

CUSTOMER RELATIONSHIP MANAGEMENT ANALYZE FOR ON-LINE STORE

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Abstract. Over the past years, the online environment has known a fast development and growth world wide proving its efficiency in various areas and becoming more present in everyday life. A smaller percentage of visits come from web directors, these are seen as databases organized by activity domain. Direct visitors are fewer. That is why search engine optimization (SEO) is the most efficient and less expensive way of promoting a web site. Visitors that are looking for a specific product or service are directed towards the sites that suit the best their wants. This paper is trying to offer a concrete image regarding the optimum mix in e-commerce focusing on the strategy used and on the SEO tools, elements which are very important for e-business to generate traffic and build a suitable Customer Relationship Management(CRM).

Keywords: SEO strategy, CRM, e-commerce, traffic, search engine

1. INTRODUCTION

High technology had a great impact upon online market and on product quality in general, competitive parties having more difficulties in attempting to differentiate them from the others. In this dynamic environment a special attention is gained by the customer, companies orientating their actions more and more consciously towards their potential and actual customers.

Representatives of Romanian companies with online gift stores believe that, after a slower beginning with few players on the market, this business is starting to develop and to cover niche segments. But even though lately there were launched several stores of this type it can not be yet the matter of a maturation or saturation on this segment.

Nowadays on the Romanian online market there are both generalized gift stores and specialized gift stores, the first ones offering a mixed range of products. These ones are more demanded for their various offers from which customers have many acquisition options. The other ones are orientated on a specific niche, their offers being useful to specialized projects. Sales on online gifts market fluctuate depending on annual events, for instance winter holidays bring the higher revenues, then being the spring season with 1st and 8th march and Easter holidays. In the rest of the year, the market is sustained by projects, specific occasions and campaigns.

This paper is structured in four parts, the second section containing competitive advantage in e-commerce using SEO and CRM aspects and concepts, the third section concern on a comparative study between two web sites based on personalized gifts, while in the forth section are presenting the conclusions and future research.

2. COMPETITIVE ADVANTAGE IN E-COMMERCE

In the past thirty years, the Internet developed very fast, offering the base for electronic mail, World Wide Web and electronic commerce – e-commerce (Kelley, 2003), creating a market where buyers and sellers interact and make directly transactions in real time despite the physical restraints (Yun, 207). The online environment is a very competitive one; websites have to gain advantages to differentiate them from the others. Improving the *competitive advantage* implies attracting a bigger number of customers and increasing their retention rate, creating efficient long term relationships with them (Kelley,

2003). At first, customers are simply visitors on the website generated either by search engines or web directors, few being really direct visitors.

A *search engine* is a tool designed to search on the Internet for the web pages that best answer the questions posed by users, the relevancy being determined by an algorithm. Its robots called also bots, crawlers or spiders crawl following the hyperlinks they find, this process being named *spidering* (Rourke, 2008). The greatest search engine, Google, organizes the world's information and makes it easily and instantly available to anyone with access online (Wilson, 2008). A web site can become highly rated by search engines and this increases search engine visibility that will lead to intensive web traffic and more product sales or advertising revenue (Raa, 2008).

Marketers that are looking to use search to deliver customers have two possibilities of action: search engine optimization (SEO), in which clever use of keywords propels you higher up the natural listings, and paid search, commonly referred to as PPC (pay per click), in which you pay for a sponsored link (Gray, 2008). *SEO* is the process of trying to rank highly a given web page for specific keywords (Evans, 2007), is the science behind earning first page results in a natural search when using search engines (Wilson, 2008). Search engine optimization is the most efficient and less expensive way of promoting a web site. Visitors that are looking for a specific product or service are directed towards the sites that suit best their wants. *Keywords* can be formed from one word or a cluster of words, helping to identify what the web pages are about. Single keywords are the hardest to win but have the highest numbers of visitors while keyword clusters are easier to reach but drive less traffic (Wilson, 2007).

