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OPTIMIZING SALES OF ONLINE SHOPPING CART  
WITHIN THE DIGITAL CUSTOMER LIFE CYCLE

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# OPTIMIZING SALES OF ONLINE SHOPPING CART WITHIN THE DIGITAL CUSTOMER LIFE CYCLE

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*The purpose of this thesis was to demonstrate the optimization of sales online within the digital customer life cycle. Within this thesis research the objective was to test and analyze whether an automatic testing and targeting of different versions of content would optimize the case company's online shopping cart success. The case company's online shopping cart success was determined to be measured by five major key performance indicators; increasing the shopping cart conversion rate, increasing the average order value of the shopping cart, increasing the revenue per visitor of the website, lifting the overall turnover of the website, and producing these KPI's with confident data.*

*The methods used were A/B testing, Multivariate testing and behavioural targeting. Tools and systems used to conduct the research with set methods were Omniture's Test and Target and SiteCatalyst for web-analytics.*

*In this thesis the customer life cycle model used is the one of Steve Jackson's REAN model. The REAN model helps to define the phases and functions to be measured and analyzed with web-analytics. These REAN phases consist of reaching the prospects, engaging and activating visitors and nurturing the customers. Applying the strategies and tactics of shopping cart recovery together with web-analytics and testing and targeting methods will result in the action research framework used within this research.*

*The application of this research was a success. The tools were working well and towards the goals, and results are shown with respectable data. During the research the effect of optimizing shopping cart success with A/B and Multivariate testing was proven and the case company was able to see tangible increase in their revenue per visitor and overall shopping cart success.*

*The definite challenge for thesis was to find adequate and up to date sources. The researcher is a professional, inventor and author of Web analytics and Online Marketing Optimization himself and therefore most of the content is produced by the researcher and only the most current and up to date sources have been used within the text. The Appendix 1 of this research shows also a list of secondary sources that assist in understanding some of the concepts and other ways and views for the research topic.*

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## GLOSSARY OF TERMS

This glossary of terms should help the reader to understand better some of the industry jargon presented in this study. These terms have been gathered with experience of the researcher and from the leading vendors of analytic industry.

**Abandonment:** Visitor exits or leaves the website in the middle of conversion funnel and does not return later in the session.

**A/B Testing:** A method of testing variables for baseline control content by publishing 1 or more tests for separate changing content advertising testing by which a baseline control sample is compared to a variety of single-variable test samples. This method has been recently adopted from direct marketing within the interactive space to test tactics such as banner ads, emails and landing pages.

**Acquisition:** The process of gaining customers through the means of different marketing strategies. For the purposes of web-analytics, it often refers specifically to the process of attracting visitors to a web site.

**Ad:** Text, image or video that contains a link which directs visitors to a website when clicked on.

**Bounce Rate:** The percentage of visitors leaving the site after viewing only one page of the website.

**Conversion:** An action that illustrates the completion of a defined activity. Usually conversion refers to buying a product, signing up and registering, or downloading a file.

**Conversion Rate:** The percentage of all visitors that convert. See conversion.

**Creative:** For the purposes of web-analytics, "creative" describes the characteristics of a marketing activity, such as color, size and messaging-for example, a "Buy Now" graphic.

**CTR: Click-Through Rate.** A click through rate is the rate at which visitors "click through" from one website page or property to the next. CTR is a good indication of an ad's effectiveness.

Customer Segment: Segregating website visitors to subset of visitors based on their psychographics, demographics and behavior.

Landing Page: Landing page is a web page created for specific marketing purpose.

Search Engine optimization Landing Page is a page created to be ranked well in organic search results. Conversion landing Page is a page created to test variables of content in order to convert visitors better.

Entry Page: The first viewed page.

KPI: Key Performance Indicators, KPI, are the most critical measurement indicators that help visitors to see the performance of the website faster and easier.

Multivariate Testing: A process by which more than one component of a website may be tested in a live environment. It can be thought of in simple terms as numerous split tests or A/B tests performed on one page at the same time. See A/B testing definition for more information.

Page View: is generally defined as a request to load a single page of a website. On the web, a page request would result from a web surfer clicking on a link on another page that point to the page in question. See also hit.

ROI: Return on Investment

Visitor: Visitor refers to an individual browser that enters a website. A visitor can have multiple visits to website.

Visitor Session: The session begins when visitor enters the website and ends when the visitor leaves the site. In most cases, if a visitor has left a site or has not executed a click within 30 minutes, the visit session will terminate.

Visit: A visit is an interaction a unique visitor has with a website over a specified period of time or activity.

(The researcher, 2009)

## 1. INTRODUCTION

In today's world economy, businesses seek to invest in short-term solutions to drive more sales and to cut cost. As the online presence has become a necessity for practically all businesses so is need for online business optimization solutions increasing. This topic is of interest to all enterprises selling products online as well as to those practitioners aiming to optimize the sales online. It has become a standard in Online Business Optimization for companies to utilize different applications of Customer Life Cycle Models when implementing new processes and tools within their organization. In this thesis the CLC model used is the one of Steve Jackson's REAN model.

The REAN Customer Life Cycle on Online Marketing can be defined by four phases as described within Cult of Analytics by Steve Jackson (2009). These phases are:

1. Reach: The means to attract visitors that are prospects or exiting customers to a website.
2. Engagement: How much (length and depth) the visitor consumes the content of a company's website?
3. Activation: The means to activate visitors to convert towards website goals and objectives.
4. Nurture: The means to cater the existing customers or registrants with re-marketing tools and processes. Often defined as e-mail marketing combined with personalized webpage, such as 'My Pages' in travel websites.

This thesis will focus on case company's activation phase with even detailed focus on optimizing the Shopping Cart process with testing and targeting tools and methods. Shopping cart is defined in more detail in further chapters.

The case company is selling consumer products globally online. The researcher has defined specific goals that should be reached by testing different versions of the content also referred to as recipes and by targeting for visitors based on their behavior, demographics and other CRM data. The goals in this project are following:

1. Increasing the amount of products added to shopping cart in an online shop in comparison to the amount of visitors, thus increasing the Conversion Rate.
2. Increasing the Average Order Value of the shopping cart.
3. Increasing the revenue per Visitor of the website.
4. Lifting the overall turnover of the website.
5. Producing the above with confident research data.

In order to increase the amount of products added to shopping cart the case company will need to convert more visitors from landing pages to product pages and convert them to add the products to cart. Simplified website visitor abandonment process is shown below in figure 1.

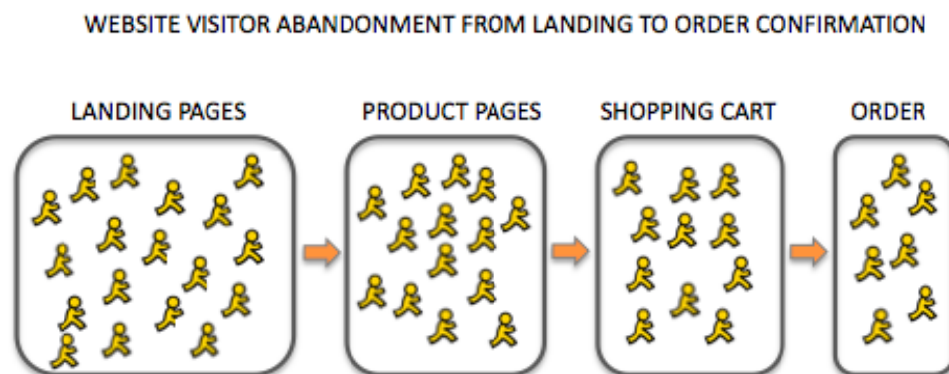


Figure 1. Website visitor abandonment from landing to order confirmation. (Heinonen, 2009)

The increase in conversion will be the result of utilizing testing and targeting. Testing will allow us to persuade to cross-sell more in order to increase the average order value of confirmed order and targeting solutions will help us to target the content based on the previous behavior or visitor demographic data in order to increase the average order value. The actual empirical research will show how A/B



testing, multivariate testing and targeting can affect on each step in the process. A/B and multivariate testing are explained in section 5.3 and behavioral targeting is explained in section 5.4 of this thesis.

Objectives of this thesis are to show different methods to optimize case company's shopping cart process to optimize online sales of consumer products as well as to show that testing and targeting the content will help save money and drive more sales. In more detail, the objectives are to show how testing and targeting can improve the website persuasiveness with small changes to product pages, headlines of the web content, web copy text of the content, banner ads and other calls to action. Calls to action are practically any means of persuading visitors to perform the desired action on the website.

There are several rather new terms and concepts related to digital marketing in this thesis. The key terms are defined in the glossary of terms at the beginning of this thesis.

