Mobile Advertising
A Case study of Mobile advertising Solutions

Ali salim
Nima Alikhani

Bachelor Thesis
Stockholm, Sweden 2009
Abstract

This report has been produced as a result of a Thesis assignment conducted at Ericsson. Its purpose is to give an overview of the Mobile Advertising industry. In this report an overview of mobile advertising is presented and thru which channels advertising could be used. Then three mobile advertising campaigns are shown and described with background, strategy and results.

The different global markets, the different actors in the value chain and how the online behavior has changed are analyzed. The problem area in this report is about profitability and efficiency of the solutions within mobile advertising and the inertia of mobile advertising and this is discussed in the conclusion.

Keywords: Mobile Advertising, Operators, Global Markets,

Sammanfattning

Följande rapport har skapats på uppdrag av Ericsson för att ge en övergripande bild över mobil reklam marknaden. I rapporten presenteras mobil reklam genom olika kanaler som detta format kan användas genom. Sedan beskrivs tre kampanjer med syfte, strategier och resultat.

De olika marknaderna, aktörerna i värde kedjan samt förändringarna kring online beteendet analyseras. Problemområdet i denna rapport är kring effektivitet och lönsamheten inom mobil reklam dessutom analyseras det kring vad som håller mobil reklam från att få slå igenom.
Analysis of Mobile Advertising  
Thesis 2009  
Author: Ali Salim & Nima Alikhani  
Supervisor at KTH: Jan-Olof Plato  
Supervisor at Ericsson: Helena Nygren  
Evolving: 30 September 2009, Kl. 15.15-17.15, Sal X  
Examinator: Daniel Pargman

Foreword & Acknowledgements

Fasestabhostedoceri –

"It is right to be taught even by an enemy; you may get a hint from the other side...." 

- PubliusOvidiusNaso

This report was produced for a Bachelor thesis project in engineering in the field of Media Technology at the Royal Institute of Technology in Stockholm, Sweden. The project was done at Ericsson in Kista, Sweden. We would like to extend heartfelt thanks to a number of people that helped us during this extremely fun and challenging project. First of all, we would like to thank the wonderful person at Ericsson who gave us this unique opportunity Per Ström. We are truly grateful. We would especially like to thank the Mobile Advertising unit at Ericsson. We would also like to thank our supervisor at KTH Jan-Olof Plato for guidance. We would also like to thank Grace Burrows and Dr Bertil Thorngren at SSE for their invaluable and exhaustive help during this time. Last but not least! Our Family, Friends and Loved ones. Without all your love and support, none of this would be possible.

The Information you provided was the key to complete this thesis
# Table of Contents

**Foreword & Acknowledgements**

**Abstract**

1. **Introduction**
   - 1.1. Background
   - 1.2. Ericsson’s Mobile Advertising Services
   - 1.3. Problem Area
   - 1.4. Delimitation

2. **Methodology**
   - 2.1. Research Purpose
   - 2.2. Work Process
   - 2.3. Research Strategy
   - 2.4. Method Analysis

3. **Overview of Mobile Advertising**
   - 3.1. Opt-In
   - 3.2. Offline Advertising Channels
   - 3.3. Online Mobile Advertising
   - 3.4. Terms of Measurement
   - 3.5. Global Markets

4. **Case Studies**
   - 4.1. Within Case Analysis of Jaguar XF Campaign
   - 4.2. Within Case Analysis of Snickers Peanut Challenge Campaign
   - 4.3. Within Case Study of Stångästadens Ice-Cream Campaign

5. **Analysis**
   - 5.1. Mobile Advertising Market
   - 5.2. Online Revolution
   - 5.3. Mobile Advertising and Marketing Value Chain
   - 5.4. The Revenue Share Between the Actors in the Value Chain

6. **Conclusion**
   - 6.1. How Profitable is Mobile Advertising?
   - 6.2. What is the most profitable and efficient solution?
6.3. The Inertia

6.4. The Future

7. References

Appendix I– Glossary
1. Introduction

In this chapter the background and an overview of Ericsson’s mobile advertising service are presented to show how this service could work. Then the Problem area with our questions and delimitation is formulated.

1.1. Background

Ericsson decided to enter into the Mobile Advertising market and formed their mobile advertising unit in August 2008. They have a well-established brand, a close relationship with the operators and experience in telecom. Therefore they have great potential of becoming one of the leaders in this market. They wanted to learn about the progress of Mobile Advertising and how it evolved globally. What are the results from the different actors in the value chain and how has it been implemented.

The purpose of this study is to gain better understanding of the process and profitability for operators using Mobile Advertising, what kind of campaigns they have run, which channels are the most effective and popular.

There are not many global investigations made on profitability and the relations between the actors in the value chain in mobile advertising from an operators point of view thereby the aspiration of those results evolved into our thesis.

1.2. Ericsson’s Mobile Advertising Services

There are two services, The Ad Orchestrator and The Ad Broker. These are for buying, planning, delivery, monitoring and follow-up of mobile advertising campaigns across multiple delivery channels. It is offered to mobile operators as a service and is designed to work with the operators existing infrastructure, enabling the operator to monetize own ad inventories, such as SMS, MMS and WAP and in a near future also voice, subscriber notifications and video for example.

These services also offer an interface to an external publisher community, allowing the operator to broker partner publishers’ mobile inventory. They offer a single-point of contact for agencies and advertisers that want to deploy mobile campaigns across multiple mobile channels. Through the multi-channel approach and advanced targeting mechanisms, the operators add a unique value for advertisers who can interact with the right target audience in an interactive, creative and efficient way, across a range of touch points.

