can be easily accessed by the users. And in order to accomplish this the site designers must, firstly, recognize who their target audience is and, secondly, understand their needs – why they come to the web page in question.

In analyzing the four business school web pages and the way that the information on them was categorized, several target demographics became clear quite quickly. The first and most self-evident one was, of course, the students. The websites’ function as a place to provide information to their existing student bodies and to recruit the next crop for academia was quite evident. For example, the first two headings on the Oulu Business School’s homepage’s main menu were ‘Admissions’ and ‘Studying’. The same was true for The Bryan School of Business and Economics. Their first two headings on their main menu were ‘Undergraduate’ and ‘Graduate’.

Another audience the business school sites provide information for are outside parties interested in the faculty and research being done within the organizations. These parties may once again be prospective students surveying possible school choices for their academic credentials but firms looking into possible project partnerships are also a possibility, as well as, journalists or the public seeking information on the institutions and their activities. Aalto University School of Business and Harvard Business School have a ‘Faculty and Research’-heading on their main menus. Oulu Business School has chosen to only highlight their research on the main menu – found under the ‘Research’-heading – but faculty information for each of its department can also be found under this menu item. The Bryan School is the only one of the group which does not clearly disclose their research projects. It does have a ‘Faculty & Staff’-heading on the main menu and under this menu item, one can find staff accomplishments and credentials but not clear information on current or completed research projects. This is a curious deviation from the others because it is clear from all four websites that these spaces function partly as marketing devices for the schools in that they are used to
showcase their academic credentials and credibility by exhibiting the research that is being produced within the schools and by its personnel.

In addition to the aforementioned faculty and research pages, the news and events features on the homepages are intended for that same wider audience, as well. News and events inform viewers of the schools’ current affairs, newest publications and articles, upcoming events as well as other notable stories within the organizations. On each of the websites in this case study, these features have been given a prominent place. On the OBS homepage, the news and events have been placed on the left-hand side margin, with the ‘News’-feature first and below it ‘Events’. This is a highly visible area on the homepage and thus the features are easily accessible even to first time visitors. AUSB has a separate main menu item called ‘News & events’ and, in addition, there is a short slideshow of some of the more noteworthy news items on the very center of their homepage (see figure 15).

Figure 15. AUSB’s news & events features.

The Bryan School has a similar layout as Aalto University in this area. Featured news stories are likewise displayed on a slideshow on their front page. In addition, there is a ‘News’-menu on the right-hand margin of the homepage with more links to news items. As for Harvard Business School, all the material that is readily displayed on the
homepage is articles and news items. For everything else one has to either access the sub menu below the main menu (see figure 16) or scroll down towards the bottom of the home page. Plainly then this is an important feature for all the websites.

Figure 16. HBS homepage's submenu.

A difference between the American and Finnish business schools emerges when looking at the emphasis placed on school alumni as one of the target groups of the websites. Both Harvard and The Bryan School have an ‘Alumni’ heading on their main menu and have extensive information on alumni activities – alumni boards, associations, events and campaigns. For Oulu Business School, the alumni information can be found under the main menu heading ‘Cooperation’. The pages themselves contain a word of encouragement from the Dean of the Faculty to join the OBS alumni network and a link to the alumni portal but that not much more. Aalto has slightly more content on their alumni pages, which can be accessed from under the ‘Collaboration and partners’ –heading on the main menu, but nowhere as much as its American counterparts. Clearly a cultural divide is visible here between the two countries on the emphasis placed on school alumni and their activeness in their alma maters after graduation.

An interesting distinction in the prioritization of who the main target audience of the schools is also becomes visible when analyzing the structure of the four different main menus. As already stated before Oulu Business School and The Bryan School have the contents aimed at the students first on their menus. However, for the two more prestigious business schools, Aalto University School of Business and Harvard Business School, information for the student body – both for the existing and for the recruitment of future ones – was clearly prioritized lower. AUSB had this information as low as the fifth heading (‘Studies and programmes’) on their main menu. The HBS
homepage had the information for MBA and doctoral students and applicants as the third and fifth heading on their main menu. This same information could also be accessed from under the main menu’s first heading ‘About’ and then further choosing ‘Academic Programs’ from the submenu. However, it should be noted that on the About–page, the focus of the viewer is first drawn to other elements — namely, the mission statement and annual report — not the academic programs as can be seen in the page clip below (figure 17).

![Figure 17. Beginning of the HBS About–page.](image-url)
5.1.3 Foreseeable location of information

To have a functional website, it is extremely important that information on the site is logically structured and found in foreseeable locations (Veen, 2002, p. 94). And, to a great extent, all four websites studied in this thesis have structured the layout of information logically and in a foreseeable manner. Although the same information may be under a slightly different moniker in each website, the placement is usually easy to anticipate.

For example, I set a test task for myself to find general information on the academic programs provided in each business school. Oulu Business School had this information available under the first main menu heading ‘Admissions’ and there ‘General Information’. For Aalto University School of Business, the information was under ‘Studies and programmes’ and ‘Programmes in English’. Harvard Business School provided a general overview of their selection under ‘About’ and then ‘Academic Programs’. The Bryan School of Business and Economics did not have one general overview page of their academic programs but, instead, had that information divided under the ‘Undergraduate’ and ‘Graduate’ main menu items, from which one could access this information (‘Undergraduate’ → ‘Departments & Programs’ and ‘Graduate’ → ‘Master’s Programs’).

The OBS website does have some ambiguity in their contact information layout, which can cause some complication to the predictability of information location. Their usage of the highly similar ‘contact’ and ‘contact us’ – terms causes the confusion, since the ‘Contact Us’ – heading (Homepage → ‘Cooperation’ → ‘Contact Us’) leads to the main pages for contact information, while the ‘Contact’ – heading (found on the submenu in the blue top border of the homepage) opens up a staff list. To confound the situation further, the same contact information submenu opens to the left-side margin of both pages. The closeness of the terms and relative similarity of the places they lead to does cause some confusion to the predictability of the location of specific contact information and how to access it.
The interface of a website should also be clear enough that it does not require instructions to use, which is mostly the case for all four websites. The cases where there are some difficulties in interface navigation will be covered in the segment below which deals with website navigation.

5.1.4 Homogenous flow of visual design

The homogenous flow of the text and a uniform visual look all contribute to the ease at which a user can concentrate to the essentials while navigating a website; in the case of these business school web pages that is, namely, to find the information they need in a given situation – be it the courses provided for a particular semester or finding the newest research the school has produced.