In order to illustrate the positioning of the research problems within the Digital Customer Life cycle the study will begin with explaining the Digital Customer Life cycle and how a business can be present in each phase in the Digital Customer Life Cycle. The phases of Customer Life Cycle are being defined in chapter 1. The study will continue by explaining in more detail the Shopping Cart Process and its role in the Engage and Action phase of Digital Customer Life Cycle. The Shopping cart Success chapter will demonstrate the means to measure, analyze and optimize the shopping cart success. The results will be analyzed and utilized for optimization of the case company's Shopping cart by conducting action research methods called A/B Testing, Multivariate testing and Behavioral Targeting. The Conceptual framework shown in figure 2 explains the hierarchy of theories and concepts used in this research.



Figure 2. Conceptual framework

The conceptual framework in figure 2 shows the hierarchy of concepts required to be studied within this research. On a high level the digital marketing customer life cycle approach will explain in how the customer interacts with web marketing and web sites. The interactions are segregated into four main categories reaching the visitors, engaging the visitors, activating the visitors and converting them into customers and nurturing customers in order to keep the customers and to up-sell more of the same product and cross-sell more of companies other products. The research focus of the customer life cycle approach is within the engagement and activation phase via shopping cart of case company's website. The success of the activation is measured by analytics solutions and specifically web-analytics solutions which will be explained in chapters 3 and 4. The web metrics and Key Performance Indicators form the base of success benchmarks. These success benchmarks will be utilized within the optimization tools and techniques. The optimization techniques used are A/B and multivariate testing and targeting by behavioral and demographical data of the website visitors. Solutions used are Omniture SiteCatalyst and Omniture Test and Target.

The researcher, Kalle Heinonen is a pioneer in online marketing and business optimization. Together with his business associate Steve Jackson, Kalle Heinonen brought Web-analytics Association (WAA) to Finland and was running the WAA Finland 2005-2009 and is still influencing in the board of directors of WAA Finland. The researcher is currently the Chairman of Search Engine Marketing Professionals Organization (SEMPO Finland). Kalle Heinonen has been selected in 2006 and in

2007 as one the TOP 100 TIVI (IT) and TOP 10 Electronic Services influencer by Tietoviikko the most popular IT Business magazine in Finland. Kalle Heinonen is currently developing full-time the business of Omniture in Finland, Baltic and Russia as well as influencing as member and advisor in several Board of Directors.

This particular topic has been of interest to Kalle Heinonen for some years now. In the online stores as in brick and mortar stores the science of being able to persuade shop visitors to buy and to buy even more than they originally anticipated is of interest to most business owners and stakeholders responsible of the sales success of a shop or online shop. This is also the trigger that inspires the researcher to focus on studying the testing and optimizing of the online shop buying behavior. The source material for this topic is very limited and the publications found are mainly Ad Hoc research provided as online publications, articles and reports. The Researcher is an inventor and author of many theoretical models used within the industry and thus the source of this research is from many parts driven by the researcher himself.

## 2. ONLINE PRESENCE AND DIGITAL CUSTOMER LIFE CYCLE

How to lure the prospects and please clients? Fragmented is not just the Internet but other digital means of marketing as well. Marketing has never been easy. Yet, the different marketing tactics as understood, pre-Internet, used to be quite straight forward. As the means of marketing get more complex the better and faster tools and processes are being developed for managing and monitoring the marketing efforts. Tools and processes are helping, yet marketing is still not easy. The fragmented means of marketing in a digital eco-system has made us understand the complexity of marketing as a concept. There are nowadays myriad of different ways to be visible and interactive with customers and prospects within the digital eco-system be it online, mobile, digital TV or digital Radio.

For a business, selecting the best way and the best strategy to be present in the Internet should be based on at least the four (4) main questions:

- a.) Where and how the customers and prospects of a company are consuming the Internet?
- b.) How can a company engage its customers and prospects online??
- c.) How can a company activate and convert its customers and prospects online?
- d.) How can a company maintain and retain its customers and prospects online?

Linking the above questions with budget allocations and Business goals and answering those major questions with subsequent questions and answers will help defining how a company should be present online. Illustrating the different means to be present in Online Market is probably best shown with the Customer Life Cycle Approach. In this document the Customer Life cycle Approach used is the REAN model designed by Xavier Blanc, Steve Jackson, Leevi Kokko and Tommi Pelkonen during their work at Trainers' House. The researcher was giving his share for the development of the REAN model as well.

We can state that there are several ways to reach, engage, activate and nurture visitors and customers online. All these elements of influencing the people via Digital Life cycle are crucial part of understanding holistically the external influence to shopping cart success and therefore they are being defined here.

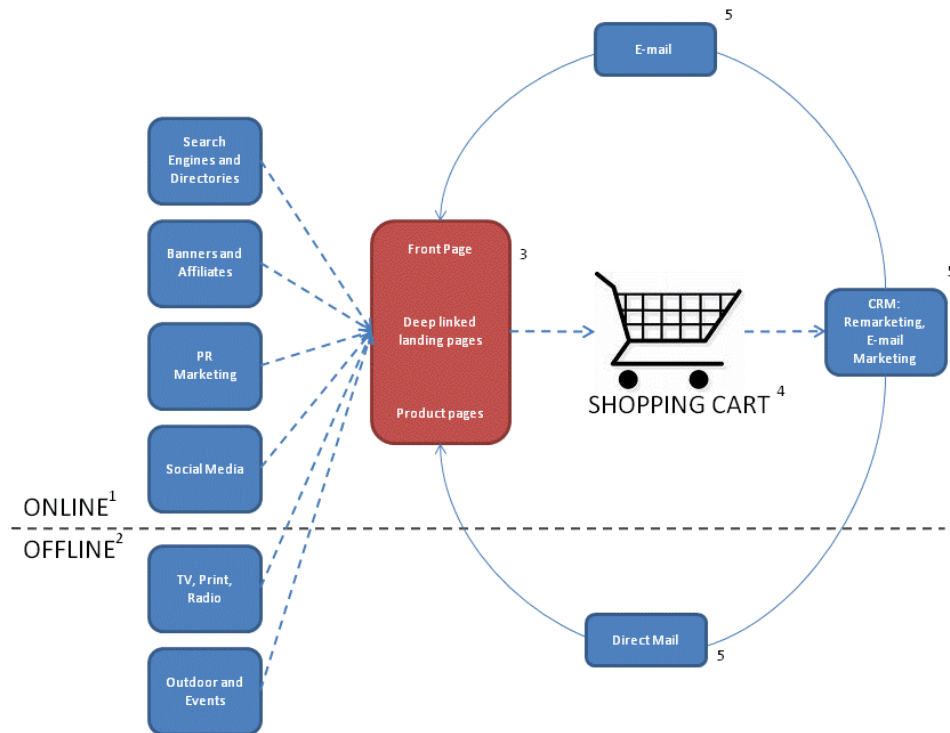


Figure 3. Extended Digital Customer Life cycle

Figure 3. shows the position of online shopping cart within the extended (offline included) digital customer life cycle. 1) Online and Mobile Marketing functions and ways to reach visitors, 2) Offline Marketing functions and ways to reach visitors, this could include much more events such as kiosk, store, different 1-to-1 and 1-to-many sales interactions, 3) Engaging visitors from online and offline, 4) Shopping Cart Process, 5) Re-marketing tools and methods. Within the next paragraphs this life cycle approach is being explained through four life cycle phases: reach, engage, activate and nurture. (Jackson, 2009)

## 2.1 Reaching Prospects and Customers

Understanding the definition of prospects and customer segments has never been more important as today in online media. Within traditional print, TV and radio advertising especially the media coverage has never been too accurate even though most mass media are providing detailed profile cards of their media users. Within

online media the visitors can be segmented very accurately due to technological enablers such as cookie based measurement of browsers and intelligent systems to gather and process the visitor data. These tools are defined as web-analytic or business intelligence tools and systems. In the Internet, it is rather well known where, in which media, the prospects and customers and consuming time. As it is known where they are thus the aim is to provide them with a message such as banner ad that drives those relevant visitors, prospects or customers, to the website. Driving the right kind of people to right section and right page on the website is crucial for the success of the online shopping process. If the visitor is led from banner ad to a completely irrelevant product page on the website they might leave and never come back to that store again. Well describing analogy of such event in visitor acquisition of brick and mortar business is one in which a shop selling electronic products is advertising a type of digital camera on local paper and directs the visitors to another shop in the same chain of shops which does not have that particular digital camera in their store. End results of such an event might be somewhat harmful for the trustworthiness of the advertisement of that store in future.

In A/B testing and targeting based optimization of an online shopping process and shopping cart the visitor source plays an important role. As explained above, certain types of people come from certain referring sources. In A/B testing and targeting one can create rules that optimize the landing and product pages and elements within pages based on successful previous behavior in combination with visitor source, landing page. This is why reach plays important role in A/B testing and targeting.