They connect the mobile network operators with media agencies who are buying the advertising space and creating campaigns. It enables operators, not only
tomonetize own mobile inventories as well as utilize networks assets such as consumer data and location information to add value to the advertising industry. This platform enables publishers to optimize their advertising revenue, as well as add several new revenue streams by selling space on content and creating new mobile ad spaces.

![Image](fig1.1 The design of Ad Orchestror.)

This service could be the heart of the value chain and the campaigns. In the figure above there are three groups, customers, publisher & media agency and operators with the Ericsson Ad Orchestror in the middle pumping the campaign.

A brand that has released a new product turns to their media agency that puts together the campaign. The media agency uses these services to plan and monitor their mobile campaign. Using the interface they can specify their target group, divide the budget between the channels. Thru the user interface they can see how the campaign is going, and it is possible to export all the data directly into tailor made reports in all formats. This gives the brands and media agencies the ability to control the campaign from beginning to the end. Operators have the detailed information about the customers and manage the opt-in information and follow up the reports.
1.3. Problem Area
- What is the most profitable and efficient solution within mobile advertising?
- Is this profitable for the actors in this value chain?
- What is mobile advertising today and how will it evolve in the next few years?
- What is holding mobile advertising market back from flourishing?

1.4. Delimitation
In this report we will limit the discourse to the mobile advertising process and solutions to find an effective and profitable model. It delimits the thesis in the sense that it is not a proven or tested model; however as part of the purpose is to sophisticate the model it will not affect the accuracy of the thesis.

The delimitation was chosen as a study to obtain an accurate representation of the operators solutions to find an effective and profitable model. This thesis will present what picture the agencies, operators, ad server/network companies and publishers have about the solutions in mobile advertising.
2. Methodology

Here in Methodology the purpose of this thesis and how the facts were planned and gathered are described. Then our method is analyzed and discussed.

2.1. Research Purpose

The study aims at exploring and describing the progress of Mobile Advertising from a mobile network operator perspective. In this sense, the study can be regard as both descriptive and exploratory.

There is little empirical research about operators using mobile advertising. We are therefore employing the descriptive and exploratory approach to the research questions. This will enable us to have good understanding and description of this study.

There are a lot of questions surrounding this subject and not enough research made. For Ericsson it is important to have information about the progress of this industry to learn about the process and results from other actors and their campaigns. Also, they want to learn about the mobile advertising development in different markets.

2.2. Work Process

The process of how this thesis started off and how facts were gathered are described here.

- **Learning & Planning**
  First step was to gather every relevant thesis found about this subject to get background information about what has already been written. Ericsson was interested in finding out which solutions are the most efficient and profitable. They also wanted to know about the revenue among the actors in the value chain of a campaign.

- **Fact Gathering**
  Facts were collected by gathering information from internet articles on sites such as mobiadnews.com, mobilemarketingmagazine.co.uk, iabuk.net, mmaglobal.com &Gomonews.com etc, research analytics from organizations like MMA, IAB, Mobext, eMarketer Pyramid Research etc. Interviews were necessary for this thesis to give better understanding and to answer detailed question surrounding this market.

Internet articles were a great way of finding important people to interview.
Searching for campaigns and to start scoping for facts and for better understanding of this subject. Finding out how the campaign results are measured, and reading about types of solutions, channels and strategies. Also, start to look inside value chains and to see which companies were the most dominant in their part of the value chain. These articles along with the older thesis on mobile advertising were the foundation of our thesis. All of the campaigns that all these sites published were important to see how these solutions and channels were deployed.

Research PDF's from MMA, IAB, Mobext and E-Marketer gave us a better understanding and facts about how the mobile advertising market is evolving. These investigations are filled with a lot of useful data and numbers. We now had figures on global and market spending and revenue from mobile advertising.

- **Interviews**
  This part was carried out with different methods depending on the possibilities. The face-to-face interviewing method was applied to companies that were local in Stockholm, such as TeliaSonera, Adiento and Tele2 etc. But many companies were not locals. In those cases the method of mail and phone interviews were applied. Most of the interviews were a combination between all of the methods above. There could be questions from the face-to-face interviews that they could not or needed approval from clients to answer and were therefore gathered from either mail or telephone. The companies were briefed about the purpose and nature of the study before the interview.

The persons and companies we official interviewed were:
Bengt Thorngren, Professor Handelshögskolan (09-06-26)
Patrick Parodi; CMO at Amobee (09-07-13)
Johan Näslund; Director at Adiento! (09-08.20)
Adam Fors; Director, Content Business Management, TeliaSonera (09-08.24)
Josep-Maria Nolla; Product Management and New Markets, Tele2 (09-08-28)
Victor Jungsand; Tre (09-08-31)
Fredrik Wallner; Microsoft advertising (09-09-17)
Joachim Alvarez; Bonnier Responsmedier (09-09-23)
Tanya Fields; Director for Mobile Data Group, Telefonica (09-10-01)
2.3. Research Strategy

In this competitive market, most of the companies are keeping statistics and other information about their process and solutions confidential. Especially for other companies who can take advantage from this kind of information. After a clear stand still, it was time to change our strategy and by taking the student approach, companies were more interested of this thesis and to answer questions.

For a couple of operators and organizations this changed nothing so friends helped with contacts to the companies key account managers. This turned out to be a successful method and they gave us information and helped us with information and contacts.