Changing the layout and visual design of an individual web page in the middle of browsing a website is always startling to the user and it takes a moment to reorient one’s self as to where everything is in the new layout. This happened within the Bryan School website, which has designed a slightly different layout and visual look to their Student Services pages (accessed through ‘Undergraduate’ → ‘Student Services’). If you compare figure 18 below to previous pictures from the Bryan School’s website (e.g. figures 12 and 13), one immediately sees the differences.
Even though the color scheme has been kept the same, the change of font in the main menu, the second menu on the left margin, as well as, for the change in size, placement and font of the text ‘The Bryan School’ are immediately noticeable and it makes the browser lose focus of their main task for a moment as they reorient their self to the web page.

Furthermore, the BSBE website has also pages that direct you to the University of North Carolina Greensboro (UNCG) web pages, which once again have a different layout to BSBE’s. This is the case, for example, with the International Students subpage, which can be accessed from ‘Graduate’ → ‘Master’s Program’ → ‘International Students’. Once on those pages the only possibility for finding one’s way back to the BSBE website is back button navigation because the page opens up in the UNCG’s website not BSBE.

The Harvard Business School website has the greatest changes in the visual look of their site from page to page. In addition to the color scheme changes described in the visual design and layout-segment (pages 33-36 of this thesis), two items on their main menu, ‘HBX’ and ‘Faculty & Research’, open up as entirely separate pages from the main website. HBX, the digital learning initiative of HBS (see the homepage in figure
19), is clearly a separate and independent web page in itself and departs from the HBS visual look and layout significantly.

Figure 19. HBX homepage, Oct. 23, 2015.

The ‘Faculty & Research’ pages (figure 20) are more similar to the case of the ‘Student Services’ pages of the BSBE website in that they still retain some familiarity with the school’s homepage and other pages but these pages are also an independent web page to a certain extent.

Figure 20. HBS’s Faculty & Research main page.
The school logo and name is still on the top of the page but the home icon beside the main menu leads back to the ‘Faculty & Research’ main page not the HBS homepage; and a search box appears beside the main menu that only pertains to the faculty pages themselves, not the HBS website as a whole as is the case with the search box in the black top border. In addition, the color scheme changes to a more subdued version, with a white background instead of the colored ones of the other pages.

Compared to the two American websites, the Finnish business school sites have excellent homogeneity in the visual flow of their web pages. There are no changes in color schemes or great departures from menu layouts. AUSB has a slightly busier look in their text layout compared to OBS. Figure 21 is an example of AUSB’s text layout and figure 22 of OBS’s.

Welcome to study Business at Aalto University

*We are the leading business school in Finland. We offer our students a profound learning experience in an international and multi-disciplinary environment.*

High-quality scientific research and intensive corporate relations ensure that we give our students education that combines theoretical studies with experience of real business life. We support the development of our students into valued experts, innovative entrepreneurs, and responsible business leaders for the future.

**Real-life challenges and international experience**

As our student you get to solve challenges of real business world through student projects and internships. High-quality professors of business studies ensure that your studies will be inspiring and highly valued in the business world.

*Figure 21. Example of AUSB’s text layout.*
Versatile career opportunities

Oulu Business School is committed to offering high-quality study programmes that address emerging business trends and give students the capabilities that will benefit their future careers as managers and leaders. Different programmes give students the option to focus on general business management or become an expert in a specific area of business.

World-class research and faculty

The research conducted in Oulu Business School is internationally awarded. All the research conducted in the faculty follows high academic standards.

Figure 22. Example of OBS’s text layout.

The relative busyness of the AUSB text design comes from font size changes as well as jumps between non-italicized and italicized text components within a short segment of text. The OBS text layout is clearly more streamlined and has a more quiet composition. Otherwise both sites present a consistent visual look and layout in their website design.
5.1.5 Navigation

Since users can enter a website from any page and move between pages as they choose, the ease of navigating the web pages becomes an extremely important feature of keeping a website functional (Fox et al., 1999; Horton & Lynch, 2002). Good structure should always be combined with an effective visual design. This enables users to construct a mental map of the website, which means that they know where they are, where they have been, and how to get to where they want to be (Saarinen, 2008, p. 12). Menu structure and navigational tools, e.g. sitemaps, become vital in the construction of these mental maps.

Three of the four websites – AUSB, OBS and HBS – use a practical navigational tool to help users browse their websites and assist in tracing where they are in regards to the homepage. This navigational tool shows the user where they are within the menu structure in relation to the homepage of the website and acts as a sitemap that tracts one’s current whereabouts. Figure 23 shows OBS’s version of the navigational help tools and figure 24 HBS’s.

![OBS Navigational Aides](image)

**Figure 23. OBS navigational aides.**
Figure 24. Example of HBS navigational aides.

All three have also elected to place this sitemap underneath or close to their main menus on the top left corner of the pages. HBS has also placed additional submenus within their navigation map (see figure 25).

Figure 25. Submenu within the HBS navigation map.

As depicted in figure 23, OBS also shows the user where they are within the menu structure by opening the submenus on the left-hand side of their pages once one has chosen a particular main menu item. AUSB has chosen to keep their main menu fixed and have the submenus always ready for viewing – even when on the homepage – by clicking the plus sign beside each main menu item (figure 26).
The navigational map of AUSB is also visible on the left-hand top corner of figure 26.

The web designers have clearly realized the importance of users finding their way back to the homepage from anywhere on the sites because several tools have been utilized for this end. To help navigate back to the homepage, all four websites have made the school name and logo, which is situated on the top of the page in all web pages, a homepage link. In addition, for the three sites that utilize the navigation map, one can click on the first part of the map (home icon in OBS, aalto.fi for AUSB, and the school name for HBS) to get back to the homepage. Additionally, AUSB has made the ‘School of Business’ – text on top of their main menu a homepage link; and OBS has a blue home icon on top their pages, right below the blue top border, in addition to the grey home icon on their navigation map.

Because the home icons on OBS’s website always lead back to the homepage, as one would expect from previous experiences on other websites, too, it can be quite confusing that the home icon that HBS has on their ‘Faculty & Research’ pages does not in fact lead to the HBS homepage but to ‘Faculty & Research’ main page. The
Faculty & Research pages also lack the navigation map that other pages have – except for the separate pages for HBX, of course.

Additionally, browsing the HBS website can be confusing because the main menu disappears once one has navigated to some other part of the web pages than the homepage. To get to other parts of the main menu from, e.g. the ‘About’ pages, one has to always return to the homepage. HBS does, however, have a unique and practical feature on their website: an arrow, which appears on the right-hand bottom corner of the page once one begins scrolling down a page (see figure 11 for a picture of this arrow). Clicking it takes one at once to the top of the page and in reach of the main or submenu.