New types of Digital Media are evolving practically quarter annually and many of the new forms of advertising carry similar features: they are viral, community driven, measurable and contextual or targeted. These features are explained within below forms of advertisement. Most used form advertisement are display ads, text ads, content ads, video ads and Podcast Ads. Currently there are at least these types of reach sources that can be defined as follows:

*Search engines; Paid search such as Google, Yahoo and MSN*

There are several ways of reaching prospects and customers via paid search channels. Traditionally, paid search is understood as text ads appearing along side the organic

search results on the search result pages. See figure 4 for illustration of paid and organic search. Paid search is also understood often as keyword driven contextual advertising. Such contextual advertising is not technically search engine marketing rather it is often closer to display advertising but also related to search engine marketing.

Figure 4.

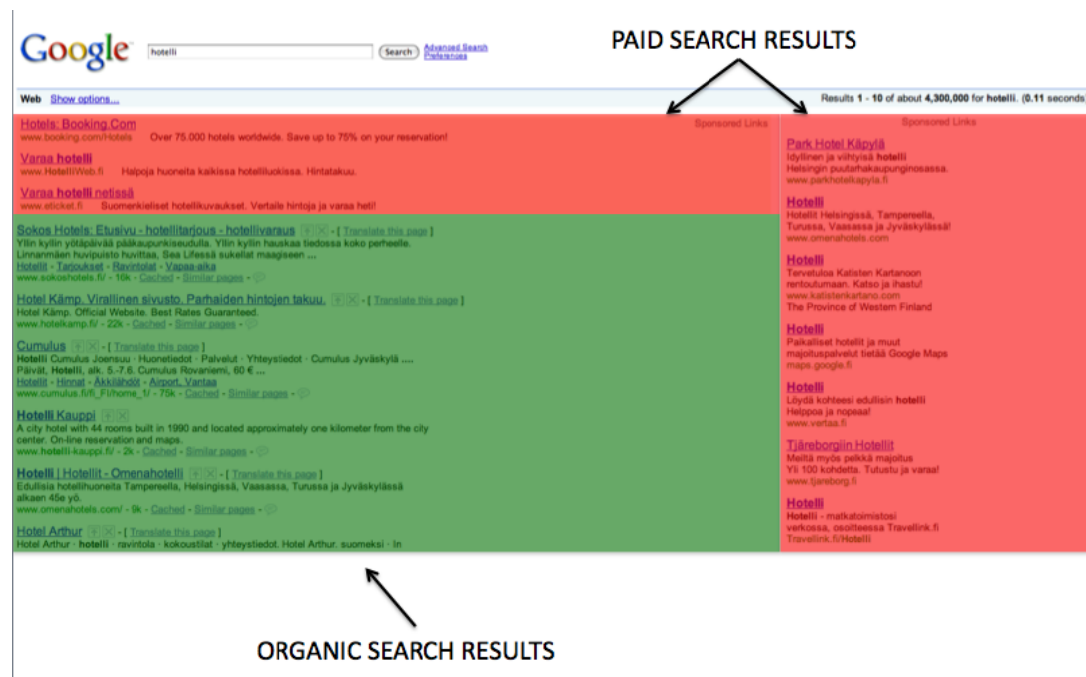


Figure 4 illustrates how within search result pages, SERP, the paid and organic search results are published. Green area illustrates the organic, free inclusion and the red area illustrates the paid inclusion.

### *Search engines; Natural search such as Google, Yahoo and MSN*

Natural search marketing is better known as Search engine Optimization and SEO. Optimizing website visibility on search engine is somewhat revealed and somewhat unrevealed science. The major search engines never unveil their indexing algorithms but search engine optimizers all over the world are trying to learn of search engines' way of ranking the relevance of websites thus failing and succeeding to tweak the search results by making changes to technical and contextual elements of the website as well as external linking of the website. Most professional SEO experts are constantly successful in increasing the visibility of the website on search engine.

*Blogs; Wordpress, Twitter, Blogger, Blogspot, Wataba.me*

Blogging and micro-blogging has rapidly become an integral part of most companies' web marketing strategy. There are four high-level ways of doing marketing via blogs:

1. Writing blog post or micro-blog status on company's blog or in one of company's employees' blog.
2. Finding the influencers on the web and advertising on their blog-site.
3. Commenting on external blog and back linking to company's blog or business website.
4. Writing or commenting on blogs or News websites that influence the blogging influencers.

*E-mail marketing*

E-mail marketing can be either pull or push marketing depending on the nature of the content and type of recipient registry. If the recipient has subscribed to receive certain type of E-mail content is this kind of marketing considered as pull marketing and also more effective way of marketing as it has been specifically requested by customer. If the same subscriber is receiving other types of e-mail marketing is that often not as effective as they have not requested that. E-mail marketing that is directed to recipients that have not opted-in is always considered as push marketing. The three most common types of content in E-mail Marketing are sales, support and information sharing.

*Contextual Advertising; maps, local search, image ads, video ads and gadget ads.*

Contextual advertising and contextual paid search marketing are somewhat overlapping by their features. Contextual advertising is such form of advertising in which the advertisement creative is pulled and published by keyword or content theme. The form of advertising in contextual advertising can be of any form from display and video to gadget ads as long as the ads are driven by content. Contextual ad placement is shown better in below figure 5.



Figure 5.

**TripHub** **TURISMO DE PORTUGAL** **lisboa** **www.visitlisboa.com** **www.visitportugal.com**

## Group Trip Advisor - A Blog Devoted to Group Travel

### Planning Guides

Group travelers have unique needs, depending on the trip purpose. Bachelor party planners debate over which type of alcohol to consume and whether or not a stripper is appropriate. Family reunion organizers decide how big of a reunion to have and where to have it. Brides and grooms deliberate on pros and cons of a destination wedding or a home-grown wedding.

Peruse these planning guides to find tips, advice, and new approaches to planning anything from a road trip, to family vacations, to ski trips, to weddings, to girls getaways, and more.

**Family Reunion Planning Guide:** Gathering the generations together takes time and patience, but is worth the lasting memories.

**Group Getaways with Friends:** Travel with college friends, poker pals, other couples, golf buddies, or just the girls.

**Wed**  
affai  
deta

**Ski C**  
plann  
slope

**Group**  
reser

**Club**

ed  
n the  
jal  
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flight  
ert

**CONTEXTUAL ADS THAT ARE DISPLAYED ON THIS TRAVEL WEBSITE AS PART OF THEIR GOOGLE ADSENSE -PROGRAM**

**Ads by Google**

**Trip Advisor**  
Book Direct and Save on Travel. Quickly Search 100+ Airline Sites  
Kayak.com/Trip+Advisor

**Pemba - Honeymoon Island**  
The perfect island for romance. Luxury accommodation & adventure  
www.themantaresort.com

**Buy & Sell TimeShare**  
Anfi del Mar recommended resale company OTE member Buy or Sell  
www.VisionsOfTheWorld.com

**Hotel Military Discounts**  
Discounted Hotel Rooms for Service Men & Women, 30+ Hotels in USA  
www.pyramidadvisora.com

### *Mobile Advertising; SMS, MMS and Mobile Flash Ads (service ads)*

By nature, mobile advertising is exactly similar to E-mail advertising. Mobile advertising can be either pull or push marketing depending on the nature of the content and type of recipient registry. If the recipient has subscribed to receive certain type of Mobile Messaging content is this kind of marketing considered as pull advertising and also more effective way of advertising as it has been specifically requested by customer. If the same subscriber is receiving other kinds of mobile messaging content is that often not as effective as they have not requested that. Mobile advertising that is directed to recipients that have not opted-in is always considered as push marketing. The three most common types of content in Mobile advertising are sales, support and information sharing.

### *In-Game Ads; MSN, EA Sports, Google*

MSN is currently one of the forerunners of in-game advertising. This kind of advertising may appear before, during and after the game during the load time and during game often as billboard ads. Google is latest arrival of In-Game Advertising platform providers. They provide video, display and text ads for their marketers to

reach consumers via google In-Game Network that include fairly large Game Industry Businesses such as Konami.

Figure 6.

The image shows a Facebook game interface for 'Frogger'. The game screen is framed by a black border with 'KONAMI' and 'Frogger' logos at the top. Inside the game frame, there is a text ad by Google. The ad has a dark background and white text. It includes the following text: 'Play Free Games', 'Play Your Favorite Games Free. Action, Car, Video Games & More! www.SpeedFunGames.com', 'Play Free Arcade Games', '100% Totally Free Games to Play Play 1000s of Free Arcade Games GamePals.com/Arcade\_Games'. Below the ad, there is a green banner that says 'FREE ONLINE PLAY OF FROGGER IS PROVIDED THROUGH THE SUPPORT OF OUR SPONSORS'. At the bottom of the game screen, there are two player avatars, Ryan and Eric, with scores of 2296 and 4946 respectively. The Facebook interface is visible at the top and bottom of the image.

Text Ads by Google inside a game on Facebook.

