

Success Factors for Supporting On-line Shopping

A Comparative Analysis of a Proposed Web Platform with Existing Websites

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Abstract — The e-commerce consists on a promoting way of economical growth; it may enable the best way for online shops to be able to compete within a global market scenario. There are success factors that permit to distinguish a good business on the Internet and their knowledge may allow reaching an important competitive advantage for its sustainability. As many disciplines are involved through those success factors, it is required an effective coordination of the underlying project so that it is accomplished accurately and through an integrated and collaborative way. In e-commerce, as well as in the ecosystem the breaking down of some of the integrating elements may collapse the whole system, which turns out to be affected and unbalanced. The various stakeholders involved on a given business should, therefore, be involved and work together to achieve a high quality product that fully satisfies the end customer needs and wishes and in this paper such a proposal is provided and illustrated through an on-line shop under implementation.

Keywords- *E-commerce; success factors; online shopping support and web platform.*

I. INTRODUCTION

The e-commerce has emerged as an interesting alternative way of commerce at the same time it has emphasized its relevance to the growing instrumentalization of the web and the intensification of alternative ways of creating value [1].

Given the existing competitiveness in the nowadays global market context, there is an enhanced need to reach the widest number of customers within particular niche markets. Although e-commerce is already being widely explored there is still considerable margin of growth to its maturity [2].

The application of e-commerce in the context of small and medium enterprises has been a potential vehicle for promoting its value creation. There are a vast number of studies demonstrating the successful implementation of e-commerce, in many industrial sectors, which led to a strong motivation for this work, in order to study the success factors for implementing business through e-commerce.

Thus, through this paper, a study of the whole process of e-commerce, with special focus on critical success factors is presented and for a better understanding of its content it is organized as follows. Next, on section 2, a brief description

of the market behind e-commerce is presented. On section 3 a summarized view about the state of the art is included; and section 4 describes the main success factors to be considered when putting forward an on-line shop. Next, section 5 briefly refers to the application of the success factors proposed on section 4, through the illustration of the main functionalities behind a website about an ongoing implementation of an online shop. Moreover, in this section a brief comparative analysis with existing on-line shops/sites is presented. Finally, section 6 presents some conclusions and future work.

II. MARKET DESCRIPTION

The competitive market of today requires companies to be in all parts of the world at the same time. The e-commerce presents itself as a tool for an extended range and with a considerable competitive advantage over the local market [3]. Although there is already a great adherence and growth of e-commerce, it is expected that this still has a high degree of progression.

The demand for niche markets and marketing allies could revolutionize the new e-commerce. All technological change is to allow cement the online business, by providing payment procedures in a safer way, up to highly effective logistic companies. This whole process of creating online stores involves many techniques and multidisciplinary areas, with a synergy of skills required for obtaining the desired result [4]. Thus, attention has to be paid to a variety of subjects related to this issue, including the study of implications of e-commerce at different levels of impact, particularly in terms of human behavior and preferences, as well as analysis of alternatives for its implementation.

Understand what drives an on-line shopper to buy online through a website as an alternative to traditional commerce is one of the goals that distinguish a successful project, from an inconsequential attempt. Being involved areas such as engineering, design, computing, communications, marketing and even psychology, it is easy to realize the interest and motivation for this work.

III. STATE OF THE ART

The large growth in terms of quantity, e-commerce has not evolved at the same rate in quality. The possibility of

creating an online store and start selling immediately, without investment cost as an obstacle, has provided many people with no knowledge in this area to invest in this area. It is easy to prove this observation by searching online stores which, for instance, simply do not allow understanding how one can buy a product when being faced with a confusing website that encourages the user to immediately close the web page, even before watching its contents.

Therefore, there is still much room for improvements, by applying logic of success factors, although there are also online stores quite well designed.

A good example of good applicability of success factors is the Nike online store. Guidelines are drawn from large companies like this one that will allow small businesses to explore these alternative business ideas, knowing that at the outside, resources are limited.