The Bryan School has the most confusing interface for website navigation out of the four websites studied in this thesis which is caused by the lack of the guiding navigational map that the other 3 websites have. In addition, the submenus for the main menu items are only visible when one’s mouse is over the particular item. Furthermore, the menu item one is visiting does not change color (like OBS’s does, where it becomes yellow) or become boldfaced (see figure 26 for how AUSB bolds the submenu page one is on). This makes it difficult to remember where on the website one is or has already been. Especially obvious this problem becomes when browsing the submenu of a submenu, which is only visible for a short moment with one’s mouse. Hence, there is a real danger of the user getting somewhat lost in the pages. Especially, this is true on those surprise pages that take you out of the BSBE website to external sites, e.g. the UNCG web pages. In those instances, back button navigation becomes the only way back to the where one was.

Fox et al. (1999) refer to navigation as a very important detail in the content design of a website. Their argument is that one should think of linking as the quickest means to get the user to the most relevant information. Links should be used as guideposts in scanning and thus should not be allowed to become distractions. Links also aide in keeping the text segments short and concise.
As can be expected, all four websites utilize links but each in their own style and with a distinct visual look. OBS and AUSB use links within the text bodies the most out of the four. Examples of this in figures 27 and 28.

**Figure 27. Example of the AUSB website's link usage.**

In these pages you can find information about admissions to the international Master’s programmes at Oulu Business School. Oulu Business School offers several international master’s programmes for international students. Take a look at the programme outlines and choose the programme that best fits your study interests and future plans.

In all of the master’s programmes a new class starts every autumn. Student selection for the coming autumn is usually made during the preceding spring, however, application periods may vary between the programmes. For more information about the admissions (intake, application periods etc.), please take a look at the admissions information here.

If you are an exchange student and interested in studying in Oulu Business School for one or two semesters rather than completing a whole degree programme, please click here.

If you already have a master’s degree, check out our doctoral programmes here.

New: Follow Oulu Business School blog here!

**Figure 28. Example of the OBS website's link usage.**

As can be seen in figure 27, AUSB’s links are in green to distinguish them from the rest of the surrounding grey text. Meanwhile, OBS (figure 28) changes the font color of the links to blue but also underlines them to draw further attention to them.
HBS utilizes the most varied style in linking. Many links are boldfaced and underlined in black font with an arrow before them, others once again boldfaced but in red (see figure 29 below).

Figure 29. HBS link design variations.

Another style the HBS website uses is having the link highlighted within a colorful arrow, like the ‘Map & Directions’ –link in figure 30 below. Additionally, some titles are identified as links by putting an arrow after the text itself, which is once again in boldface and black font. In the instances that the HBS website does have links within texts, they are in maroon red color to highlight them from the black text around (figure 31 on the next page).

Figure 30. Examples of HBS's link design variations.
The Bryan School website uses a similar style to the Finnish business schools in the visual design of their links. The links are in blue font, like OBS’s, but not underlined, similar to AUSB links. However, the Bryan School site does not utilize the links within the text bodies as much as the Finnish websites did. Instead most of the usage is after the text, as is the case on the ‘Master’s Programs’ page, part of which has been captured below in figure 32.

In addition to these links, the websites also utilize the margins as places where to place lists of links. OBS has a ‘Shortcuts’—segment on the right-hand margin of their pages and as can be seen in figure 32, BSBE has a section for events with links on the right-hand margin of their pages, as well as a ‘Quick Links’—segment.

5.1.6 Content written for websites

As has already been stated in previous segments that dealt with writing for web pages, different rules apply to text produced for printed text and text for web page content.
All in all, in website content the principle of frugality is an important one in producing text for websites and it is prudent to be as concise as possible (Horton & Lynch, 2002). Hence, short segments are preferred.

Although it is clear in all the websites that they are aware of the need to be frugal in text usage, the HBS website has perhaps taken the principle of short and concise the furthest out of the four. Most text on the homepage or the main pages of the main menu items are no longer than a couple of sentences. Once one navigates a little bit deeper into the website, more substantial text bodies appear but they too have been kept to a limited length. The formula, not only on HBS’s web pages but on the other three, as well, seems to mostly be a title followed by a paragraph or two, in maximum three. After that and before further paragraphs, a new subheading is always given to the texts.

This recurring use of headings and subheadings is also an important feature when producing web content. Horton & Lynch (2002) state that in order to help the user understand why a particular page is important, even before they see the text, the topmost head on the page should be worded carefully in order to indicate the content of the section. Fox, Nielsen & Schemenaur (1999) also give the same advice to web designers: break up the text into easily scanned bullet-pointed lists and divide the text with unambiguous headings and subheadings.

All the websites analyzed here use headings and subheadings generously in the layout of their web pages. Figure 33 is an example of this practice from OBS’s website. And as mentioned, this same style of writing in present in the other business school websites, as well. The only thing that differs is the visual look of the layout.
Additionally to short segments and delineating the text with titles, highlighting keywords in boldface, using a different color font or differentiating with background colors, using bullet point lists and other typographical landmarks are also some of the key features of online content. All these characteristics are likewise present in the analyzed web pages in this thesis, as can be already glimpsed in figure 33.

For their website, Aalto University School of Business (AUSB) highlights key words by changing their font color and size as well as by using boldface typeset (figure 34). Titles are in boldface and green-colored font and the font size of titles varies from biggest for main headlines and smaller (but still larger than the body of text) to subheadings. Numbered lists are also frequently utilized.
Application quick guide

Now that you have decided to apply to study at the School of Business, here are some pointers for your future studies.

1. Familiarise yourself with the School’s study options in English.
2. Choose where you want to apply and read carefully instructions for applying and admission requirements.
   - Bachelor’s Programme in International Business (Mikkeli)
   - Master’s Programmes
   - Doctoral Programme
   - Read what our students think of studying here
3. Follow the application schedules. Submit all the required documents by the given deadline.
   - Application period for Bachelor’s Programme in International Business (Mikkeli campus) is once a year.
   - Application period for Master’s Programmes is once a year.
   - Application period for Doctoral Programme is once a year.

Figure 34. Example of how the AUSB website highlights key features in their texts.

In addition to using different font colors and sizes as well as strategic capitalization, the Harvard Business School website also utilizes bulleted lists and generous linking (figure 35 on the next page) to keep their online content short and precise. Fox et al. (1999) recommend the use of these bulleted and numbered lists since a list slows down a scanning eye and draws attention to important points. To make the keywords stand out, highlighting should be used liberally – perhaps even three times as much as when writing for print.