New web sites appear frequently and this determines the necessity of elaborating new strategies and the need of being innovative. A strategy consists in establishing goals and objectives, elaborating actions and allocating resources to accomplish them. Identifying, attracting, retaining and maintaining the profitable customers implies creating strong long term relationships with them (Sin, 2004). *CRM* is the strategic approach to manage these relationships, security, quality, comfort and confidence in a website forming an essential e-commerce background (Kelley, 2004). Companies can develop these relationships to customize the shopping experience, to predict better online buying patterns, to attract customers with special offers or services, to evaluate the economic advantage of each customer and to build long-term beneficial relationships for both sides (Chen, 2003).

If the company want to see which of two different versions of a web page is more effective it use *A/B testing* is a method of testing for an advertising campaign. It is called a *50/50 A/B Split Test*, and that leaves the decision of which page is shown to the visitor to coin toss predictability. In a basic *A/B test*, a random visitor is shown either the *A* web page (which is generally control page or the current design), or the *B* web page, which is the challenger page or new design. The reaction of the visitor is tracked, recorded and the results determine which page, *A* or *B* will become the new page for the website. Parameters involved include: number of visitors, whether the visitor leaves the page, stays and reads text, or makes a purchase based on what the web page looks like.

The effectiveness of *A/B test* must reach an audience within the target demographic, or, should be tested on the key audience the website wishes to reach, should be used to narrow down how individual changes work for or against the website. Changing too many variables at once will render the test useless, as the reaction of the visitors will not be judging just one change on the web page. To change multiple variations and test them, websites should use a multivariate test. Other variables that might be tested using an *A/B test* include: banner ads, e-mails, landing pages and other changeable variables (Brick, 2008).

3. CRM ANALYZE FOR ON-LINE PERSONALIZED GIFTS STORES

Search engine optimization contributes in gaining online success; CRM's strategies have to be integrated right from the beginning in the website project, to maximize customer satisfaction, rate of retention and loyalty and therefore the company's profitability (Petre, 2006). The traffic on a web site is generated especially by search engines from which approximately 90% of "organic" visitors come. In this paper we analyze two websites that promote personalized gifts: www.giftland.ro

and www.personalizarecadouri.ro. Even though the first one was launched in 2006 and the second a year later, the competition is very high in this field, this being a reason more for continuous optimization. Second store used A/B test to determine whether they have any effect on the behavior of visitors to the website.

3.1. Online Competition

Over half of all visitors to a web site come from a search engine rather than from a direct link on another web page (Evans, 2007) and that is why we concentrate on Google. Searching by the ‘cadouri’ keyword, a very competitive one and very hard to optimized, we have top ten positions: 1- www.fungift.ro, 2- www.cadouri.ro ,3-www.giftland.ro, 4- www.zaragoo.ro, 5- www.cadouri-funny.eu, 6-www.cadoul.com, 7 -www.cadourihaiioase.ro, 8- www.usbmania.ro, 9- www.cadouri-din-inima.ro, 10 - www.startoshop.com (Table 1).

The leader on this field is www.fungift.ro, a website that has tradition. It is easy to notice that www.personalizarecadouri.ro does not appear in the first results. Even though the competition is harsh, Gift Land has a good visibility being the third result. This is very important because according to some studies 73% of search engine users never look beyond the first page of returned results (Evans, 2007).

Keywords	S1- Before	S1- After	S2-A site	S2-B site	Competitors
Gift	14	2	59	50	www.fungift.ro
Personalized gift	2	1	4	2	NONE
Gift shop	5	7	>50	>50	www.fungift.ro , www.cadouri.ro/ , www.magazin-cadouri.ro/ www.kadoly.ro/ www.cadourihaiioase.ro/ , www.ideicadourionline.ro
Online gift	26	6	8	14	www.fungift.ro , www.cadouri.ro/ , www.magazin-cadouri.ro/ www.kadoly.ro/ www.cadourihaiioase.ro/
Funny gift	9	3	24	12	www.cadourihaiioase.ro/blog/index.php , www.dilishop.ro/
Men gift	17	3	>100	>100	www.myman.ro/ , www.fungift.ro/
Online presents	8	4	17	14	
“cheerful” presents	7	5	27	9	
Presents	5	3	45	50	