*Social Media Advertising; Youtube, Facebook, MySpace, Hi5, Flickr, LinkedIn, etc.*

Social Media has opened businesses a new way of interacting with customers and making the customers participate in brand building and selling via digital channels. Websites like Facebook, LinkedIn and Youtube offer businesses to create channels, groups and applications that can make the users of the website to act on behalf of the company on the company's favor.

### *Editorial ads; Articles and PR news ads*

Editorial ads are content that have the nature of editorial material but are actually paid inclusions in editorial form. Such editorial ads can be in form of PR News, article, video, podcast, mobile advertising and e-mail advertising.

### *Affiliate marketing*

Affiliate Marketing is an Internet-based marketing practice in which a business rewards one or more affiliates for each visitor or customer brought about by the affiliate's marketing efforts. The Affiliate Marketing industry has four core players at its heart: the Merchant, the Network, the Publisher and the Consumer. The market has grown sufficiently in complexity to warrant a secondary tier of players, including Affiliate Management Agencies, Super-Affiliates and Specialized Third Parties vendors. Affiliate marketing overlaps with other Internet marketing methods to some degree, because affiliates often use regular advertising methods. Those methods include organic search engine optimization, paid search engine marketing, e-mail marketing, and in some sense display advertising. On the other hand, affiliates sometimes use less orthodox techniques, such as publishing reviews of products or services offered by a partner. Affiliate marketing—using one website to drive traffic to another—is a form of online marketing, which is frequently overlooked by advertisers.[citation needed] While search engines, e-mail, and website syndication capture much of the attention of online retailers, affiliate marketing carries a much lower profile. Still, affiliates continue to play a significant role in e-retailers' marketing strategies. (Wikipedia, 2009)

It's important for online shopkeeper to understand the entire shopping discovery process and the diverse methods of reaching the prospects, the nature of the digital marketing channel and tying the visitor behavior from those channels to visitor behavior on shopkeeper's website and shopping cart. It's important to understand how they got to the site and even more important to understand where, from which reach sources the each type of visitor are most likely entering the website in order to understand how to best engage and persuade them to buy.

## 2.2 Engaging and Activating Visitors

Engagement and Activation are part of customer life cycle in which the customers and prospects are interacting and being persuaded within such web entity in which they can read and consume the content, be persuaded and eventually activated. How can the visitors be engaged? How they are engaged? The means to engage the website visitor to consume the website based on individual website's Engagement Index. Engagement Index defines most often the two things that define the level of engagement per visit: A.) The length of visit; how long did the visitor stay in the website? B.) The amount of pages viewed during the visit session. Activation is defined as the means to activate visitors to convert towards website goals and objectives. These conversions are often explained as lead generation, sales online, downloads or registrations online.

Businesses have seriously started investing in websites since late 1990s'. It has become such a standard, that nowadays, when companies are being established, their first step in the name selection process is the web. People will ask themselves: "Sounds good, but is the domain free?" The researcher notes that: "A friend of mine has company selling solar power solutions online and another one has an e-shop for sporty new moms and dads. Both of them selected the name of their business based on the available good domain name". The business reason of setting up website varies even though mainly the reason is to sell more one way or another. Business reasons for setting up the website affects the decision making in digital marketing. Website is an integrated marketing strategy that utilizes other strategies and tactics. The web is more than a 'read only' medium, unlike in traditional media, in web companies can form a dialogue, interact, activate and engage their customers. The digital era brought us onto the trial-and-error culture. No matter how bad your new product launch is, you can many cases launch again and again, with different online identity, brand and domain.

### *Types of websites and webgets for engaging the visitors*

In Digital Marketing the users of the digital media can be engaged either via a type of site website or mobile site and webgets such as gadgets and widgets that are often providing content and services stripped from the website. The types of websites and webgets:

*Portal; Gateway website*

Web portals are definitely the most traditional ways to provide content and services over web. Portal is a doorway that shows the way to navigate via website to all information provided by a company on web.

*A Microsite; Local microsite, Product microsite.*

Micro-sites are often seen on web portals of businesses working on global scale. Microsite can be for example localized version of the main site. Localization is strategically important for international corporations. In this era the global online presence is not always enough and the localized presence is often required. Websites are modified, translated and applied to send the corporate message, product launch (product marketing microsite) information or to support (support site) local society with their language, culture and class.

*Intranet; Corporate internal website*

Intranet is a secure web service that can be accessed by employees and members of an organization. The use of intranet is often related to administrative tasks, information sharing, infrastructure support and training.

*Extranet; Internal website for Interest groups*

Extranet differs from intranet in that extranet can provide content for customers, investors, partners and media. The contents of extranet are related to business relationship supported services and information sharing.

*The Corporate Wiki and Business Portals; Social media for corporate*

This type of social media for enterprises can be used as an intranet and/or extranet service. Blarp, Business Live Action Role Play is a type of Corporate Wiki and

combined extranet developed by Finland based company Trainers' House to motivate employees to achieve their goals.

### *The WebGets; Widgets and Gadgets*

The webgets are traditionally feed based (fetching content from master site) application or mini-sites that are actually auxiliary to the main website. Feed based means that the content and service is updated by XML feeds as the main website is updated. Widgets and gadgets are sitting on desktop of a PC or as an application on mobile phone. Google gadget ads can be nano-sites within the advertisement space that can have stripped version of features those of traditional website.

## 2.3 Nurturing Customers

Once the visitor has been converted to customer they should be catered and taken care based on planned activities called Nurture tactics. Nurture strategy aims at retaining the current customers, selling more of the same or cross-selling products and services for the existing customers or registrants.

Traditional nurture tactics include:

### *E-Mail Marketing; tactics for Re-marketing*

There are many scenarios for utilizing E-mail Marketing in nurturing existing customers or re-marketing to old customers and prospects. The most important and distinguishing differentiator is the level of usage of customer insight data within planning, designing and implementing the E-mail Campaigns. Some campaigns are well planned and well utilizing the customer insight data and some are merely mass e-mail campaigns directed to purchased or collected list of recipients. Actually, perhaps the most common scenario is the mass e-mail campaign that has no or very little visibility into receivers' mind and desires.

Collecting opted-in email contacts with customer or subscriber demographics is an excellent and the simplest way to start intelligent e-mail marketing. Adding Web-

analytics data of website visits of the recipients adds even more value to that. Asking survey questions from e-mail recipients or website visitors will increase the level of intelligence to yet another level. The most intelligent ways to use e-mail marketing is to apply testing of content and behavioral targeting to e-mail campaigns.