Figure 35. HBS's usage of bulleted lists and linking.
All these features described above lend to the scannability of the business school web pages. This is crucial to the readability of the pages because Fox, Nielsen & Schemenaur (1999) reveal that 79 percent of users scan pages instead of reading it word-for-word. They also say that reading from computer screens is 25 percent slower than reading from paper. To take this into account, websites use more typographical landmarks, such as pictures and font variations, in their pages.

Figure 36 displays how the Bryan School website has chosen to visually break their pages into shorter more readable pieces with typographical and editorial landmarks.

**Why the Bryan School?**

The knowledge and experience you'll gain from the Bryan School of Business and Economics will help you become the exceptional problem solver that our organizations and communities need.

You'll learn how to identify solutions ethically, innovatively, globally and sustainably through a combination of courses taught by experienced professors and practical, hands-on experiences.

Everything you learn during your Bryan School experience will position you to make meaningful contributions where you work, live and lead.

"exceptional problem solvers that our organizations and communities need"

One of the largest business schools in North Carolina, the Bryan School's AACSB International accreditation in business and accounting puts it among the top 3 percent of business schools in the world.

Figure 36. The Bryan School's usage of typographical and editorial landmarks.

In the middle of the text body, a quote has been placed in different colored font, which is also bigger in size, to draw attention to it and break the monotony of the page.
Furthermore, a picture of the AACSB accreditation logo has been placed beside the paragraph that mentions it. This also gives the web page in question more features for the eye to be drawn to and ensures that the paragraph beside the picture does not go unnoticed.

5.1.7 New content

Once a user is familiar with a website, new content becomes a practical and quick way to attract their attention to features that are being promoted. Regularly changing the content on the homepage’s featured area maintains the interest of long-time users in the web pages (Nielsen, 2002).

All four websites have news and events sections on their homepages for this purpose. Furthermore, AUSB and the Bryan School have a slideshow of three featured articles or news items as the focal point of their homepages. Yet during the course of this study only one of the four business school websites has maintained a steady and frequent update schedule in regards to the items featured on its homepage; this has been the Harvard Business School website.

On the HBS website, the main featured article on the homepage changes every 2-5 days. All three of the featured items on the front page change completely once a week. Furthermore, every time the main article changes so does the white image that accompanies it. In addition to all these, the HBS homepage has also changed its main colors from red orange and orange to green and blue (figure 38) and back again, with just the colors inverted (see figures 37 and 39 to compare), during the past one month. All these regular changes ensure that the homepages appear fresh and new almost every time one opens the web pages without having to resort to renewing the basic layout of the pages, which would be distracting for users, instead of attracting attention as is the aim.
Below are three screen captures of the HBS homepage that feature the changes described above (figures 36-38). All of the print screens have been taken within October, 2015.

Figure 37. HBS’s homepage with a red-orange and orange color scheme, Oct. 12, 2015.

Figure 38. HBS’s homepage with a green and blue color scheme, Oct. 16, 2015.
The weakest of the four websites in featuring new content and drawing attention to these items is the Oulu Business School website. Compared to the featured items slideshow of AUSB and the Bryan School or the regularly changing articles that the HBS homepage displays, the ‘News’ and ‘Events’ –sections on the left-hand margin of the OBS homepage are quite modest and inconspicuous.

5.2 Web design

Web design differs from visual design in that it pertains to the way the websites perform in the World Wide Web and the various changing environments and the challenges that presents. Instead of looking at just the visual elements of a site, as visual design does, web design looks behind that into the functionality of the site.
within the Internet setting. As Veen (2002, pp. 103-104) states: a good design is not about decorating the website but about solving problems.

The above mentioned means, for example, that the website must be flexible and must adjust to different operational conditions. Horton & Lynch (2002) also say that the first thing users see is the overall pattern and contrast of the page. Consistency is an important element in this. Margins can play an important role in providing unity throughout the website and, thus, creating a consistent structure.

5.2.1 Flexibility

The flexibility of websites to changing operational environments is important. Otherwise users will not have a similar browsing experience on all platforms and may struggle greatly in certain settings. The changing factors that should be taken into account are, for example, the size of the screen and definition, the browser and the operating system (Saarinen 2008: 13).

The browser adaptability of the studied web pages was checked using both Mozilla Firefox and Google Chrome to access the business school websites. The findings were that if one was using the same equipment and operating system – my Hewlett and Packard laptop with Windows 8.1 operating system, in this case – the web pages retained the same visual layout and design no matter the browser.

However, differences in the flexibility and adaptability of the websites became evident once their behavior was looked at in the setting of changing screen sizes. For the homepages, Aalto University School of Business, Oulu Business School, and Harvard Business School websites had all been designed to adjust to part-size screens. Below are pictures of the websites in part-sized screen setting (figures 40-42).
Figure 40. AUSB homepage on a part-size screen.

Figure 41. OBS homepage on a part-size screen.
On the three homepages, all three websites scale down their texts and pictures to take into account the changed the screen size. In addition, the OBS website moves the ‘Business School’ and ‘Shortcuts’–sections to the left-side margin. Likewise, the HBS website adjust their menu configuration to adapt to the changed setting. In this setting the menu becomes hidden behind the three white bars on the top right corner of the page and can be accessed from there (figure 43).

Figure 42. HBS homepage on a part-size screen.

Figure 43. HBS main menu reconfiguration for part-sized screens.
When looking outside of the homepages, however, only the OBS website consistently keeps all elements of the web pages scaled down to the new screen size. The AUSB fails in resizing some of the videos on their pages. This is the case, for example, with one of the videos on the ‘About us’—page, captured in figure 44.

![Figure 44. AUSB failure in scaling down a video.](image)

Apart from the HBS homepage, all other pages of the website have even greater problems than the AUSB pages in that they have no scaling down to fit the new part-sized screen (see figure 45) and require scrolling left to right to access all the content on the page.
Figure 45. HBS website's failure to scale down web pages.

The least flexible of all the websites is the Bryan School site. Their web pages, both home and other pages, fail to adjust in any way to part-sized screen (figure 46).

Figure 46. The Brya School homepage's inflexibility.

The worst problem in this inflexibility was that the submenus failed to open up correctly on the new screen size (see figure 47 on the next page). Instead of the submenu items opening up in a column, they move to a row arrangement and if one tries to choose an item on the submenu which stretches underneath another main menu
item, this automatically opens up the submenu for that new main menu item on top of the old submenu. This means that the menus become largely illegible, as can be seen in figure 47, below the ‘Alumni’-heading, where the submenus for both ‘undergraduate’ and ‘Graduate’–headings are on top of each other. In addition to illegibility, the fact that the submenus open up on top of one another means that it is impossible to choose those submenu items that become entangled with one another.