Thus, designing an online store without any prior investigation of potential success factors may turn out to hardly succeed.

IV. E-COMMERCE SUCCESS FACTORS

The e-commerce is undoubtedly the future that most companies will have to face. However, the fact of creating an online store does not mean guaranteed success.

The e-commerce is an issue that turns around a multidisciplinary environment that must be in harmony as there are complementary aspects arising from each area, which have to be considered and integrated, as a requirement for success [5].

Just like a real physical shop, also in e-commerce it is not just the commercial part that is implied but a whole set of assumptions that must be guaranteed and controlled.

The internet is a medium with its own characteristics, where every detail must be thought out carefully so that the end result is as expected. Figure 1 presents a proposal of the main success factors to be considered when putting forward an on-line shop and corresponding website.



Figure 1. Main success factors for e-commerce.

The concept of e-commerce is similar to the solar system, where the e-commerce is the central star and it must include on its orbit all the other stars. Once one of the surrounding stars gets lost from its orbit the whole system's stability can be checkmated. Whether for lack of credibility, poor brand concept or simply due to a poor visibility, any failure on one of the factors implies that the project may not work properly and there are plenty of online stores that just do not sell. Next, each of the proposed success factors will be analyzed separately.

A. Website

The website is a showcase of the online store, which has to take into account to whom it should attract attention, as its mere existence does not mean its success. The whole construction of the website must be developed by a multidisciplinary team because there are several areas that will be involved for achieving the final product with the intended image and functionality. For example: the programmer may build the website quite clearly, without any bugs or technical problems but if the designer does not provide an efficient commercial aspect to it much probably it will fail [6].

Therefore, all those multidisciplinary areas should be involved on the creation of the website, so that each area can provide an important contribution to the final result of the website, which has to be complete and balanced and thus turning possible to pass an image of a serious and credible company without any tendentious reflection just about a particular area or concern.

B. Design and Usability

In an on-line shop the customer interface occurs via the website, therefore, their expectations have to be met as they easily may pass away to the competition.

Design and usability have the main role to capture the attention and provide comfort to the online customer [7].

Therefore, a website with a distinctive design turns out to be pleasant and easily invites the client to explore all its products and/or services.

If on the other hand, the entire website design is very successful but it is difficult for the users to find the products and/or services when exploring it, their instantaneous interest will fall down immediately and they will pass to the exploration of the next one [7].

Simplicity and clarity must be main slogans and intentions, for the user to feel comfortable when searching a solution in a way that seems intuitive for him/her.

C. Brand

Nowadays, the world of brands moves millions, as increasingly more companies look for convincing brands, to better affirm themselves among competitors [8].

In e-commerce the paradigm does not change, to buy online, you need something to push you to finalize your purchase. It is not enough to think that a brand is just a cute name and a futuristic logo, the whole communication with

the surroundings has to be thought, and the care and concern about the customers need to be visible in order to enable to construct a loyalty based relation with them [8].

The concept of a brand has to have the objective to be a precise way to reach the clients and establish a collaborative interaction with them by enabling integration of different areas. Impact, desire and trust are the ingredients that may enable a common brand to become a benchmark worldwide. If the main purpose of the brand is not describable by a few words, it is most probable not well designed.

D. Marketing

Once designed the brand it must continue towards the goal of being recognized as a reference. A well structured marketing plan, with a well defined line and an innovative and credible image are essential success factors [1].

From videos and images up to workshops and international conferences, it is worth using all channels of communication to solidify the brand on the market. Thus, it becomes a necessity, to innovate and break the rules of marketing to re-invent the way we present ourselves to the world [9].

"To take a step ahead and anticipate the future may be a mirage, however, with marketing the mirage becomes less unfocused." Miguel Floriano.

E. Web-marketing

Although a segment of the Marketing, the Web-Marketing deserves special mention, for conceiving a fantastic store, in terms of design and image, may seem to be good enough for becoming very successful, but imagine how disastrous it would be if no one would pass on the street where it is located and the same may happen regarding online stores (<http://www.acepi.pt>).