2.4. Method Analysis

The strategy and method could be questioned. When we noticed that getting any contacts and answers were difficult when approaching the companies as students. The approach strategy was discussed and how this problem could be solved in the best way.

This industry is still in its infant state so it is difficult finding relevant and reliable information. There are a lot of forecasts and there are no exact confirmed numbers so in the end it is all about whom to listen to. Good example is to compare US Mobile Advertising Spending 2008-2010 between JPMorgan (released January 2009) with The Kelsey Group (released February 2009) from eMarketer February 2009.

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPMorgan</td>
<td>$1,613 million</td>
<td>$2,233 million</td>
<td>$3,217 million</td>
</tr>
<tr>
<td>The Kelsey Group</td>
<td>$160 million</td>
<td>$330 million</td>
<td>$720 million</td>
</tr>
</tbody>
</table>

It is a huge difference between these two estimates so it is difficult to know for a fact what the market estimates are. We have chosen to draw our own conclusions by reading and analyzing a lot of reports and thru our interviews.
3. Overview of Mobile Advertising

This chapter provides an explanation of the mobile advertising channels, which begins with an explanation of opt-in. To be able to perform a push campaign the advertiser or operator needs to have the end-users consent in order to send the advertisement or else it could seem intrusive. After describing this important factor the focus is on the different mobile advertising channels. These channels are described to give further understanding in which solutions that could be used. These channels can be divided in two groups: the offline advertising channels and the online advertising channels.

3.1. Opt-In

The meaning of opt-in is receiving the end-users consent to send advertisements. Wireless Advertising Association was one of the forefathers of the current Mobile Marketing Association, wrote in their “Code of Conduct” that all ads, all of them, on mobile had to be on the basis of opt-in.

Mobile phones are seen as something private and personal, so to receive unsolicited advertisement is seen as intrusive. This kind of SPAM messaging advertisements could lead to unhappy customers and get reversed effect. In order to reach customers on this format the end-users consent is crucial. The potential and effectiveness of this method is the optimal direct marketing strategy within mobile advertising. With the permission and profile of the customers, operators and marketers can zero in on their specific market group and they have already given their consent and do not see these messages as intrusive spam. With the opt-in messaging, campaigns will be 100% on target.

The direct and relevant communication between the marketers and their opt-in costumers is personal and the advertisers can market the customers on a one-to-one basis, hence giving them the sense of individual treatment. Brands and marketers promote new products, brands and services to new and existing customers. Existing users are well treated, enhanced and rewarded with coupons and/or variety of special offers. New customers can easily opt-in with an SMS, MMS or online to get the same personalized treatment.
3.2. Offline Advertising Channels

Under offline channels we sorted all the channels that can engage with end-users outside the web browser.

- **Quick Response Code to Engage an Advertisement**
  This is a good example of mixing traditional and mobile advertising. Quick Response code is a 2D bar code containing information in both vertical and horizontal direction. With this channel end-user who sees a poster or an ad in a magazine do not have to memorize an URL, instead they can pick up their phone and take a picture of this QR code attached on the poster or magazine ad. The code is like a bar code but can store more information. This could store the URL and by taking a picture of a code the end-user can get directed to the campaign site to download the game or for more information surrounding the campaign.

Volvo’s pan-European campaign for the launch of the Volvo C70 is a good example of cross platform marketing. It was marketed thru ads in magazines where they encouraged the consumers to download a 2D code reader by sending a SMS. After installing the code reader program, the consumers could “swipe” the code from magazine ads with their camera to receive the content.

- **Push/Pull Messaging**
  This is one of the most popular channels today. By pushing messages, end-users can receive the advertising on their phone either as a text, picture, audio or video. This channel can also store URL or telephone number so the user could click-to-call or click-to-URL and browse the campaign site. With messaging, advertisers have the best opportunity to start a dialogue with their customers by first asking a question and requesting an answer.

  Pull messaging can be defined as any content sent to the end-user upon request shortly thereafter on a one time basis (MMA 2005). In this case advertiser provides a wireless mean for customers to respond to advertisers message, thus it is a kind of advertising that the end-user request for advertisement instead of the company pushing it on the consumer. According to (Karjaluoto, 2005) there is a strong assertion that in the future mobile advertising will be more in the form of dialogue, which implies bi communication after “opt-in” and permission is receive from the end-user.

- **In-SMS**
This channel is using the free space in messages by putting ads in them. There are 160 characters in a SMS but the average SMS sent is 80 characters leaving 80 characters left where operators can fill with an advertisement. With In-SMS operators can ad a small text with a click-to-URL and also use adWords technique to deploy ads depending on the message.

Vodafone’s South African subsidiary Vodacom developed a service called “Please Call Me” which lets prepaid customers send a free, In-SMS, mainly asking their friends to call back. This target users who are running low on their minutes and giving them a chance to send urgent SMS text messages. This service is spreading widely and operators are starting to see the potential. More operators are testing In-SMS services. Orange ran the worlds first In-SMS trial in Switzerland in cooperation with Amobee Media Systems. Customers who opted-in were offered a discount. These kind of pull-SMS have a much higher chance of being read than usual push-SMS because they are less intrusive. There are different ways to interact with the end-user who reads the In-SMS advertisement, e.g by integrating features such as click-to-WAP, click-to-call or click-to-download. Test results measured during the nine-week testing period are very positive in terms of acceptance rate, service delivery, click rates, number of inventories and the impact on brand recognition.