Figure 47. The Bryan School submenu configuration problem.

The same results occurred when looking at the websites in a different operating system and environment. The design of the sites, when viewed from a smart phone (Huawei Honor 7 with Android 5.0 operating system), adjusted to accommodate the changed environment in the case of the same three websites as previously: AUSB, OBS and HBS (figures 48-50).

For the mobile phone, the HBS site performed even better because it had adjusted the entire website not just the homepage. Hence, the browsing experience was better on
the smart phone than on the part-size screen. AUSB still had the same problem of scale down failure with the YouTube video on their ‘About us’ –page (figure 51). The video did not actually quite fit the phone screen even when the screen was aligned sideways.

Figure 51. AUSB website's problem with scaling down video size.

The OBS website continued to perform consistently in this area and had no problems adapting their web design to the mobile platform.

Once again it was the Bryan School website designers who had failed to design any adaptability into the layout of their website for the mobile platform (figure 52). The failure to adapt to the mobile screen setting was even worse than the part-screen problem because of the limited size of a smartphone screen to begin with. In a computer environment, one can switch the browser window back to full-size if one gets tired of scrolling left and right to read the text. But because the Bryan School website never shows up in its entirety on the smart phone screen no matter the alignment of the phone screen (see figure 52 and 53 below), the user browsing on their phone has no choice but to scroll back and forth (left and right) on the screen to access
different parts of the website. This becomes extremely tedious quite quickly, especially when trying to read the text portions.

In addition, because the same problems with the submenu structure that were present in the part-sized screen layout occur when the website is opened on the mobile phone platform, this cripples the whole browsing experience. This is because while browsing the site through a smartphone, there is no way to access a huge number of submenu items. One simply cannot switch to the full screen version of the pages where the submenu opens up correctly, as one could when browsing on the computer, because the website never opens up scaled down and adjusted to the smaller screen when on a phone.

Figure 52. The Bryan School homepage viewed with the phone aligned sideways.

Figure 53. The Bryan School mobile platform homepage.
5.2.2 Consistency

Horton & Lynch (2002) say that the first thing users see is the overall pattern and contrast of the page. Margins provide an important visual relief in a website and when used consistently, margins and other visual elements provide unity throughout the website and therefore help in creating a consistent structure.

This consistency in web design is closely linked to the homogenous flow of the visual look and layout, which has already been covered in more depth in this thesis under the section with the same title. Suffice to reiterate at this point that the Finnish business school websites had greater homogeneity in their design and, thus, a more consistent structure in this area than their American counterparts.

Consistency also contributes greatly to the ease of navigating a website as well as to the foreseeability of the location of information. These two elements have, likewise, been discussed in greater length in their own independent sections within this work. As a short reminder, let it be restated that navigationally AUSB, OBS and HBS had the most helpful interfaces and logical menu structures while the Bryan School site had some major problems with its submenu layout.

In the predictability of information location, there were no great differences between the four websites as they all had a relatively rational way of organizing the outline and grouping of the information they provided. The OBS website did have some inconsistency problems in the way it used the ‘Contact’ and ‘Contact Us’ headings; and to access the main menu of the HBS website one had to always navigate back to their homepage. Otherwise, the location of information was consistently foreseeable.

Margins as well as other empty spaces can be used to delineate the main text from the other page elements and all four websites utilize these divisional tools. When the websites are opened full screen in a window, they all use empty space as margins on both sides of the main elements on the pages. For examples of this, see the appendices 1-4, which display the homepages in full-size.
In the instance of these ‘empty space’ margins, all four business school websites use them with good consistency. Once again only the visual look of these spaces changes. The Bryan School differentiates this empty space from the main elements by shading the edges of the main portion and having a clear edge to the space. The other three sites do not have such a strong visible line between edge of the blank margins and the area where all the content is. HBS has the least differentiation between the empty spaces and the main body of the website because they do not utilize menus in the side margins. Although, the background on the AUSB web pages is white throughout, because they have their main menu in the left-side of their web pages, this already brings a natural border between the blank margin and the content portion. Same is true for the OBS website.

5.3 Websites as marketing tools

The websites studied here may all have been construed, first and foremost, as places to share information about the organizations behind them; however, as we saw in the analysis portion of the target audiences, they do also have a strong, secondary function as tools to market the schools and their know how. The information shared can actually in itself function as an advertisement and marketing tool.

The way in which Aalto University School of Business has prioritized on their main menu for information directed at other parties rather than students to come first, e.g. ‘Fundraising’ comes before ‘Studies and programmes’, shows the importance of the websites to the school’s marketing efforts. For example, corporation information, i.e. key figures and annual reviews for investors are presented right in the submenu of the first item on the main menu.

Out of the four, in particularly, the Harvard Business School website seems to be the most aimed at marketing efforts aimed at other parties than student acquisition.
Because of HBS’s prestigious position as one of the world’s top business schools, not as much emphasis is placed on their website into the recruitment of new master’s or doctoral level students as is the case, for example, with the OBS and the Bryan School websites (where those are the items prioritized in the main menu order). However, even HBS emphasizes the recruitment of participants for their Executive Education – initiatives as well as members for their new online education platform, HBX.

Up-to-date information is also crucial in maintaining regular visitors to the sites. As has been stated before, the HBS website has an excellent and routine update schedule especially for their homepage. AUSB and the Bryan School websites are not quite on par with the HBS update schedule but still maintain up-to-date news and events sections. OBS had the most outdated ‘News’ and ‘Events’-segments on their website, as can be seen in figure 54, which is a screen capture taken of their web pages on Oct. 25, 2015.

**Figure 54. OBS Events -section.**

Two out of three items in the ‘Events’–segment are outdated.
5.4 Taking into account global users

In a global world with global audiences and people having access to websites anywhere in the world, international issues should always be taken into account in website design. As Horton & Lynch (2002) state: one should think globally when writing for the Internet.

In some ways, it is a strong advantage that the American websites have in being able to only produce their websites in their mother tongue and that being automatically in the lingua franca of our modern world. There is no worry of producing linguistically inferior text or having to grapple with difficult native language terminology that does not lend itself for easy translation. There is also the challenge of acquiring material in English. For example, both AUSB and OSB had articles in their news archive sections in Finnish. There just are not enough resources to always translate every piece of material on the websites into English.