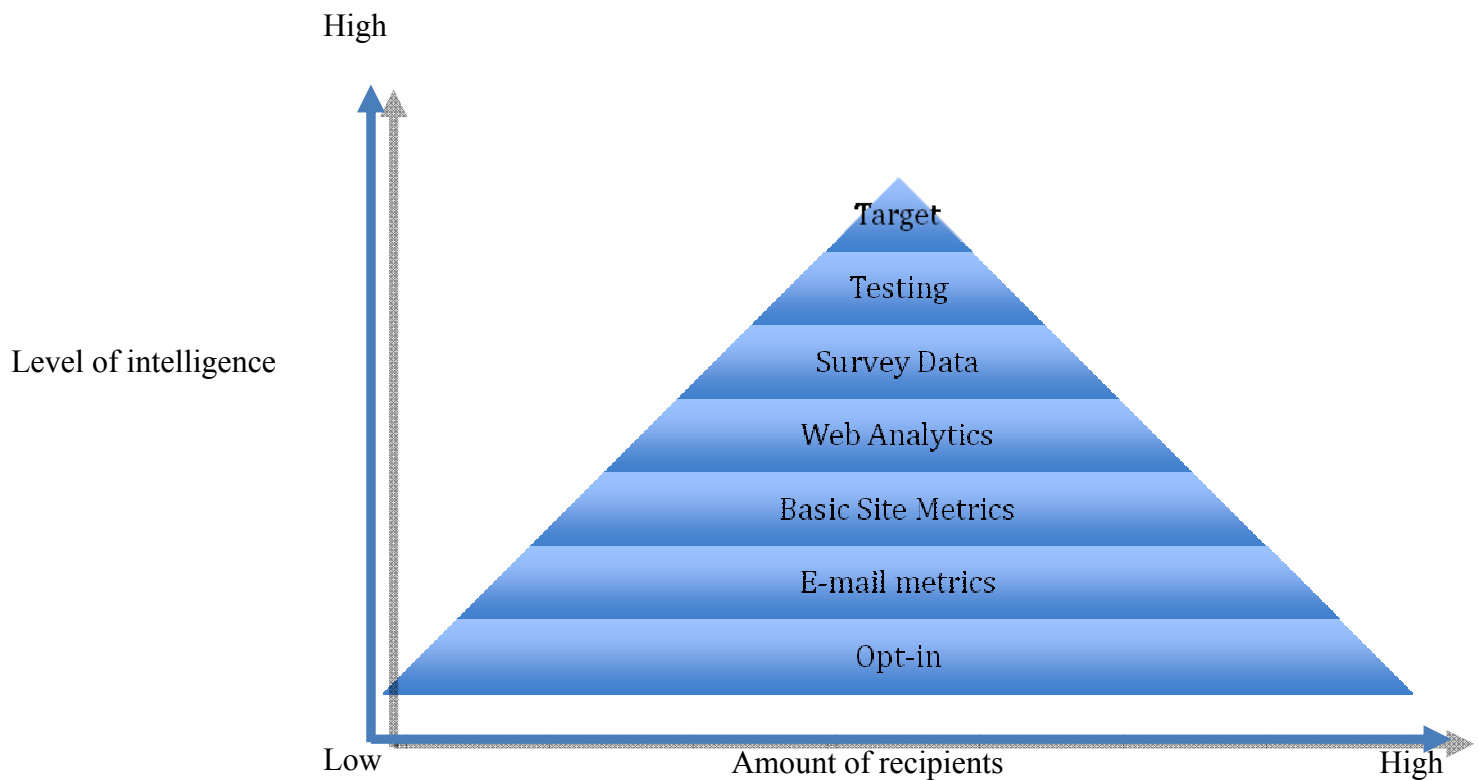


Figure 7. Levels of intelligence in E-Mail re-marketing (Researcher, 2009)

#### *Mobile Marketing; tactics for Re-marketing*

Mobile re-marketing tactics are often very similar to E-mail re-marketing tactics as the SMS and MMS messages have similar functions in the marketing as e-mail campaigns do. Mobile re-marketing and nurture tactics include also several other ways to nurture and re-market existing and old customers. Other channels of mobile re-marketing are Widgets, mobile webpages and mobile applications with especially iPhones and similar touch screen internet smart phones.

### *Re-marketing entities online and mobile*

The Mobile and e-mail marketing are the strategic means of attracting visitors back to mobile and online sales process and the following types of content are often referred as re-marketing entities within the up-selling process:

1. Dynamic Product pages
2. Dynamic Shopping cart
3. My Pages section on the website
4. Company Extranet; for B2B customers and other external interest groups

## 3 MEASURING CUSTOMER LIFE CYCLE ACTIVITIES

Before we can Test and and optimize we need to measure and before we can measure we need to understand what and how we measure and quantify the success of the digital marketing efforts. First the goals need to be defined. Every website, creative, published article, any form of marketing has to have a goal. To be more specific: a quantifiable goal. Without a quantifiable goal website owner will have hard time selling new development ideas and marketing campaign to bosses or business partners. Every money-driven company has two initial goals: to make more money and to save more money. If there are no goals in place, how can one measure the success of marketing efforts? If one can't measure the success of marketing efforts, how could one have budget for them? Setting up the Business goals defines the performance goals. Performance goals can be measured with Key Performance Indicators, KPIs'.

### 3.1 Examples of Key Performance Indicators

Amount of pages each visitor browses on one visit (avg. p/v), the average time on page each visitor spends (Avg. t/p), the amount of total visitors "bouncing" or leaving the site without viewing more than one page (Bounce rate). The previously



mentioned are examples of website key performance indicators (KPI's). The KPI's have been used for half century in managing quality and lead through time in Japanese factories (similar philosophy as in Kaizen, Andon, and Six Sigma). The ideology behind KPI's is quite simple actually. A KPI is a flag that reports how a set of actions have performed in a certain time period within the predefined values of limit. Same in English: imagine the KPI that tells how fat a man is: if the KPI value is below 60 kilos the man has dangerously lost weight, if person is between 60 – 70 kilos he is in good shape, and if his weight goes above 70 kilos he is too fat. Applying that ideology within the limit values and benchmarks of a business gives a simplified tool for managing KPI's – the quality of the website performance. KPI's would be just another mean of reporting if it was not KPI. A KPI is a value for monitoring and analyzing the performance that has been given preset actions based on KPI value which should be executed when applicable. That is a KPI.

### 3.2 Benchmarking the KPI

An excellent method of benchmark is to find out the current values for the KPI's that have just been set and then match those values after certain time period. Example: A Media company first benchmarked their organic search results and search visit behavior from their web-analytics tool and then compared that data with the new values after three months of Search optimization project.

Fireclick Index (<http://index.fireclick.com>) provides excellent real benchmark data based on web-analytics that can give rough estimates of your industry goals online. The Fireclick Index helps you in finding comparable Indicators for measuring website success.

## 4 SHOPPING CART SUCCESS

An online Shopping cart is an electronic version of its traditional brick and mortar cart or trolley used for the logistics of the goods to be purchased at the checkout in a mall. A Shopping cart of an online store is much more complex entity than its brick and mortar cousin. Traditionally, one will buy the products or at least most of the products that they put into the trolley in the mall this is not necessarily the case in the Online Store. Window shopper is a very common visitor in an online shop. It is easy to add products to cart and go to the checkout and look at price and shipping cost and then decide not to buy and just go to another shop. There are several reasons that can be predefined to help online shopkeepers to increase the amount of successful cart entries.

### 4.1 Cart Abandonment Reasons

Some of the reasons of having too many window shoppers can be related to elements that affect the trustworthiness of the store and some of reasons often relate to the quality and relevancy of the visitors in the shop.

Below you may find the most probable reasons for shopping cart abandonment.

- High shipping cost; When cost of shipping exceeds 1/3 of the entire purchase value or when shipping cost adds so much cost for the entire purchase value that it is just not feasible to buy online then one might consider not buying. Same principles often apply online as in catalogue shopping.
- Comparison shopping or browsing; and then never continuing the process because of a better offer found somewhere else or because of buying the goods offline or just deciding not to buy the goods at all.
- Changed mind; as is.

- Saving items for later purchase; and then never continuing the process because of a better offer found somewhere else or because of buying the goods offline or just deciding not to buy the goods at all.
- Total cost of items is too high; In addition to what is explained in regards shipping costs also budget or bad credit might become an issue.
- Checkout process is too long; and takes too much time.
- Checkout requires too much personal information; takes too much time or is making the purchaser feel uncomfortable of leaving too much information.
- Site requires registration before purchase; time consuming, complex and making the visitor feel uncomfortable.
- Site is unstable or unreliable; this often an issue with websites that have server downtime and bad design and look and feel is just unreliable. Payment terms need to be visible throughout the website, contact details need to have reliable entities, references and testimonials will increase the feeling of trust. Verified by VISA logo is a gesture of trust that should be placed on all pages of the website.
- No availability of products; creates often disappointment and long delivery time will only make it worse. Leads easily to a situation where customer is forced to choose competitor's products.

As you can see the most probable reasons for visitors to drop out from the shopping process are mainly driven by the two main reasons: Shopper's mindset and Shopping cart ability to persuade and convert. Obviously, it is impossible to make the decision on behalf of the shopper however Online Shopkeepers can assist their visitors, the shoppers, to make the purchasing decision and even to add more value per order than the shoppers initially anticipated.

## 4.2 Shopping cart Key Performance Indicators

Knowing the reasons for shopping cart drop out is small step towards optimizing the shopping cart success. As explained in the previous chapter, one will need KPI's to measure the performance of a shopping cart and to react upon the alerting performance metrics and reports.

The following KPI's were used in this project:

- Increasing the absolute amount of products added to shopping cart in an online shop with the same amount of visitors.
- Increasing the ratio of product add to cart of all website visits.
- Increasing the order value per confirmed order.
- Decreasing the absolute amount of fallout in shopping process entries.
- Decreasing the shopping cart abandonment ratio in individual steps as well as the overall sopping cart abandonment ratio.

## 4.3 Cart Abandonment Recovery

The behavior of the Shopping cart visitors can be best tracked with cookie based web-analytics tools that enable the shopkeeper to understand each individual shop visit and to answer the following question: Where did the visitors come from? How did they enter the shop? How did they move around the shop and where did they leave the shop without buying? Did they add products to cart but didn't buy? Are they returning visitors or new visitors? Have they previously added products to cart? Which products did they previously add to cart? Have they already purchased products from the store? There are myriad of questions that can be asked and answered by means of web-analytics. Understanding the behavior of the visitors helps the shopkeeper to react and make changes to match their online business goals.

#### 4.4 Cart Abandonment Recovery Strategies

As the shopkeeper finds bottle necks in shopping cart process he will then need to decide on the strategies to be used in order to recover the cart abandonment. Below you may find some of the key strategies in Cart Abandonment recovery. These are explained as strategic means to improve your shopping cart process as they are none-site related tactics and are affected by either visitor behavior patterns or a company's strategic business decisions.

There are seven key strategies for cart abandonment recovery Behavior Strategy, Abandonment Step strategy, Value Strategy, Margin Strategy, SKU Strategy, Day-parting Strategy and Profiling Strategy.