- **In-Call**
  
  Before a phone call a 15-second voice ad that the end users can listen to either before or in a phone call. That voice ad could ask the end-user if they want to receive more information from the advertiser via SMS. In a portal there are a lot of banners so the competition could be tough. In-call advertising is a way of getting some free one-to-one time with the consumer in a clutter-free environment.

  According to John Roswech, the president of Jingle Networks, their response rate is 3 or 4 percent, which is higher than he would’ve thought. 1-800-FREE411 is Jingle Networks ad-supported directory assistance service.

  Turner Network Television (TNT) had a campaign to promote the NBA playoffs using 1-800-FREE411. When consumers called 1-800-FREE411 for information or directions, a targeted ad was played to male callers reminding them of their hometown’s next playoff game airing on TNT. Callers were also given the opportunity to receive a reminder via SMS two hours before game. The campaign ran from May 5 - May 29 2008 and served more than 1.3 million mobile impressions with a 5.4 percent opt-in rate for text message reminders. Jingle Neworks sells their audio In-Call ads for $25 to $40 on a CPM basis.

- **Location Based Services (LBS)**
This includes services to identify a location of a person or object, such as discovering the nearest banking cash machine or the whereabouts of a friend or employee.

There are different technologies behind LBS like GPS, which is getting more common in today's Smartphone's. If the mobile end-user does not have GPS on their handset then there is another technology to locate the handset thru triangulation of the signal from cell sites serving a mobile phone. This technology is called network based positioning.

Almost any service that involves information about mobile objects can benefit from knowing the location of a mobile phone. Parents can use services like childfinder to keep track of their children for instance receiving a SMS when they leave the house or come home or just went missing. You may also receive SMS if you attend or get close to a friend or family member.

This kind of location-based services gives mobile advertising a great way for boutiques and stores to advertise. When you enter a pre-defined area like a mall you could get a SMS with coupons, discounts and news from stores, cafés, restaurants and movie theaters. Mix that with the opted-in targeting and with the end-users profile information, interests and habits maybe information about their favorite brands and stores and it could be relevant, interesting with an immediate value.

In 2007 the Singaporean mobile operator, m1, carried out an initiative that involved many local marketers and it was reported to be a huge success in terms of subscriber acceptance.

- **Bluetooth**
  This is an alternative to WAP for broadcasting information or sending LBS messages. Generally installed at set locations such as cinemas, stores or train stations and can distribute opted-in content within a limited area.
  With Bluetooth advertising the stores need to buy a device that identifies a Bluetooth handset like a mobile phone. The end-user who walks by the store or is within the area gets an advertisement. It could be built so that the first message could be an opt-in message where the user can accept or decline further ads from the store. This could then be stored in the Bluetooth device database.

  Bluetooth is a very cost efficient channel compared to other channels. The advertisements are sent freely over the Bluetooth frequency compared to messaging, which is on the operator network. Therefore the stores do not have to pay for every sent message.
• **Ad funded Content/In-Games**
  Mobile games and applications are often linked in with ad funding or sponsorship can be as simple as a full page interstitial before the games, between the levels or a fully integrated branded experience.

  Apple’s iPhone has also brought apps and games to another level with their app store. With over 1 billion downloaded apps more companies like Vodafone, Nokia and other companies are building online stores where users can download software applications. Google, with their Android, has joined that market but in their app store there is no need of approval and large costs in comparison with Apples.

• **Mobile TV**
  Ericsson’s Consumer Lab study indicates that Mobile TV is a potential top-three service for 3G mobile phone users. The 2006 Australian survey, released last month, showed that one in four Australian mobile phone users have access to Mobile TV services and a third of those already use the service. In terms of interest in Mobile TV content, the top three are news (with 49% of Australians being interested) comedy (43%) and sports (29%).

  Ericsson presented its results from a global study on the business potential of Mobile TV advertisements in 2006. Ericsson interviewed 40 senior executives across Europe and the US, including representatives from TV broadcasters, consumer brands, service providers, operators, and media and marketing agencies. The results recognize the unique value-add that the mobile channel offers compared to regular TV advertising, due to the fact that it is more targeted and viewers are more actively involved. Personalization and interactivity set Mobile TV apart as an advertising medium.
3.3. Online Mobile Advertising
Here we describe the advertising made online on the mobile web.

- **On-Portal**
  To encourage mobile subscribers to use data services and browse the web, many mobile operators use Mobile Portals. In these portals, subscribers can browse and download different services or, in some cases, even use more advanced services like Mobile TV. These portals are a great tool for mobile advertising. Most of the portals are free to surf and with targeted banners consumers can click on a banner they find exciting and read the rich Campaign Microsite free of charge. One of the main obstacles with mobile advertising from the consumers point of view is that they do not want to be charged for interacting with ads.

  The most famous portal is Vodafone Live! which, as well as being used by Vodafone, is sold onto affiliates such as Telekom Austria’s mobile unit Mobilkom Austria.

- **Off-Portal**
  Off-portal sites are sites outside the operator portal like news sites or different social networks. In a research made 2008, IAB showed that 44% of young people are accessing social networks on their mobile phones, which are an increase by 180%. The fastest growth area for mobile usage is social networking: we are creating and sharing content, and spending more time updating our Facebook profiles on mobile (three times per day) than we do online (twice a day) (Robert Thurner).