However, there is another side to the matter. The translation process is often a good tool to ensure that one stops to think about aspects that would otherwise seem self-evident to the writer; to see the one’s world from the perspective of someone unfamiliar with the cultural world one inhabits. There was evidence of the lack of thinking of this aspect in the Bryan School website content. For example, on the ‘Community & Friends’ main page, when discussing the purpose of the Bryan School, the Triad region is mentioned but not explained in anyway (direct quote: “Bryan School’s fundamental purpose is to serve the people of North Carolina, particularly those in the Triad region, by providing high quality business education.”). Clearly this is a geographical area in North Carolina but one that is unfamiliar to people outside of the region.

Another advantage that the Finnish business school websites have is that the target audience for the website’s English version is already international, at least student wise, i.e. they are aimed at the exchange students coming into the schools. One can see this in, for example, the ‘For new students’ page of the OBS website, which is entirely aimed at exchange students (see figure 55 below).
This already makes the point of view international when producing text and should make the writers more conscious of their terminology usage. This point of view of having a wider, global audience is visible on the homepage of OBS, where there is right away a short paragraph on Oulu and where it is situated geographically. No assumptions have been made that the readers would already know this information. This is in direct contrast to the previous Triad region example from the Bryan School website and the assumption it made about its readers and their inherent familiarity with the area.

Both OBS and AUSB websites have also taken care to have the major links from their English websites direct the users to English versions of the new sites, as well. For example, if you navigate to the Oulu University or Aalto University main page by clicking on the provided link in the business school websites, the university homepages open up directly to their English versions.

Figure 55. OBS 'For new students' man page.
However, some parts in terminology are still be overlooked in the Finnish websites, too. For example, on the ‘Shortcuts’–list on the OBS website the O365 term is explained by indicating that it is the student e-mail shortcut. However, the terms ‘WebOodi’ or ‘Lukkari’ are not explained. Probably the supposition there is that students will become familiar with these terms in other introductory events and do not need to know them when browsing the website for more general information about the school.

HBS clearly more internationally oriented than the Bryan School website. For example, for their ‘Executive Education’ pages, they provide a Chinese version (see figure 56).

Figure 56. HBS’s ‘Executive Education’ main page in Chinese.
6. Conclusion

Overall, all four websites were functional when viewed full screen accessed via a computer. The information on the sites is logically structured and foreseeable in its positioning and the naming of the main menu headings as well as submenu items was clear and concise. This was the area where the global homogeneity of business schools in general most evidently shone through. No outside instructions were needed in using the interfaces of these web pages.

The websites also excellent in producing scannable text and content appropriate for websites. Text was used with frugality and concisely. Furthermore, incorporated within the text bodies were numerous headings and subheadings to indicate the content of paragraphs and pages. Links were used generously and highlighted properly no matter their placement, whether it was in the main body of texts, at the end of text or title to indicate where to get more information on a matter or as part of bullet point or numbered lists. Ample typographical and editorial landmarks were also used. Therefore, none of the websites had problems with this aspect of readability.

When analyzing the visual design of the four sites and the homogenous flow of it differences emerged between the Finnish business school pages and their American counterparts. Aalto University School of Business and Oulu Business School had good consistency in their websites’ visual layout and design with OBS having the more streamlined visual look out of the two. Of the American sites, the Bryan School of Business and Economics had some inconsistency within the design because of a few internal pages that lead to the UNCG website. However, the Harvard Business School had even greater shortfalls in the homogeneity of their visual design. This was caused by incorporating in the main menu items that lead to independent and separate websites, like the HBX site, which had a different visual look and jarred the viewer.

Differences also emerged in the functionality of the websites in regards to their menu structures and in the ease of navigating the sites. All four web pages had a different menu configuration and layout choices. The AUSB, OBS and HBS structure choices worked fairly well. The fact that the HBS main menu was only accessible from their
homepage caused slight inconvenience at times but did not confuse the user. Mainly, it as just required of the users to navigate within the site through the homepage more often than on the other sites. Additionally, these three had a navigational help tool on top of their pages to help users orient themselves as to where they were within the sites. It was the Bryan School website, however, that had the most problems in their menu structure; to be exact, the site’s submenu layout was the source of most of the problems. Without the same site amp tool as the other three had, and with the submenu items not changing color when one was on the pages, it was too easy to get lost within the site.

Harvard Business School outshone the others in the area of generating new content with regularity to their homepages. On the whole, the school’s web pages were the most focused on news features and articles. AUSB, OBS and the Bryan School did all have news and events sections on their pages, as well. In addition, AUSB and the Bryan School had a slideshow of main news features or articles at the center of their homepage. OBS had invested the least attention to this area out of the four. Although, they also had the news and events sections on their homepage, it was the only one to have outdated information showing on their feed.

When the sites were analyzed in the area of web design and the flexibility of it, the greatest differences emerged between the four. The OBS website had the best flexibility in their overall web design, no matter the screen size, platform or operating system that was used. AUSB had some problems with scaling down their video content and HBS had not scaled down other than their homepage for part-sized screens. Smartphone platform wise they were on par with the OBS’s web design flexibility. Unfortunately for the Bryan School, this area revealed their website’s design’s greatest short comings and failings. Their web pages had no flexibility designed into them that would have taken into account changing settings, for example, different screen sizes or platforms. And the problems with the submenu structure that had become apparent in the navigation analysis portion became even more magnified now. When trying to navigate the site on a part-size screen or smartphone, the site actually became impossible to browse properly; especially, on the mobile phone platform because of one’s inability to access most of the submenu items.
When looking at the websites as tools for marketing, it became clear, especially in the case of the HBS and AUSB websites that this was an important function of the sites. The HBS pages were visibly oriented toward outside viewers, not just their own students. The same was discernible on the AUSB site. The Bryan School and OBS web pages also had content aimed at attracting attention to the schools, both in the form of prospective students as well as outside investors or collaborators.

Because the English version of the Finnish business schools’ websites were already oriented toward exchange students and the international audience in general, global users were best taken into account in the content of the Finnish sites. However, the HBS web pages also had features aimed at a wider audience than just Americans. This was evident, for example, in the fact that the Executive Education pages had been translated to Chinese.

An area that would be interesting for further study is the public image of these schools and their websites. What is the view that their users really hold of the organizations and how far spread is their reach in actuality. This subject matter had to be left out from the analysis of this thesis to limit the size and expanse of this study; but it has potential to be an area that would yield interesting findings and further our understanding of the real scope of the influence that business schools have.