Behavior Strategy is concentrating on understanding how visitors' current or historic behavior shows affect on cart abandonment. Example: When visitor has shown certain pattern of behavior then predefined tests and targeting recipes are run. Profiling Strategy is utilizing CRM data in order to understand the customer profiles better. Example: Serving the test content based on previous bought items, birthday, sex, age, location, interest or merely any CRM data that can affect the sales by appealing on the visitor based on information that is known about him or her. Abandonment Step Strategy is concentrating on single abandonment step on a shopping cart process and studying affects of that step to conversion success. Value Strategy is concentrating on shopping cart value based testing. Example: When cart value hits certain level then predefined tests and targeting recipes are run. Day-parting Strategy is defining which recipes and which tactics to be used when showing the content at agreed day-parts. Example: Day-parting the content to be showed based on different day-parting methods I.E. Showing the Lunch-hour Banner for visitors entering the site during 11-14 and the Dinner Banner for visitors entering the site between 17-20. Margin Strategy is concentrating on developing the sales of those products that have the best product margin for the shopkeeper. SKU Strategy is using different recovery tactics to increase overall SKUs per order. Example sales tactics for this strategy: Buy one get another for free. Buy three get a gift voucher for free. People who bought this also bought that.

#### 4.5 Cart Abandonment Recovery Tactics

Within each abandonment recovery strategy one can utilize the following tactics for the best results of applying the strategy.

- Test different designs; when testing the affect of different designs to improve shopping cart success it is often recommended to start with small and non-dramatic changes. With robust testing and targeting solutions such as Omniture Test and Target it is equally safe to test Dramatically Different Design (DDD) as one can very quickly get an idea of reliability of the tests' affect on shopping cart success.
- Test different process; The length and complexity of the shopping cart process has a very
- Test different trust messages;
- Test free shipping options;
- Test less options; sometimes less is more. The less the visitors need to fill in the more likely they will complete the process.
- Test different error messages; Error messages that have suggestion links often work best.
- Test different copy; Testing different copy is the most used form A/B testing and targeting. Testing short, long, personal, urgent, and different variations of messages might show the winner recipe and result in many percentages of more value for the shopkeeper.
- Test pop-ups; Sometimes pop-ups work against you, sometimes for you. One can never know unless they have tried. This is the ideology of testing.
- Test providing „save cart“; providing this feature will help the purchaser to leave the shopping cart and next time they arrive they have their items

ready for the shopping process. One can only imagine how this might affect the brick and mortar shops if this was physically possible.

- Test different incentives; „Buy now and receive a free gift “type of messages sometimes work.
- Test different „recovery“ emails; It is good to recover the visitor by e-mailing them back with an offer related to a shopping behavior they

#### 4.6 Cart Abandonment Targeting Tactics

In targeting the strategies and tactics are very similar with the difference of utilizing the data we know about the visitor with recovery tactics. Below is a list of tactics to be used in targeting.

- Leverage Analytics Data (use what you know!)
- Set up segments for each abandon step
- Test targeted „recover cart“ email for each step
- Combine targeted emails with incentives/surveys...
- Target return visit
- Target outside funnel navigations (express shipping only today)
- Target specific carts (ex. Based on SKU, margin)
- Target up-sell and down-sell
- Target bundles (your cart+)
- Target based on title/gender (Mr., Mrs., Ms.)
- Target based on Geo Data (City, Postcode...)
- Target high-value carts with „free call back“

## 5 RESEARCH METHODS

### 5.1 Web-analytics methodology

Web-analytics Association declares that the official definition for Web-analytics is: “Web-analytics is the measurement, collection, analysis and reporting of Internet data for the purposes of understanding and optimizing Web usage.” (Webanalytics Association, 2009) Web-analytics is about gathering data of website visitors’ behavior, understanding where they came from, how did they land, how much time they spent, did they buy, did they ask to be contacted and what most understanding the causality of actions and data in order to optimize the web operations success. In this research the Omniture SiteCatalyst and Discover 2 are the tools to be used.

### 5.2 Action research methodology

Action research is an interactive inquiry process that balances problem solving actions implemented in a collaborative context with data-driven collaborative analysis or research to understand underlying causes enabling future predictions about personal and organizational change (Reason & Bradbury, 2001). After six decades of action research development, many methodologies have evolved that adjust the balance to focus more on the actions taken or more on the research that results from the reflective understanding of the actions.

This tension exists between:

1. those that are more driven by the researcher’s agenda to those more driven by participants;
2. those that are motivated primarily by instrumental goal attainment to those motivated primarily by the aim of personal, organizational, or societal transformation;
3. and 1st-, to 2nd-, to 3rd-person research

Action research challenges traditional social science, by moving beyond reflective knowledge created by outside experts sampling variables to an active moment-to-moment theorizing, data collecting, and inquiring occurring in the midst of emergent



structure. “Knowledge is always gained through action and for action. From this starting point, to question the validity of social knowledge is to question, not how to develop a reflective science about action, but how to develop genuinely well-informed action—how to conduct an action science” (Torbert 2001). (Wikipedia, 2009)

When optimizing websites by a/b testing, multivariate testing and behavioral targeting the research is by default a type of action research. The optimization process in this study was and is a continuous loop of measuring website performance, analyzing performance, testing and targeting different options for improvement and making changes to the website design and content accordingly. This project started in early 2009 alongside with this research and is still continuing as a continuous improvement program within the case company.

### 5.3 A/B and Multivariate Testing

A/B testing, or split testing, is a method of advertising testing by which a baseline control sample is compared to a variety of single-variable test samples in order to improve response rates. A classic direct mail tactic, this method has been recently adopted within the interactive space to test tactics such as banner ads, emails and landing pages.

Significant improvements can be seen through testing elements like copy text, layouts, images and colors. However, not all elements produce the same improvements, and by looking at the results from different tests, it is possible to identify those elements that consistently tend to produce the greatest improvements.

Employers of this A/B testing method will distribute multiple samples of a test, including the control, to see which single variable is most effective in increasing a response rate or other desired outcome. The test, in order to be effective, must reach an audience of a sufficient size that there is a reasonable chance of detecting a meaningful difference between the control and other tactics: see Statistical power.

This method is different than multivariate testing which applies statistical modeling which allows a tester to try multiple variables within the samples distributed. In internet marketing, multivariate testing is a process by which more than one component of a website may be tested in a live environment. It can be thought of in simple terms as numerous split tests or A/B tests performed on one page at the same time.

In A/B testing, the tester presents two (or a handful) of options to a visitor and tracks performance of each creative presented. Multivariable testing is a technique that simultaneously tests multiple variables in a creative presentation. Therefore, A/B testing gives you the ability to test two (or a few) options, whereas multivariable testing allows you to test thousands or even millions of options. In addition, unless only a single element is being tested, A/B testing does not reveal why one particular version worked better than another, whereas multivariable testing tells the tester how every individual variable change contributes to overall results. Interestingly, the traffic required to conduct a multivariable test is usually the same required for a single A/B test! Although there are limited occasions when A/B testing is appropriate (such as if the marketer wants to test two completely distinct concepts of a page or a funnel), generally there is no upside to choosing A/B testing over multivariable testing in terms of time, efficiency, ease of implementation, or likelihood of superior results. (Optimost, 2009)

#### 5.4 Demographic and behavioral targeting

There are no good scientific definitions for this fairly new topic in Digital Marketing. Demographic and Behavioral Targeting are forms of optimization science that utilizes past and/or ad-hoc demographic or behavioral data in order to provide the most suitable content for the recipient. Below graph shows different ways to segment the visitors in order to target them.

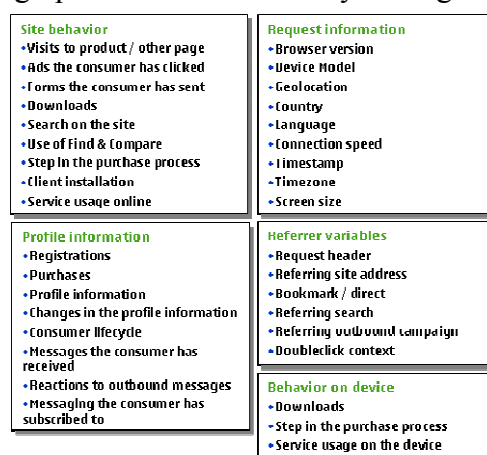


Figure 8: Inputs used for targeting (Optimost, 2009)

### 5.5 Implementing the research

This research is being conducted by using theoretical research from books and publications as well as by conducting experimental Web-analytics, A/B testing, multivariate testing, behavioral targeting and demographic targeting.