- **Search**
  This channel is primarily used via search partners on operators portal sites but it can also be accessed directly just like the Internet. The major players in this area are Yahoo! and Google. Google dominates mobile browser-based searches in Western Europe, ranging from 63% in France to 88% in Italy. Yahoo has partnered up with a couple of operators to run on their mobile portals. Google has released a mobile operating system called Android where you easily can search on Google from your mobile home screen.

  WAP has been commercial failure because only few people can connect to the Internet through it due to high costs, slow access speed, hard to read screens that lead to lack of comfort and lack of ease of use, on the other hand SMS is very successful in Europe.
3.4. Terms of Measurement

There are a couple of terms used in analyzing and evaluating the results from a campaign. To see if a campaign has been successful or unsuccessful the first thing is to think about what the purpose and background of the campaign was. By looking at the results on how previous campaigns on other medias and channels has been can also give a good understanding in how well the campaign was.

**Cost per click (CPC)** is the amount of money an advertiser pays publishers and search engines and other Internet publishers for a single click on its advertisement that brings one visitor to its website.

**Cost per thousand impression (CPM)**, is used for measuring the worth and cost of a specific campaign. CPM is frequently used in advertising to represent cost per thousand (where M is the roman numeral of 1000). When used in advertising, it relates to the cost per thousand page impressions. An impression is a single ad, when used in Mobile Internet Advertising a impression is a banner. Every time the server loads the banner the ad server counts it as one impression.

**Click through rate (CTR)** is a way of measuring a campaigns success. It is the amount of people that clicked on a banner to get more information. If an impression has been sent out 100 times and one person clicked on the impression, then the CTR is 1%.

What the industry should consider about what users welcome into their phones is two things.

1. There must be some perceived value in the message, wether that would be a coupon to recoup, a game to play or a notification for a sale in a retail outlet.
2. That the message was relevant to them, for example notifying them to a sale for a retail outlet, some local information to find where they are or allowing them to download a screensaver to personalize their phone.

3.5. Global Markets

Bernstein Research forecasted that mobile advertising worldwide quadrupled from $4.2 billion USD in 2008 which is about 7% of online ad spending, to $17.0 billion USD by 2012 which is about 19% of online ad spending. We investigated about the different markets around the world to give us more understanding. After reading a lot of case studies and global researches our understanding were that mobile messaging and mobile web advertising were the most common and popular channel. Then we had our interviews with the Swedish operators. According to them messaging channel is obsolete. The Swedish market is all about banners and online advertisement. We should forget about push advertising and opt-in and concentrate on pull. Different cultures and markets work in different ways, therefore we decided to analyze these markets further.
• **Asia-Pacific**

Asian market is mostly focused on Japan and South Korea, which are the world-leading markets for the mobile industry. Their early-adopter culture makes it easy for companies to run new services like Mobile Advertising and m-commerce. Asia-Pacific is leading the mobile advertising industry with 43% of total spending worldwide.

mTrend reported that 63% of South Koreans make payments with their mobile phones. A new innovation in form of e-wallet devices from NTT DoCoMo has become hugely popular. There are 50 million mobile phone devices in Japan equipped with a Contactless Integrated Circuit (CIC), and customers can simply wave their phones over a reader to use them as e-money, e-credit cards, train/plane tickets, membership cards and door keys.

Many of the new services are first tested in Japan and South Korea before they enter the European and American markets. A report called “What Japan Thinks” from 2008 reveals that when the Japanese uses a phone to request information about an ad, 42 percent scan a QR code and 35 percent send a blank email to access the URL. Mixi, which is Japan's largest social networking site, has more members accessing from mobile devices than PC’s.

It is estimated that the penetration of mobile video in Japan and South Korea is over 50 percent.

Asia-Pacific is world leading and will hold on to the first place. The total spending forecast for Asia-Pacific is going to increase from $3.2 billion to over £13.3 billion over the next 5 years.

• **Western & Eastern Europe**

The European market can be divided into two groups: Western Europe and Eastern Europe. Western Europe is the more matured and the more complex mobile market.

The European market is the second market behind the Asian. The most remarkable development for the European market according to ABI Data points to the fact that the most popular channel will be video advertising. The revenue of video advertising will increase from $145.6 million in 2009 to $2.4 billion in 2014.
• **North America**
North American market is behind the Asian and the European markets but they are advancing. North America has always followed their own path in the mobile handset industry. A market where beepers, were the most common mobile communication handset, where someone could call to a friend’s beeper, asking them to call back, instead of buying mobile phones. A market with their own strategy of payments and price rates.

An example of that is the main reason why the adoption of marketing via messaging is not as popular as other markets. In the North American market consumers need text messaging plans for receiving messages or it will cost them to receive messages.

The biggest trend among the channel revenue for North American market is mobile application advertising. It will rise to become the second most popular channel. The revenue will increase from $20,55 million in 2009 to $853,95 million in 2014.

• **Emerging Markets**
In the rest of the world we have added markets like South American and Africa & Middle East. These markets are growing rapidly and the lack of a PC-generation drives their online adoption toward mobile Internet. Former Mobile Marketing Association President Laura Marriott noted in July 2008 that mobile penetration in Latin America was six times the PC-penetration.

The top reason of the huge increase in mobile advertising spending in Asia-Pacific compared with Europe or North America is countries like China and India. These countries do not have a PC-generation, therefore Internet for them will be mobile Internet. With a combined population of 2,5 billion, it will give a massive Compound Annual Growth Rate bringing Asia-Pacific market up to $13 billion.