Searching engines are a major interface between consumers and online stores; therefore a good positioning or ranking of a website is of utmost importance. Searching engines like Google have tools to know how many times certain words are searched and analyze all statistical data about the number of visitors about a given online store.

There are several ways for enabling good rankings of websites within searching engines, which turns out to be even more important when a website includes sponsored links. The best way to attract potential customers is to accurately know the market where it operates, so that the whole effort is focused in favor of the business [8].

F. Social Networks

Social networks have changed the way people communicate; it was like reinventing something we did naturally, with a slower speed. The initial idea was aimed at friends to join on a virtual network where they could communicate about everyday's life. This phenomenon has exceeded expectations and inevitably began to move towards the business world. If customers are concentrated on a particular community, nothing is more natural than participating on it.

All major brands present themselves within this environment, trying to reach a huge market with a multiplying growing effect [8]. Applying the phenomenon of social networks to e-commerce, has the advantage of these people being already regular users of the Internet, and to capture their attention to new products and services requires a good communication and marketing strategies to be implemented. Thus, one can gain customers through these communication engines, enhancing the target market.

G. Convert Consumer

Once achieved the whole way to generate flow of the market to the online shop, there is still another important but less explored subject, which consists on being able to convert a visitor into a customer [10].

With the tools available on the market it turns possible to analyze all the details of the visits to a website. From the time each user wastes browsing, up to the number of visitors per day, broken down by country and other indicators, many different kind of analysis is possible.

When the number of visits to a website is big and the sales have not risen, something must be done to reverse potential customer's bad attention. Issues related to websites usability, communication and marketing problems must be completely abolished.

H. Supply Chain

When buying on an online store, its success is only possible if the entire supply chain is synchronized and integrated [11]. A climate of trust and sharing of success must prevail, so that the whole quality of the system is reflected on the final consumer [12].

If the manufacturer and all intermediaries are not sharing the same values, the whole supply chain may be compromised and the concept of a successful online store will most probably fall. Imagine how disastrous it would be having a well-designed online store, with a powerful marketing and numerous customers and the delivery due dates of the products were constantly being violated [13].

Only the skilled ones can be a part of the supply chain, for each one, on its "core business", to provide its best possible contribution, always focused on reaching common objectives and on customer satisfaction.

I. Market

Knowing our market can help to know, "where we are" and "where we want to go" [1]. Measuring performance at each step of business allows adjusting measures to consider and values to obtain, through a sustained growth. This measurement is only possible if there are predefined and measurable goals for market trends. Therefore, it turns out necessary to know if it is a market of thousands, millions or billions.

The more information we have available the better our position will be to support good decision making strategies. Understanding the market is the first step, setting goals is the

second one and nothing serves the former is the next one is not acting and evaluating results obtained.

J. Communication and Support

The clients and their satisfaction must be constant concerns of any company aspiring to reach a sustainable growth [5]. Moreover, in a medium like the internet additional concerns about the fact that many users still do not feel comfortable buying products in a place where they cannot physically see them have to be kept on mind.

One of the central concerns of a consumer is sometimes about knowing if the website provides support to clarify any questions that may arise about a product or service, in particular, issues related to product returns or simply about how to get information in a more direct and easy way about the provided products and/or services. With the growth of the Internet there are also many online shops whose quality standards do not meet customer requirements, installing uncertainty on the market.

It is of utmost importance to provide a full service support, before, during and after purchase. This way the clients feel supported and understood, not feeling afraid to repeat the experience and buy through the same website.

The word "guarantee" frightens many entrepreneurs; however, this paradigm must change as people buy more if they feel "safe" and in the majority of online stores the rates about product returns are quite low [5].

K. Credibility

Regarding marketing strategies to incentivize anyone to buy through an online store, there will still be many entrepreneurs that continue to aim at prioritizing cost reduction instead of improve investments on that direction in order to enrich online stores' credibility. A shop with amateur aspect easily distracts consumers that are more aware and suspicious about online shopping.