In the beginning, in order to justify what is being optimized the researcher will need to define web entities:

- Websites analyzed and optimized
- Sources of traffic
- Product pages
- Shopping cart process

Secondly, in order to optimize the results the researcher will need to find out several things related to Web-analytics Data. Web-analytics Data required:

- Sources (Google paid or organic, Blogs, Portals, Affiliates, etc.)
- Total Website Visits
- Add to cart ratio
- Order Value
- Average order value
- Shopping cart abandonment ratio
- Shopping cart conversion ratio
- Total website conversion ratio

Chapters 6 and 7 in this thesis will show which elements affect the sales, how the individual sales decisions can be influenced, how the average order value of a website can be increased, and how that all can be measured.

## 6 THE RESEARCH IN ACTION

The Shopping Cart Improvement project was initiated as a high priority project for the case company. Preliminary plan was to execute behavioral targeted digital marketing for the case company's PC on-line web channel in Spain. The scope of action research methodologies to be utilized has changed to cover A/B testing and Multi-variate testing in addition to behavioral targeting. The business goal for targeted marketing in the online channel is to increase the relevance of the marketing messages and thereby increase click through and conversion to the online store and service portals.

### 6.1 High level project scope

The scope for targeting of this action research project is restricted to the Spanish market and to the Spanish websites of the case company. Traffic has also been driven into the local variants of the case company's portals. Spanish website has monthly traffic of 1 292 730 visitors, monthly returning visitors are 144 941. The traffic pattern for the Spanish website is similar to other case company's websites where 8% percent of the traffic is generated on the site landing page and 50% of the traffic is captured in the top 25 pages.

This project will focus first of all on the high traffic product pages to maximize the effect of the marketing messages there. A second focus will be to create and put in place targeted marketing for the lower traffic, higher number of site pages.

The research project started at early March 2009 and ran until end of April 2009. Within this timeline the tool was implemented into the tested website and the methodologies based on the use cases were applied.

## 6.2 Required tools, methodologies and use cases

This research required the A/B testing, Multi-variate testing and behavioral targeting capabilities. The tool of choice was Omniture Test and Target as it provided all these features in single solution. In the beginning, the use cases had to be utilized in order to conduct the action research.

## 6.3 A/B Split testing of the case company's website

Multiple assets were produced for all types of site pages and the expectation were that the Omniture Test and Target platform would monitor the effectiveness of the different assets on different pages and provide the mechanisms to have the ones that work weed out the less performing ones, automatically.

## 6.4 Segmentation Analysis

With the A/B split testing implemented in the site, a next step was to analyze the consumer behavior and determine why certain messages performed better than others. Analysis would determine if there are certain segments that can be identified to which some of the messages could be targeted. To enable this segmentation analysis, the site required to get the Omniture test and Target event mechanism, customized javascript code, implemented. The different types of events, actions and inputs that were considered relevant and that was fed into Test and Target database are presented in the below figure 9.

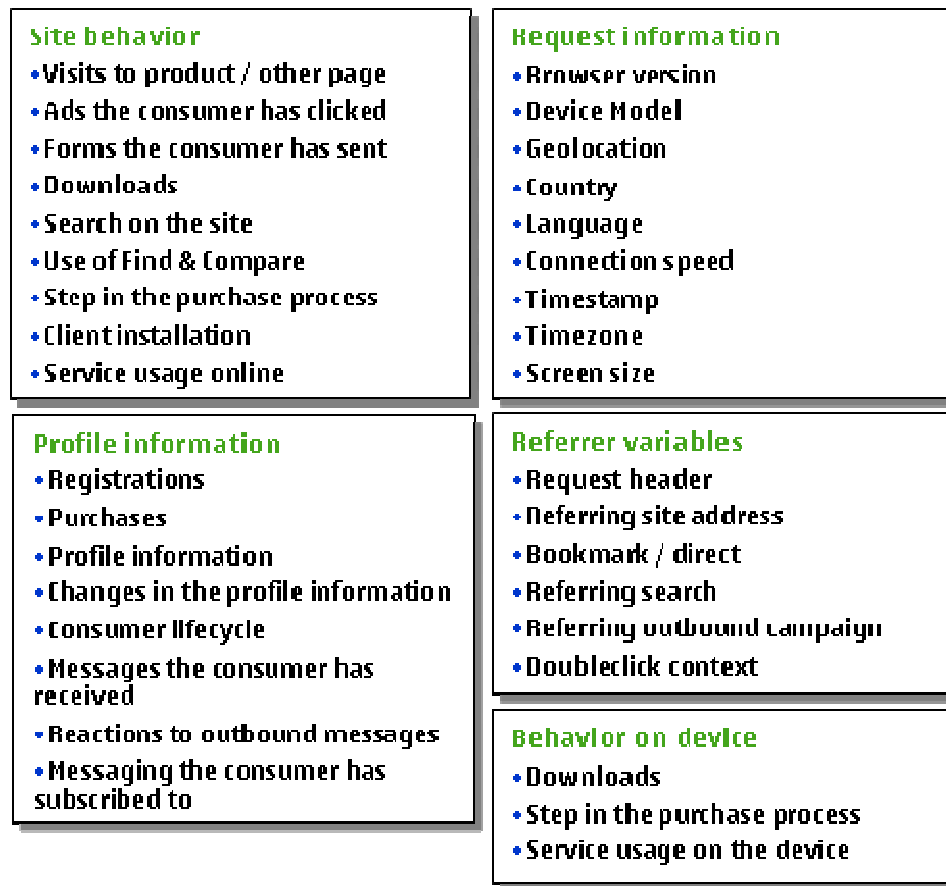


Figure 9: Inputs used for targeting. (Optimost, 2009)

## 6.5 Behavioral targeting

As the final stage in this project, the outcome of segmentation analysis drove the modeling of segments and the implementation of targeting rules that started replacing some of the A/B split testing. Once a segment was identified and rules were running for that segment, A/B split testing was used to optimize the assets for that particular segment. The whole process repeated itself and gradually got more granular in this way. The results for behavioral targeting and multivariate testing are not available until by the end of the year due to the implementation budget cuts.

## 7 FINDINGS AND RESULTS

The purpose of A/B Split testing was to test various different kinds of propositions on the top pages of the case company's Spanish website to see which of them performed the best and for which audience.

The illustration of the actual events and result that took place is presented below in figure 10.

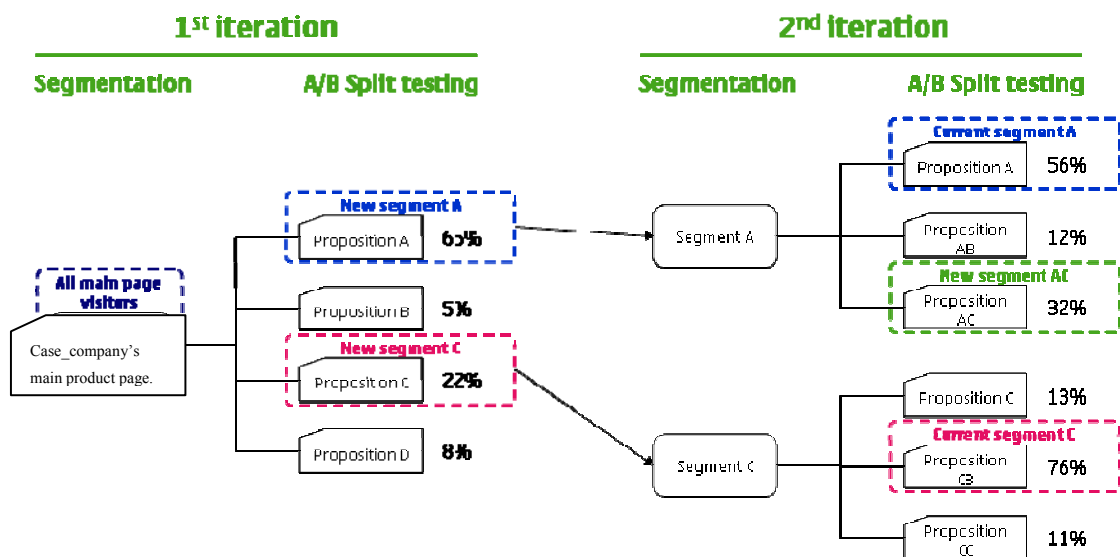


Figure 10: Illustration of project approach for case company's main webpage. Four different propositions were tested on the main product page visitors and while Proposition A has been identified as the best performing one with 56% conversion, Proposition C has been found to work on a certain sub segment of the visitors well by converting 76% of visitors who have followed the path from main product page to Proposition C to sub segment Proposition B. The A/B split testing has been successfully conducted and as a result of this the audience were divided into two segments, and the same process was run again. The actual Euro values and Propositions used in the research case are highly classified and they cannot be presented in this research.

*What was the impact of Lead Campaigns on Purchases?*

The testing and targeting was conducted with a lead campaign that was a certain type of onsite creative which was used on two different types of content: *Content Pages*

that included all the other content than those of the online shop content and the *Online Shop Pages*.