"Mobile is not simply viewed as an extension of the Web in BRIC (Brazil, Russia, India and China), as it is in the US, Western Europe and parts of Asia-Pacific. Mobile is the Internet for an increasingly large and attractive consumer segment – an important distinction for marketers to keep in mind." – John du Pre Gauntt, eMarketer Senior Analyst.
4. **Case Studies**

This chapter provides analysis of a couple of case studies. In these case studies we want to show how a campaign is successful by targeting and performing the campaigns with great timing. These cases are presented for their innovation. The first campaign described is an information site marketed thru mobile banners on specific sites for their target group. The second campaign used a wide marketing mix to promote a branded In-Game channel. The timing was great because of UEFA European Championship. The third and last campaign is a gift-card campaign marketed on street posters. To get this gift-card the consumer need to interact with the advertiser, which will be a great way to get opted-in end-users.

4.1. **Within Case Analysis of Jaguar XF Campaign**

Here we chose to analyze the Jaguars XF campaign to show a successful off-portal campaign and why it was successful. We found that this was a great example of how mobile advertising could be used with great timing and targeting. The information surrounding this campaign was gathered on mobiadnews.com and mobilemarketer.com.

- **Purpose & Background**
  
  Jaguar released their new car model Jaguar XF in the Los Angeles motor show in November 2007. At the time of the motor show they also launched their mobile campaign. This mobile campaign ran from November 1st 2007 to the end of June 2008 and consisted of banners and a campaign site.

  Jaguar worked with their world wide digital agency Global Beach, who designed the WAP site for the US market. Global Beach partnered with mobile specialist Incentivated for the build of the mobile site.

- **Strategy**
  
  “The strategy of the campaign was to deliver a new experience to Jaguar owners and prospects. We were trying to capture a mobile audience and determined that having a mobile WAP site was an interesting way to do that. We have this audience and we want to cater to it.” said Beth Bilock, account manager at Global Beach.

  Jaguar reached out to high-income consumers by purchasing targeted banners across Yahoo mobile, MSN.mobi, cars.mobiand through admob ad network. Their targeted audience consisted of males between the ages of 35 to 54 years old and with a high level of income above $150.000.

  The site had a built in detection service which automatically resized the site
for over 2,000 different mobile devices. The Jaguar XF is a luxury product so the quality of the images was of special importance so they were specially rendered for each handset. They also built a special site for iPhone users to insure a quality experience on that device.

These banners sent the consumers to the mobile campaign site. The mobile site provided a range of material about the new Jaguar, as well as several ways for consumers to engage with the company.

- Visitors could read about and download videos to watch about Design, Innovation and Performance. The downloadable videos were in two resolutions, one high and one low.
- Visitors could submit their email addresses in order to request a branded email newsletter.
- The visitor could download wallpapers to their handsets
- Visitors could also input their ZIP codes in order to locate their nearest dealer and book a test drive.

• Results
The Strategy built a “significant” pre-release interest among its key audience, according to Michael Boyle, Senior director of monetization at Connected Life, Yahoo.

This campaign delivered more than 30million ad impressions and brought more than 140,000 unique visitors to the Jaguar XF campaign site. This gave them an overall click through rate of 0.6%.

12,000 videos and 18,000 wallpapers were downloaded and the average time spent on the site from visitors was 2 minutes and 12 seconds.

1.2% of the visitors requested a branded email brochure for further information about the car. Also 2.6% located their nearest dealer in order to arrange a test drive. The campaign also prompted a 96% completion rate of the dealer location form.

“Overall, the campaign did extremely well. It broke all records in terms of expectations” according to Beth Bilock.

This campaign’s success has prompted Jaguar North America to develop sites for the XK, XF, and XFR models, and commit an additional $1.6 million to mobile advertising for 2009, a major vote of confidence in mobile amid difficult trading conditions (Robert Thurner 2009).
4.2. Within Case Analysis of Snickers Peanut Challenge Campaign

We chose to write about Snickers Peanut Challenge case to show a successful ad-funded in-game campaign. Sporting events are a gift for mobile marketers, as dedicated fans gear up and don not want to miss a thing about their team. We received information about this campaign thru interviews with Johan Näsland at adiento and Josep M. Nolla at Tele2.

- **Purpose & Background**
  The purpose behind this campaign was to drive brand awareness by using UEFA European championship 2008 to attract their target audience.

  This campaign was launched in Sweden, Norway and Denmark. The partnership behind this campaign was the technology provider Mobiento, the media agency Initiative Universal Media, the content provider behind the game Mobile Interaction.

- **Strategy**
  The targeting audience was boys between 16-24. The campaign was marketed in the movies, online, in-stores and mobile advertising through Tele2 and TV4 mobile portals through adiento.

  The mission was to drive these boys to download a mobile game where you shoot penalty kicks against a Snickers goal to win prizes.

  The game was branded with Snickers and the purpose of the game was to shoot against the Snickers goal to win prizes. They could either practice or compete and even submit their high scores. The game supported SMS-Challenge so the score could be sent to a friend who receives a SMS with the score along with a download link to download the game.

  The winner who received the best score would win a Nintendo Wii and Snickers products.