Table 1: Google position before and after optimization

A better optimization that both sites own is on the “cadouri personalizate” keyword, Gift Land being the first and Personalizare Cadouri the second on natural search. For other keywords, their positions are shown in table 2. Traffic.ro provides statistics, classifications and tools regarding the traffic on the website. For the same keywords used before, Gift Land is positioned second and Personalizare Cadouri is the eighth. For second site S2 B test we note with K1 to K5 keywords: K1- Cadouri personalizate, K2-Cadouri online,K3-Cadouri haiioase,K4-Cadouri aniversare,K5- Cadouri business, K6- Cadouri de suflet pe Google. In Table 2 we present dynamics evolution for summer to winter 2008.

Week	K1	K2	K3	K4	K5	K6
10.11.2008-16.11.2008	2	18	6	11	7	6

03.11.2008-9.11.2008	2	17	6	11	7	8
27.10.2008-2.11.2008	2	16	6	30	9	8
20.10.2008-26.10.2008	2	15	7	12	8	10
13.10.2008-19.10.2008	2	15	7	12	9	8
6.10.2008-12.10.2008	2	14	7	13	8	7
29.9.2008-05.10.2008	2	13	7	14	8	6
22.9.2008-28.9.2008	2	15	7	6	6	8
15.9.2008-21.9.2008	2	4	7	11	6	9
8.9.2008-14.9.2008	2	17	6	9	7	8
01.9.2008-7.9.2008	2	17	6	6	7	4
25.8.2008-31.8.2008	3	17	9	7	6	05
18.8.2008-24.8.2008	6	17	9	9	7	05
11.8.2008-17.8.2008	6	14	12	9	7	5
4.8.2008-10.8.2008	11	22	16	18	11	13
28.7.2008-03.8.2008	11	21	20	14	12	8
21.7.2008-27.7.2008	20	87	74	36	27	>100
14.7.2008-20.7.2008	5	89	45	48	42	43
7.7.2008-13.7.2008	32	>100	49	55	33	16
30.6.2008-6.7.2008	12	35	26	20	13	5
23.6.2008-29.6.2008	12	35	25	20	13	5
16.6.2008-22.6.2008	12	56	25	20	22	7
9.6.2008-15.6.2008	17	>100	60	>100	19	78
2.6.2008-8.6.2008	53	>100	71	>100	27	91

Table 2. Keywords and site positioning

Optimizing a web site is correlated with company's marketing objectives and it depends also on the available budget. However, limited marketing budgets can be used much more effectively in this medium than in almost any other, so long as strategic decisions are taken and followed. SEO offers a growing opportunity that can generate more business, build customer loyalty and create brand awareness (Kenney, 209).

3.2. Website Design

The first impression the visitor gets is the web site's design and structure and, of course, the load speed of the page. In case the user has to wait to actually see what is about this site he is accessing, he will abandon the page and go to another one, chances to coming back being severely reduced.

All pages should have the same style within a web site, an integrated design being recommended so the user to feel that he is on the same site. Maintaining a consistent interface can be done with

Cascading Style Sheet (CSS) technology that helps developers to create artistic effects on text-based links (Falk, 2005). Both sites have implemented CSS.

Comparing at first sight both web sites, it is visible that Personalizare Cadouri has a more clean and accurate design that does not tire the visitor. Gift Land has more vivacious colors, but it seems to have a disorganized appearance because of the announcement they put on the site.

Product pictures are optimized having the .JPEG extension for a smaller size that facilitates a higher load speed. Gift Land had transformed them into .GIF images, this action having even a bigger impact on the design. At both sites the user sees the products in images that could be improved because of their quality. The possibility to see the product in detail can have a positive impact on customer's perceptions. Another aspect is that their naming correlated with the actual product could generate more visitors from www.images.google.com, being recommended in both cases this optimization. Usually a picture should only be included in a page if it "adds" value to the page by improving informational content or enhancing the quality of the online experience (Falk, 2005). An important SEO aspect is having friendly Google links that suggest what information can be reached through that page.

Creating quality content and having useful information to attract many visitors is very important in e-commerce because customers can not evaluate physically the quality of the products (Yun, 2007). Both sites have a rich text describing products, being also an optimization objective to practically exist in search engines databases.