A good call centre, setting up a company with physical office, a registered trademark and the overall design and functionality of the website should not be jeopardized due to a low budget. Moreover, be professional and combine all these details will help strengthen the credibility of the store. Another key factor consists on partnering with credible companies [11].

L. Quality Data Processing

The features of the website should be working perfectly; no bugs or links that do not work are allowable. When usability is jeopardized and something stops working and confuses the user this may compromise the quality of the whole website and underlying information system project, which is essential to gain the users confidence.

M. Security and Payment

With the exponential growth of the Internet, security has been the major concern of users. However, increasingly more do occur money transactions on the internet and the systems are already becoming considerably safer. Select safe

payment methods in an easy way and be at the forefront of information technology about security issues is a competitive advantage on on-line selling. Thus, if the client is conscious about the concern of an online shop to keep secure downloads and payment transactions the brighter the image of trust and responsibility that will be passed to the potential clients.

Although the world is aware that issues about security continue to arise on data computing and Internet transactions, and as even the most protected systems are transposable, we must maintain the dedication to guarantee purchases as secure as possible. Moreover, to attract online customers concern the fact of being able to understand what are their real wishes and expectations and what payment methods each type of segment of users does prefer. Each market has its peculiarities and consumers tend to create common purchasing habits with which they feel more comfortable. For example: "to use the online shopping cart" [7].

V. WEB PLATFORM ILLUSTRATION

To begin to transform theory into practice, let us present our online store proposal, which is under a starting-up construction about "Extreme Luxury Furniture", belonging to "iQNe-commerce" (Niches quality innovation), to be put to work through our proposed website, which is illustrated on Figure 2, for some kind of luxury product.



Figure 2. On-line store's website illustration.

This online store is being designed according to the principles presented in this paper, based on the existence of a multidisciplinary team working on an integrated and cooperative manner, to leave no detail to be thought and accomplished. From graphical design to the functionality of the whole buying process, everything is analyzed and there is nothing that cannot be improved constantly. Only with a spirit of hard working for providing these characteristics it becomes possible to obtain a sustainable success. If there is no expertise around any of the key characteristics of success previously described, everything becomes more complicated and any aspect that had been overlooked may compromise the whole work done.

Next, a brief review aiming at comparing existing websites with this new ongoing project, will be presented, by comparing it with five other more or less closely related ones, through the corresponding websites, which can be found by using, for instance, the “google” searching engine and the main keywords for this kind of business area, for being able to identify results about the best matches about some of the most closely related online stores for this comparative analysis.

A set of four main proposed success factors were used for performing this comparative analysis, which were: design, usability, web-marketing and marketing and a scale varying from “very bad” to “very good” for expressing the comparison results obtained. The results obtained are presented on Table 1.

TABLE I. WEBSITE COMPARISON ABOUT MAIN SUCCESS FACTORS

Website	Design	Usability	Web-Marketing	Marketing
www.luxuryfurniture.com	good	good	very good	bad
www.bernadettelivingston.com	very bad	bad	good	bad
www.williams-sonoma.com	bad	bad	good	good
www.juliettesinteriors.co.uk	good	good	good	bad
www.taylorllorentefurniture.com	very good	good	very bad	good
www.extremeluxuryfurniture.com	very good	good	very good	very good

The results obtained show that on all the four comparative websites at least one parameter analyzed was classified as “bad”, and as explained before, when one success factor is bad, the whole system can be affected.

To better understand the criteria for websites classification, a more detailed explanation about each one’s main characteristics as well as their main strengths and weaknesses will be discussed next.

The website www.luxuryfurniture.com has as main advantage its web-marketing strategy. The site domain is representative for the market niche. This is important to increase its position on the searching engine for obtaining favorable searching results about the on-line store.