- **Results**
  Results were successful with nearly 40,000 games downloaded and an amazing 2.2 million penalty kicks were shot against the Snickers goal. The click-through rate from the mobile banners on Tele2’s mobile portal and TV4’s mobile portal were 2-3%. The click through rate from the SMS-Challenges was up to 5%.
4.3. Within Case Study of Stångåstadens Ice-Cream Campaign

We chose this case to show how successful a coupon campaign could be. Mobile coupons and gift cards is a good way reaching to the consumers and getting consumers to engage with the advertisement. Information on this campaign comes from Joachim Alvarez at Bonnier Responsmedier AB.

- **Purpose & Background**
  Stångåstadens is the biggest property owner/landlord in Linköping, Sweden. The purpose behind this campaign was to show that their tenants are pleased with them. This campaign was made after a survey showing that 96% of their customers were pleased with their landlord. By making the consumers to engage with the campaign they receive the message that almost everybody is pleased with Stångåstadens.

  This campaign was launched in Sweden, Linköping. The partnership behind this campaign was the content provider Bonnier Responsmedier Mobile Services and the media agency Markus.

- **Strategy**
  The strategy behind this campaign was to make the consumers engage with the campaign to get free ice cream.

  This was marketed thru street and bus stop posters. And this was carried out in two steps.

  In the first step the customers Jaafar, Birgit, Emma, Julius and the dog Milton say that they are pleased and that 96% of all the customers share their view. So in the second step the same customers are seen eating ice cream with the request to all the citizens of Linköping to SMS the percentage of the pleased customers. In return they would receive a code that entitles them to a free ice cream.

- **Results**
  The results were astonishing. Almost 3000 consumers sent a SMS with their answer. 67.5% of those who answered used their codes to receive a free ice cream from the stores. The conversion rate on a traditional paper-coupon is between 0.2-2%. On mobile, the conversion rate on coupons is between 20-40% thereby this conversion rate of nearly 70% is seen as a success.

  The campaign was so successful that every ice cream in Pressbyrån was sold out a couple of time during the campaign period.
4.4. Within Case study of McDonalds McFlurryCampaign

This is a great example of how a bluetoothcampaign could be made. This was only a trial. The information on this campaign comes from a telephone interview with Daniel Ahlinder from DDB.

- **Purpose & Background**
  The purpose behind this campaign was to test the Bluetooth channel.

- **Strategy**
  Bluetooth transmitters were built on the store near the sidewalk outside. This device scans after Bluetooth handsets to interact with by sending a request for engagement. When end-users walks outside the restaurant, with their Bluetooth turned on, their mobile will interact with Mcdonalds Bluetooth device. The end-user will receive a message asking the end-user if he or she wants to receive an offer from McDonalds. If the end-user answers yes then a coupon will be sent. With that coupon the end-user could go in to the restaurant to buy one McFlurry and get one for free.

Every end-user who answers to the request is placed in a non-send database in the Bluetooth device. The next time the end-users, who already received the message, walks outside the restaurant the Bluetooth device recognizes it and will not send any request to that handset.

- **Results**
  The results are unknown.
4.5. **Within Case study of 7-Eleven Store Locator Campaign**

This case is special because it is an ad funded application that uses positioning and delivers offers. This campaign is a very interesting solution that could be used by other retailers and companies to build up their brand and customer relations. This could be a great way to get consumers to opt-in.

- **Purpose & Background**

  The purpose for 7-eleven is to reinforce their position as one of the retail innovators. They want to strengthen and further evolve the relation between their consumer and at the same time offer their suppliers the opportunity to test their new products with quick feedback.

  The companies behind this campaign are the technology provider Lonely Duck, the media agency Peacock and the content provider Bonnier Responsmedier in cooperation with 7-Eleven.

- **Strategy**

  This application has first created as a store locator and when the consumers started it they would be asked to plug in their phone number to receive a unique coupon code for a free coffee and biscotti. To claim their coffee and biscotti offer, they just show the code to a 7-Eleven clerk. The coupon is only valid once and free coffee in April will be followed by free ice-cream in May.

  In October they released a newer version where brands behind the products could add a survey before the end-user could receive the coupon. This gives the brands the opportunity to receive quick feedback about their brand and products. This becomes a great way for brands to test their new products.

  This campaign is a win-win-win situation. 7-Eleven builds up their brand and strengthen their relations with the consumers. Brands will get the chance to test their new products and get feedback from the consumers. And the end-users will get free offers.

- **Results**

  The application was downloaded 2,500 times in the week it launched which was enough to place it in the top 10 of free app downloads in Apple’s appstore.
5. **Analysis**

In this chapter we are analyzing how the online behavior has changed and affected the mobile advertising market. Also, the different actors in the value chain and different global markets are described and analyzed.

### 5.1. Mobile Advertising Market

According to Vodafone Australia it is estimated that consumers are spending 25% longer looking at their mobile screen compared to last year. How has the market changed and why?

### 5.2. Online Revolution

The online behavior is constantly changing. With stationary PC’s for 10 years ago consumers where stuck in front of their computers while surfing. Then the laptops were developed and changed the market and online behavior. Thereby consumers could sit on their sofas watching TV and surfing with a computer on their knees. Now after the iPhone revolution the online behavior has changed yet again. Now consumers are always online and can surf while sitting in a bus.

Even while the consumers are at home they are surfing more on their phones. Instead of having the laptops on their knees the consumers now have the world in their hands. Pyramid Research forecasts that the number of mobile subscriptions at the global level will grow from 4 billion subscriptions to roughly 6 billion and that 44% subscriptions will be using 3G services by 2013.