3.3. Pages load time

Images are very important in e-commerce, but could also generate some problems regarding long load times and difficult navigation. The general rule is that a page should load in less than eight seconds, which means the aggregate size of the web page should be fewer than 56k bytes (Falk, 2005). Making a test on www.iwebtool.com both sites confirm positive results. Figure 3 gives back the situation from this aspect in the case then two presents stores rom with www.giftland.ro 0.05 seconds and 42.06 KB size and www.personalizarecadouri.ro with 0.22 seconds and 42.06 KB size.

Figure 3: Average Speed

#	Domain name	Size	Load Time	Average Speed per KB
1	www.giftland.ro	42.06 KB	2.13 seconds	0.05 seconds
2	www.personalizarecadouri.ro	13.3 KB	2.98 seconds	0.22 seconds

Another test, more detailed, performed on www.websiteoptimization.com reveals that on www.personalizarecadouri.ro there are more than 20 objects per page and what it is above (6 of them) accounts for more than 80% of whole page latency. There are also pages with total size of 2219440 bytes which will load in 447.53 seconds on a 56Kbps modem, needing to be reduced to fewer than 100K for 20 seconds response time. www.giftland.ro has the same warnings about the objects on some of the pages. Regarding sizes, there is one page with 171689 bytes which loads in 228.39 seconds on a 56Kbps modem. The total size of external CSS is 29348 bytes (over 20K) and has to be optimized by eliminating whitespaces or using shorthand notation, combining multiple CSS files where appropriate.

3.4. Customer interaction and feedback

Both web sites have sitemaps that help visitors to navigate easier and to find faster the information they need. Unlike Personalizare Cadouri, Gift Land is more orientated towards customer interaction containing in addition newsletter, search option and even a blog.

The newsletter regards the promotion of the newest offers and products and is a way of maintaining contact with loyal customers through information creating trust and credibility. This mean has a less pressure on the customer than other promotion ways. When there are a lot of products on the site that could confuse the hurried user, he search option is an efficient tool to get straight to the wanted offer. Another competitive advantage is the existence of a blog where there are posted articles with a personal character. This is like an online journal through which promoting campaigns can be made.

Constantly gaining information about customers reduces the need for traditional marketing research tools such as customer surveys and focus groups. It is possible to identify and report by product or service, geographic region, distribution channel, customer group, and individual customer. Information is then available to all customer contact points in the organization. Customer data includes all sales, promotions, and customer service activities (Chen, 2003).

3.5. Customer loyalty

The explosive growth of the Internet has also brought new understandings to creating customer relationships. Nowadays customers have a greater access to the organization information and benefit from real time transactions, having the possibility to order online, customer service is gaining new approaches. A recent report describes how successful Web sites are in building lasting relationships with “e-customers” by offering services that traditionally were impossible to offer. Customers expect organizations to anticipate their needs and provide consistent service at levels above their expectations. In return, customers are loyal to the organization for longer periods of time (Chen, 2003).

The attention paid to the key customers and CRM make more efficient the strategic actions of the company, knowing that not all customers are wanted in the same way and that not all of them are profitable. Statistics show that 80% of profits come from only 20% of the customers (Sin, 204).

If we analyze new visitors versus returning between 03.4.2009 – 22.4.2009 we can conclude that S1 has 71,44% (368) New visitors and Returned visitors

<u>www.giftland.ro</u>	28,56%	147
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<u>www.personalizarecadouri.ro</u>	60,92%	53	39,8%	34
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According to traffic.ro, in the last 30 days, 1212 users visited www.giftland.ro and 1959 www.personalizarecadouri.ro, having only 16% of the amount of visitors the competitor had. That is why, even if the returning rate is higher in the second site, it is not that relevant because of the physic score.

For the period 03.4.209 – 22.4.209, the bounce rate for Gift Land is 36,03% and for Personalizare Cadouri is 42,52% which means that more visitors left the second site after one post.

Using technology like CRM to optimize interactions with customers, companies can learn from past interactions to optimize future ones. CRM systems accumulate, store, maintain, and distribute customer knowledge throughout the organization. A decisive role in CRM is played by the effective management of information (Chen, 2003).