The Conversion rate referred below is the percentage share of the total visitors, visiting sections of the website that converted I.E. bought something from the Online Shop.

The average order value, revenue per order and total revenue values cannot be shown due to possible stock market stipulations.

Impact on conversion rates can be seen on the below tables. The test results are relevantly different when comparing the results based segmented test and non-segmented test.

Table 1. Illustrating performance without segmentation

Experience	Visitors	Purchases	Purchase Rate	AOV (€)	RPV (€)	Sales (€)
<b>In Test</b>	5,738,113	2,696	0.05%	xxx.xx	x.xx	xxx.xx
<b>Control</b>	1,435,797	726	0.05%	xxx.xx	x.xx	xxx.xx
<b>N-Com</b>	7,885,492	3,814	0.05%	xxx.xx	x.xx	xxx.xx
<b>Shop</b>	2,715,926	4,527	0.17%	xxx.xx	x.xx	xxx.xx

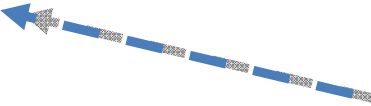
7% drop in conversion with non-segmented visitors.

230% rise in conversion of those entering shop.



Table 2. Illustrating the power of segmentation. Example of Music Segment

Experience	Visitors	Purchases	Purchase Rate	AOV (€)	RPV (€)	Sales (€)
<b>In Test</b>	731,733	369	0.05%	xxx.xx	x.xx	xxx.xx
<b>Control</b>	182,842	81	0.04%	xxx.xx	x.xx	xxx.xx
<b>N-Com</b>	516,118	292	0.06%	xxx.xx	x.xx	xxx.xx
<b>Shop</b>	155,868	295	0.19%	xxx.xx	x.xx	xxx.xx

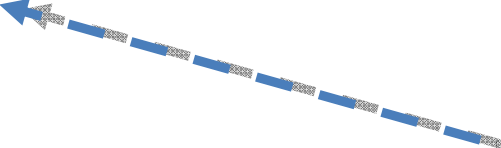


Online Shop: 13% rise in conversion.

*How many visitors are in each Segment?*

Table 3. Illustrating how many visitors are in each segment

Segment	Visitors	Purchases	Purchase Rate	Average Order Value (€)	Revenue Per Visitor (€)
<b>Music</b>	1,433,762	901	0.06%	xxx.xx	xxx.xx
<b>Convergence</b>	3,869,704	4,720	0.12%	xxx.xx	xxx.xx
<b>Sharing</b>	250,352	347	0.14%	xxx.xx	xxx.xx
<b>First Product</b>	703,743	748	0.11%	xxx.xx	xxx.xx
<b>Email</b>	475,925	741	0.16%	xxx.xx	xxx.xx
<b>No Segment</b>	11,378,803	4,304	0.04%	xxx.xx	xxx.xx



Notice: Most of the visitors (11 million visitors) are not segmented at all.

### *What was the effect of the Flash Takeover*

The landing page conversion was tested with two different types of landing pages:

- With Flash Takeover; full page flash banner that aims to sell the product.
- Without Flash Takeover; Dynamic website with smaller banner as a lead campaign.

Table 4. Illustrating the effect of the flash takeover

Experience	Visitors	Purchases	Conversion Rate	RPV (€)
Take Over	300,573	440	0.15%	xxx.xx
No Take Over	99,287	156	0.16%	xxx.xx

Losing With Takeover:  
7% drop in conversion  
rate with Flash Takeover.

### *What was the effect of showing the price?*

The landing page commercial content was tested with and without price in order to find out which brings more click-through (more clicks to banner per visit) and more sales.

Table 5. The effect of showing the price versus not showing the price

Flash	Visitors	Click-through	Click-through Rate	Purchases	Conversion Rate
With Price	111,259	4,143	3.72%	144	0.13%
Without Price	111,272	6,207	5.58%	154	0.14%

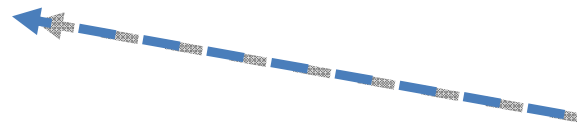
Winning without price:  
50% better click-through rate and  
roughly 8% better conversion rate.

### How do reviews & ratings effect the conversion rate

The functionality of visitor generated product reviews and ratings were tested on two types of pages: *N-Com Content Pages* and *Online Shop pages*.

Table 6. Reviews and Ratings in N-Com

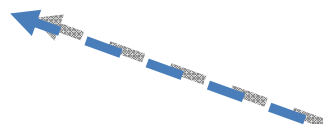
Experience	Visitors	Purchases	Conversion Rate	AOV (€)	RPV (€)
<b>With Review/Ratings</b>	202,081	357	0.177%	xxx.xx	xxx.xx
<b>Without Review/Ratings</b>	204,606	363	0.177%	xxx.xx	xxx.xx



Winning without reviews:  
0,5% lift in conversion.

Table 7. Reviews and Ratings in Online Shop

Experience	Visitors	Purchases	Conversion Rate	AOV (€)	RPV (€)
<b>With Review/Ratings</b>	217,293	1,126	0.518%	xxx.xx	xxx.xx
<b>Without Review/Ratings</b>	218,109	1,089	0.499%	xxx.xx	xxx.xx



Winning with Reviews:  
3,8% lift in conversion rate after  
adding the review and rating  
functionality to Online Shop  
pages.

## 7.1 Findings explained

It is statistically shown in the tables 1 and 2 that the visitors visiting Content pages are going to purchase with less confidence than those visiting the Shop pages.

The Lead Campaigns show a decrease in conversion of 7% when shown to any visitors. When shown to segmented visitors we can see dramatic change in performance. The Music segment indicated a 13% increase for the Lead Campaigns.

Large number of visitors remains without a segment from start to conversion. Unsegmented visitors have the lowest conversion rate. Visitors in the Music segment have the lowest conversion rate for a segment. Majority of purchases made through Convergence. Initial results suggested that the Flash Takeover had a negative effect on conversion rate. Flash Takeovers displaying a price appeared to decrease Interaction and Conversion rates.

Test on N-Com suggests that the Review/Ratings have little effect on the overall conversion rate. Review/Ratings had a positive impact on the Shop. Visitors to the Shop and N-Com interact with the site differently.

## 7.2 Recommendations for improving the shopping cart abandonment

After running the tests and reviewing the results the researcher provided the following recommendations for the business owner of the Online Shop. Case company should consider activating targeted campaigns after a visitor has shown interest in a segment.

- Investigate splitting larger segments to make them more focused
- Explore possibility of using lead campaign logic in Shop
- Investigate where visitors not in a Segment end their journey
- Find segments where visitors are currently not being detected, eg Accessories.

- Consider splitting large Convergence into smaller groups
- Investigate where Music visitors go next
- Try to ensure that a test runs for a minimum of two weeks
- Perform further tests on whether showing the Price has a negative effect
- Consider running a Flash vs Static test
- Run tests on N-Com and the Shop separately as outcome is likely to be different
- Look to use the Lead Campaign logic within the Shop

## 8 CONCLUSION

As a conclusion the researcher states that A/B Testing has shown that it can have a strong affect on the shop performance. Looking at the goals set at the beginning of the research shows that segmenting visitors increases the amount of products added to shopping cart of case company's online shop in comparison to the amount of visitors, thus increasing the Conversion Rate. With intelligent changes to copy and creative the A/B testing is increasing the Average Order Value of the shopping cart which both together also have a direct affect on increasing the revenue per visitor of the website. The most desirable goal has been reached as the lift of the overall turnover of the website is real. As shown by the Tables on Chapter 7 this result has been produced with confident research data.

It is also notable that targeting increases conversion as well and that different visitor segments react differently. A/B Testing when accompanied with targeting capabilities the shop conversions seem to rise with high confidence. Perhaps the next phase is to study even more of the affect of the different segments and also to try to understand better how to convert visitors to buy when they seem to be on browsing mode.

## 9 FINAL REMARKS

This thesis was conducted on parallel with managing the new born baby-boy, the renovation of an old house and while working on challenging position for Adobe managing and developing the Omniture Business Unit in Finland, Baltic & Russia. Taking into consideration the scarcity of resources this project was well managed and run. Overall, the research proved the results well and the thesis succeeded in a timely manner and served its purpose for the case company and the researcher. Time allocation was challenging but eventually well managed. Also the lack of reliable and up-to-date resources was very difficult to find and therefore the researcher was forced to succeed in establishing new concepts and measurement frameworks of which few examples are shown within this thesis as well. The concept of intelligence levels of e-mail re-marketing is one of those new concepts created due to this research. The reliability of the results gained from using Omniture Test and Target can be well established due to the scientific reliability algorithm existing within the back-end system of Omniture Marketing Suite. Overall this action research project was a success.

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