Moreover, the domain of this site enables to explain its content and contains important information about relevant keywords for supporting web searches. Besides that, the marketing strategy is not good; because once we analyze the website we realize that not all of its products are luxurious. This situation decreases the customer focus, credibility and also violates the niche market strategy.

The on-line store available through the website www.bernadettelivingston.com also expresses a good web-marketing strategy, because the keywords in back office are appropriate for this kind of niche market but the marketing is poor. On the other hand, the design and usability are really bad examples. The information is disorganized and excessive, which conducts to a bad and difficult user’s experience, when trying out to buy something. Moreover, the website design is also very out of date. The colors are much confusing and there is no identity expression through an appropriate brand design.

This website www.williams-sonoma.com reinforces the idea of the previous analysis present on the other sites

referred above, regarding a good web-marketing but inside the website everything is confusing. The layouts have too much text and it contains a big mix of products, which does not turn out to be a good strategy for attracting the attention of the niche market. Therefore, this store shows an intention to sell quite different kind of products, which are not related and also not luxury ones.

It is possible to face with good website on www.juliettesinteriors.co.uk and on www.taylorllorentefurniture.com, but they have a feature that fails. “Juliettesinteriors” fails on its marketing strategy because it mixtures luxury products with other non luxurious ones, and people who shop at luxury furniture does not look at common products.

On “taylorllorentefurniture”, the web design is very good and the general image is also positive. Therefore, regarding only appearance it seems ideal. The packaging is good, the set of products seems to be appropriate but what if there are no customers? By selecting the keywords related to the target market, this page appears in third results page by using the Google’s ranking! This is the big problem of many websites, as all details were thought carefully but they forgot their focus, to get customers.

After this analysis, the opportunity for improvement for this websites appears to be evident. More quality will be possible to achieve by carefully looking at accomplishing the whole set of success factors put forward on this work. The proposed “extremeluxuryfurniture” online shop does not aim at being the largest luxurious furniture company of the world, as it does also not aim at being the website which gets the highest number of visits, regarding it does not intend to include and sell any kind of product to get the maximum momentary profits. Therefore, the main aim of this proposed on-line shop consists on aspiring a world’s extended luxury furniture shop, by selling only luxury products to appropriate customers. So, the proposed strategy consists on trying to focus and attract just potential customers instead of the whole population, being the quality of website traffic one of the biggest issues to face for being able to get advantage regarding the marketing strategy of the company. The picture above shows the starting up point of “extremeluxuryfurniture” development website, which expresses a “minimalist” and quite simple design and structure, which are its brand image. This simplicity will also be present on all processes underlying the website, for instance, regarding payment processes, as well as for customer registration, along with the whole website usability and communication facilities for customers and partners.

VI. CONCLUSION

With the knowledge of the necessary ingredients for success in e-commerce, it is possible to build a highly profitable business on a consistent basis. An online shop creation based on a fully integrated discipline, among the many involved actors in the appropriate context of each kind

of market enables to create a confident attitude on potential on-line clients.

Therefore, it is of utmost importance not to distract them while compromising the balance of a whole website. There is still plenty of room for improvement in the market of online shops, as more and more people choose this kind of shopping, which enables entrepreneurs to get closer to its market, while presenting an appropriate solution for their clients' expectations. Moreover, while online shops may attract segments that can easily be taken on the basis of little investments, sometimes it is not given the necessary attention to aspects for enabling a good e-commerce practice. Often those aspects are due to lack of analysis and investigation regarding a set of proposed success factors described through this work, which many people trying out this kind of products selling do sub-estimate.

Such proposes success factors are related to the website, its design and usability, the brand and the marketing and web-marketing strategies, as well as social networks and concerns about the whole supply chain integration, along with other concerns, regarding consumers conversion, communication and support, while looking at quality data processing and secure payment methods and enabling a favorable image for reaching on-line shop credibility. Therefore, a more professional attitude is needed, as all these considerations are of biggest importance for enabling to make the difference between a modest online store and an online empire.

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