Overall, it was clear that the websites were important parts of the operation of the business schools. Through them information reaches their students, both prospective and current, as well as outside financiers and partners. In marketing the schools and raising the visibility of their programs or research efforts, there was no other medium that the schools could rely on as heavily as their websites. Hence, great care had been shown in designing the websites to be as effective as possible in this function.
References


Website of the Bryan School of Business and Economics. Online. 8th October 2015. http://bae.uncg.edu/


Appendix 1. Homepage of Aalto University School of Business on Oct. 8, 2015
Appendix 2. Homepage of Oulu Business School on Oct. 8, 2015

Appendix 3.1 Homepage on Oct. 8, 2015

Appendix 3.2 Homepage on Oct. 16, 2015
Appendix 4. Homepage of the Bryan School of Business and Economics on Oct. 8, 2015
## TOP TEN MISTAKES IN WEB DESIGN

### 1. Bad search

Overly literal search engines reduce usability in that they're unable to handle typos, plurals, hyphens, and other variants of the query terms. Such search engines are particularly difficult for elderly users, but they hurt everybody.

A related problem is when search engines prioritize results purely on the basis of how many query term(s) they contain, rather than on each document's importance. Much better if your search engine calls out "best bets" at the top of the list — especially for important queries, such as the names of your products.

Search is the user's lifeline when navigation fails. Even though advanced search can sometimes help, simple search usually works best, and search should be presented as a simple box, since that's what users are looking for.

### 2. PDF files for online reading

Users hate coming across a PDF file while browsing, because it breaks their flow. Even simple things like printing or saving documents are difficult because standard browser commands do not work. Layouts are often optimized for a sheet of paper, which rarely matches the size of the user's browser window. Bye-bye smooth scrolling. Hello tiny fonts.

Worst of all, PDF is an undifferentiated blob of content that's hard to navigate.

PDF is great for printing and for distributing manuals and other big documents that need to be printed. Reserve it for this purpose and convert any information that needs to be browsed or read on the screen into real web pages.

### 3. Not changing the color of visited links

A good grasp of past navigation helps you understand your current location, since it's the culmination of your journey. Knowing your past and present locations in turn makes it easier to decide where to go next. Links are a key factor in this navigation process. Users can exclude links that proved fruitless in their earlier visits. Conversely, they might revisit links they found helpful in the past.

Most important, knowing which pages they've already visited frees users from unintentionally revisiting the same pages over and over again.

These benefits only accrue under one important assumption: that users can tell the difference between visited and unvisited links because the site shows them in different colors. When visited links do not change color, users exhibit more navigational
<table>
<thead>
<tr>
<th><strong>disorientation in usability testing and unintentionally revisit the same pages repeatedly.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4. Non-scannable text</strong></td>
</tr>
<tr>
<td>A wall of text is deadly for an interactive experience. Intimidating. Boring. Painful to read.</td>
</tr>
<tr>
<td><strong>Write for online, not print. To draw users into the text and support scannability, use well-documented tricks:</strong></td>
</tr>
<tr>
<td>- subheads</td>
</tr>
<tr>
<td>- bulleted lists</td>
</tr>
<tr>
<td>- highlighted keywords</td>
</tr>
<tr>
<td>- short paragraphs</td>
</tr>
<tr>
<td>- the inverted pyramid</td>
</tr>
<tr>
<td>- a simple writing style, and</td>
</tr>
<tr>
<td>- de-fluffed language devoid of marketese.</td>
</tr>
<tr>
<td><strong>5. Fixed font size</strong></td>
</tr>
<tr>
<td>CSS style sheets unfortunately give websites the power to disable a Web browser's &quot;change font size&quot; button and specify a fixed font size. About 95% of the time, this fixed size is tiny, reducing readability significantly for most people over the age of 40.</td>
</tr>
<tr>
<td>Respect the user's preferences and let them <em>resize text</em> as needed. Also, specify font sizes in relative terms — not as an absolute number of pixels.</td>
</tr>
<tr>
<td><strong>6. Page titles with low search engine visibility</strong></td>
</tr>
<tr>
<td>Search is the most important way users discover websites. Search is also one of the most important ways users find their way around individual websites. The humble page title is your main tool to attract new visitors from search listings and to help your existing users to locate the specific pages that they need.</td>
</tr>
<tr>
<td>The page title is contained within the HTML <code>&lt;title&gt;</code> tag and is almost always used as the clickable headline for listings on search engine result pages (SERP). Search engines typically show the first 66 characters or so of the title, so it's truly <em>microcontent</em>.</td>
</tr>
<tr>
<td>Page titles are also used as the default entry in the Favorites when users bookmark a site. For your homepage, begin the with the company name, followed by a brief description of the site. Do not start with words like &quot;The&quot; or &quot;Welcome to&quot; unless you want to be alphabetized under &quot;T&quot; or &quot;W.&quot;</td>
</tr>
</tbody>
</table>
| For other pages than the homepage, start the title with a few of the most salient information-carrying words that describe the specifics of what users will find on that page. Since the page title is used as the window title in the browser, it's also used as the label for that window in the taskbar under Windows, meaning that advanced users will move between multiple windows under the
guidance of the first one or two words of each page title. If all your page titles start with the same words, you have severely reduced usability for your multi-windowing users.

Taglines on homepages are a related subject: they also need to be short and quickly communicate the purpose of the site.

| 7. Anything that looks like an advertisement | Selective attention is very powerful, and Web users have learned to stop paying attention to any ads that get in the way of their goal-driven navigation. (The main exception being text-only search-engine ads.)

Unfortunately, users also ignore legitimate design elements that look like prevalent forms of advertising. After all, when you ignore something, you do not study it in detail to find out what it is.

Therefore, it is best to avoid any designs that look like advertisements. The exact implications of this guideline will vary with new forms of ads; currently follow these rules:

- **banner blindness** means that users never fixate their eyes on anything that looks like a banner ad due to shape or position on the page
- **animation avoidance** makes users ignore areas with blinking or flashing text or other aggressive animations
- **pop-up purges** mean that users close pop-up windows before they have even fully rendered; sometimes with great viciousness (a sort of getting-back-at-GeoCities triumph).

| 8. Violating design conventions | Consistency is one of the most powerful usability principles: when things always behave the same, users do not have to worry about what will happen. Instead, they know what will happen based on earlier experience. Every time you release an apple over Sir Isaac Newton, it will drop on his head. That is good.

The more users' expectations prove right, the more they will feel in control of the system and the more they will like it. And the more the system breaks users' expectations, the more they will feel insecure. Oops, maybe if I let go of this apple, it will turn into a tomato and jump a mile into the sky.

Jakob's Law of the Web User Experience states that "users spend most of their time on other websites."

This means that they form their expectations for your site based on what's commonly done on most other sites. If you deviate, your site will be harder to use and users will leave.

| 9. Opening new browser windows | Opening up new browser windows is like a vacuum cleaner sales person who starts a visit by emptying an ash tray on the customer's carpet. Do not pollute my screen with any more |
windows, thanks (particularly since current operating systems have miserable window management).