4. CONCLUSIONS

CRM has an important impact over the e-marketing, aspect which leads to financial performances and of course to profit. Even though Customer Relationship Management can maintain or increase the success, but it does not create it. Both business studied need improvements, the feedback from customers being essential in obtaining the information about what wants the clients have.

Analyzing the statistics provided by www.traffic.ro for the web site www.personalizarecadouri.ro we noticed that the site has a significant number of clients, but the degree of returning of site is very small.

Furthermore, the site confronts some issues regarding the design, especially the absence of dynamics that attracts the visitors, that incites them to spend much then 0-10 seconds on the site. In this case, the business is like an unpolished diamond which can be confounded with a simple coal, the e-marketing and the strategies of CRM being the saving solution.

The number of competitors in the domain of online stores of presents is considerable and only a continuous interest for gaining and maintaining good positions of the site in the first page of the search engines will create a reliable and trustful image for www.personalizarecadouri.ro and www.giftland.ro. The presence of one page named "Portofoliu" could be favorable for the site www.personalizarecadouri.ro because they already have posted their partnerships. We believe this could be made more obvious for visitors.

By Google optimization of these web stores it was managed to reduce a lot of advertising costs. The investment in site optimization for www.personalizarecadouri.ro could become in a relative short time one of the most efficient actions of promoting the business and their products. Also, in this moment the only advertisement that Gift Land company is paying is the publicity by banners on the Romanian portals such as: www.acasa.ro , www.subs.ro , www.movieclip.ro , portals with big traffic that will create a positive image and even a brand building: "Gift Land". Although, the company management at beginning saw the idea of site optimization with reticence and the optimization costs were seen as too high, the conclusion was: "It is the most efficient investment in promotion which our company could make on the way of its online existence. All our stores are now in the first page of Google and all the stores have doubled the sales, the image of stores has increased in the mind of online customers and also the firms image in the mind of judicial persons in Romania."

REFERENCES

1. Chen, I. & Popovich, K. (2003), Understanding customer relationship management (CRM), Vol. 9, No. 5, pp 672-688
2. Evans, M. P. (2007), Analyzing Google rankings through search engine optimization data, Internet Research, Vol.17, No.1, pp 21-37
3. Falk, L. & Sockel, H. & Chen, K. (2005), E-commerce and customer's expectations: what makes a website work, Journal of Website Promotion, Vol.1
4. Gray, R. (2008), A balancing act, Marketing, pp 59
5. Kelley, L. & Gilbert, D. & Mannicom, R. (2003), How e-CRM can enhance customer loyalty, Marketing Intelligence & Planning, Vol.21, No.4, pp.239-248
6. Kenney, Brad (2008), How Strong is Your Brand Online?, Industry Week, pp 62-63
7. Petre, M. & Minocha, S. & Roberts, D. (2006), Usability beyond the website: an empirically-grounded e-commerce evaluation instrument for the total customer experience, Behavior & Information Technology, Vol.25, No.2, pp.189-203
8. Raa, Jim (2008), Searching for more traffic?, eWeek, pp 50
9. Rourke, Kevin (2008), *Going organic – An auto parts merchant covers the basics of natural search*, Multichannel Merchant, pg 21-22
10. Sin, L. & Tse, A. & Yim, F. (2005), CRM: conceptualization and scale development, European Journal of Marketing, Vol.39, No. 11/12
11. Wilson, Scott (2008), All You Need to Know About SEO, Pharmaceutical Executive, pp 147-148
12. Yun, Z. & Good, L. (2007), Developing customer loyalty from e-tail store image attributes, Managing Service Quality, Vol.17, No.1, pp 4-22
13. www.giftland.ro
14. www.google.com
15. www.iwebtool.com

16. www.personalizarecadouri.ro
17. www.traffic.ro
18. www.websiteoptimization.com
19. [Brick] <http://www.brickmarketing.com/website-marketing-definition-glossary.htm>, last access: 20-10-2008
20. <http://www.searchengineoptimizationjournal.com/>