Designers open new browser windows on the theory that it keeps users on their site. But even disregarding the user-hostile message implied in taking over the user's machine, the strategy is self-defeating since it disables the Back button which is the normal way users return to previous sites. Users often do not notice that a new window has opened, especially if they are using a small monitor where the windows are maximized to fill up the screen. So a user who tries to return to the origin will be confused by a grayed out Back button.

Links that do not behave as expected undermine users' understanding of their own system. A link should be a simple hypertext reference that replaces the current page with new content. Users hate unwarranted pop-up windows. When they want the destination to appear in a new page, they can use their browser's "open in new window" command — assuming, of course, that the link is not a piece of code that interferes with the browser’s standard behavior.

<table>
<thead>
<tr>
<th>10. Not answering users' questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Users are highly goal-driven on the Web. They visit sites because there's something they want to accomplish — maybe even buy your product. The ultimate failure of a website is to fail to provide the information users are looking for.</td>
</tr>
</tbody>
</table>

Sometimes the answer is simply not there and you lose the sale because users have to assume that your product or service doesn't meet their needs if you do not tell them the specifics. Other times the specifics are buried under a thick layer of marketese and bland slogans. Since users do not have time to read everything, such hidden info might almost as well not be there.

The worst example of not answering users' questions is to avoid listing the price of products and services. No B2C ecommerce site would make this mistake, but it's rife in B2B, where most "enterprise solutions" are presented so that you cannot tell whether they are suited for 100 people or 100,000 people. Price is the most specific piece of info customers use to understand the nature of an offering, and not providing it makes people feel lost and reduces their understanding of a product line. We have miles of videotape of users asking "Where's the price?" while tearing their hair out.

Even B2C sites often make the associated mistake of forgetting prices in product lists, such as category pages or search results. Knowing the price is key in both situations; it lets users differentiate among products and click through to the most relevant ones.
### TEN USABILITY HEURISTICS

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visibility of system status</td>
<td>The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.</td>
</tr>
<tr>
<td>Match between system and the real world</td>
<td>The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.</td>
</tr>
<tr>
<td>User control and freedom</td>
<td>Users often choose system functions by mistake and will need a clearly marked &quot;emergency exit&quot; to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.</td>
</tr>
<tr>
<td>Consistency and standards</td>
<td>Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.</td>
</tr>
<tr>
<td>Error prevention</td>
<td>Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.</td>
</tr>
<tr>
<td>Recognition rather than recall</td>
<td>Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.</td>
</tr>
<tr>
<td>Flexibility and efficiency of use</td>
<td>Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.</td>
</tr>
<tr>
<td>Aesthetic and minimalist design</td>
<td>Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.</td>
</tr>
<tr>
<td>Help users recognize, diagnose, and recover from errors</td>
<td>Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.</td>
</tr>
<tr>
<td>Help and documentation</td>
<td>Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.</td>
</tr>
<tr>
<td></td>
<td>OBS</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Structure &amp; Content</strong></td>
<td>(the way info is presented)</td>
</tr>
<tr>
<td>foreseeable location of info (p.16)</td>
<td>Y → contact info under contact heading, etc.</td>
</tr>
<tr>
<td>visual design and layout of hps</td>
<td>blue-white-grey (yellow for emphasis)</td>
</tr>
<tr>
<td>visual design</td>
<td></td>
</tr>
<tr>
<td>homogenous flow</td>
<td>y</td>
</tr>
<tr>
<td>homepage</td>
<td></td>
</tr>
<tr>
<td>-&gt; org. name, logo, e-mail</td>
<td>Y → part top, part bottom</td>
</tr>
<tr>
<td>somewhere info on org's aims and objectives, needed addresses, dept's</td>
<td>Y: top of pg under BS activities and under contact</td>
</tr>
<tr>
<td>help and search facility</td>
<td>Y → sb</td>
</tr>
<tr>
<td>navigation</td>
<td></td>
</tr>
<tr>
<td>-&gt; use of linking</td>
<td>y</td>
</tr>
<tr>
<td>-&gt; 'see also' labels for less relevant links</td>
<td>more’</td>
</tr>
<tr>
<td>-&gt; do you get lost?</td>
<td>hp icon on every pg ← easy to return to hp and start again even if did get lost</td>
</tr>
<tr>
<td></td>
<td>navi tool</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>headings and subheadings (explain the imp of that pg/segment)</td>
<td>y</td>
</tr>
<tr>
<td>bullet points? Lists?</td>
<td>y, some</td>
</tr>
<tr>
<td>short segments? --&gt; frugality</td>
<td>+subheadings, bulleted lists, inverted pyramid</td>
</tr>
<tr>
<td>(concise style (frugality), ample editorial and typographical landmarks)</td>
<td></td>
</tr>
<tr>
<td>scannability</td>
<td></td>
</tr>
<tr>
<td>highlighting keywords? Bold or colored font (not blue (for hyperlinks))</td>
<td>Y → Titles in bold; colored font (blue) for hyperlinks (n hl)</td>
</tr>
<tr>
<td>Best or recent content (attracts attention)</td>
<td>y on hp</td>
</tr>
<tr>
<td>--&gt; short list of recent features (+ permanent archive link)</td>
<td>y on hp</td>
</tr>
<tr>
<td><strong>Web design</strong></td>
<td></td>
</tr>
<tr>
<td>flexibility</td>
<td>good</td>
</tr>
<tr>
<td>adjustment to diff. op conditions --&gt; size of screen, browser, op.system</td>
<td>y (diff config of margin menus when page open full size vs part-size window)</td>
</tr>
<tr>
<td>--&gt; MARGINS (delineate the main text, unity throughout the site --&gt; consistent structure)</td>
<td>y (good use of margin; menus change according to main menu)</td>
</tr>
<tr>
<td>consistency</td>
<td>some confusion: contact vs contact us</td>
</tr>
<tr>
<td>Website as mkting tool</td>
<td>info up-to-date</td>
</tr>
<tr>
<td>good corp info (increase credibility, support recruiting, investor relations, etc.)</td>
<td>y</td>
</tr>
<tr>
<td>Internationalization</td>
<td>(lay out, info presentation)</td>
</tr>
<tr>
<td>-taking into account global users (local term explanation, translation)</td>
<td>in hp intro already a short paragraph on Oulu (where it is in the world, etc.); new students pg in eng starts w/ exchange student specific info</td>
</tr>
<tr>
<td>Term explanations</td>
<td>Some explained: e.g. O365 student e-mail</td>
</tr>
</tbody>
</table>