- **The iPhone Revolution**

  After the launch of iPhone 3G the mobile phone usage has transformed. iPhone users for example are around 7 times more likely than average to browse on their phones daily for news and information. It is not the only phone to do this since the penetration of 3G handsets overall increased in total by 36% in 2008. iPhone has set a new standard of handsets and handsets companies are trying to copy iPhone. These kind of smartphones are all about mobile Internet, media and entertainment.

  With the new release of iPhone 3GS and the new operating software 3.0 application developers can now sell directly in the application. Users are now able to buy new levels, upgrades or other services and products without exiting the application. With the built in GPS and compass a lot of new options has opened up especially for Location Based Advertising.
How Mobile Surf Packages Changing the Usage
Mobile Internet is growing stronger with more unlimited surfing packages. Telecom operator O2 have reported seeing a 300% increase in mobile surfing (IAB 2009). Before this kind of unlimited surfing packages there were a lot of hesitation and fail rates due to high surfing costs. The problem regarding network operators taking too large share of the profit refers to the fact that the content providers believe that the network operators are intruding on revenues that should in fact be theirs. When using premium SMS, the network operators take 30% of the revenue making the service 50% more expensive for the advertiser. In regards to mobile surf, the content providers receive nothing (Radojewski&Lucander 2009). With MB costs of more than 1€, downloading a 10MB video could cost the consumer 10€. These costs have scared a lot of consumers without unlimited surf packages from engaging with the advertisements.

Targeting Attracts Advertisers
The biggest advantage of mobile advertising is the option of targeting. With targeting the consumers, end-users can receive relevant advertisements directed to them personally. Advertisers can choose to target a specific demographic group deciding on sex, age and location or even other targeting options such as positioning. Positioning is giving relevant advertisements a whole new meaning. This is a new revolution in marketing and advertising.

Channels
In the starting faze of Bluetooth advertising, messages were sent out to every consumer walking by with their Bluetooth turned on. With the behavior knowledge we have today we know that it is a big mistake, hence it is an unsuccessful channel because of it. The consumers have found this channel intrusive and they have been deleting the messages.
and this has given the stores opposite effect in form of negative brand awareness (according to interview with Marcus Gustafsson, Digital Planner at Mindshare).

Bluetooth could evolve and learn from its mistakes by sending these advertisements to opted-in consumers. There are stores who have membership cards so the members could get informed about a new exclusive Bluetooth service and be invited to opt-in.

Location Based Services is another channel that has been requested among advertisers this last year. But according to TomiAhonen, the former Nokia Director, he calculated this at Nokia. Location Based Services without opt-in would fail, because the end-user will see it as SPAM. The WAA’s Code of Conduct for Mobile Advertising says that all ads on mobile had to be on the basis of opt-in.

According to TomiAhonen the only situation that Location Based Services will work is on events. For examples concerts were people who enters the arena receives a message inviting them to opt-in to the artists fan club to receive pictures, news and maybe ringtones. They are then used while promoting the artist album and future work or concerts.

- **Mobile Advertising Grows Despite the Economic Downturn**
  The Advertising revenue has closely tracked the economic trends. The slowdown in global economy has and will be challenging for the advertising as a whole, but new formats, like internet and mobile platforms is more dynamic and we have seen a market allocation from traditional formats to digital.

  The economic downturn has affected mobile advertising but it hasn’t been in a negative way. Advertisers have less money to invest and are interested in smaller sized campaigns. This has driven them to try out this new format where the advertisers can target their exact audience according to Johan Näslund. There have been a discussion over the pricing that this new format is expensive in a CPM point of view but with targeting they can reach their specific audience, hence a cheaper campaign.
5.3. Mobile Advertising and Marketing Value Chain

The value chain of mobile advertising is complex. Since the mobile content and mobile advertising ecosystem is still in its early stages, the market is not formed. The roles of different players are not quite as defined as in the online advertising market. We are seeing companies starting, closing down and restructuring to find their place in the ecosystem. They are described in chronologic order.

- **Advertisers**
  Advertisers are perhaps the most important player in the mobile marketing ecosystem. They have to make a choice when committing to this medium, and there is not much history of successful and unsuccessful campaigns to guide one’s decision (Heather Way 2009). For mobile advertising to really flourish it is in need of the total commitment from two actors, Advertisers and Operators.

  The industry is still in need of time-tested data on which formats work best for what ends, so it is currently experimenting with different forms of mobile ads. The vast majority of mobile advertising expenditures currently go to text-message ads because messaging is the most common mobile data activity (Heather Way 2009).

  A broad-based brand-building campaign could tie together many different forms of consumer contact, such as text-based advertising in the form of either opt-in messaging or participation marketing using short codes that involves some other media such as a magazine or TV ad.

- **Ad Server/Network Companies**
  The mobile ad network companies allow advertisers to reach into the mobile web, in-application advertising, and even wireless operator inventory, and then place their advertisements there with a range of potential targeting capabilities.

- **Agencies**
  The agencies play an important part. They are the ones that advertisers assign to decide the campaign strategy. Agencies have to get educated about mobile advertising and its possibilities to pitch to their clients.

  Most large agencies today have digital divisions. They are open to mobile advertising but they lack knowledge.
• **Content Providers**
  The content providers are important parts of the overall value chain. Their content is often either fully or partly monetized through ad support, or the content provider is one of the primary advertisers. Content providers could for example make contents like a gift card application just like Stångåstaden campaign that was described in the Case Study chapter.

• **Operators**
  Operators are challenged by the fact that revenues from mobile broadband are limited, just a few per cent of the overall ARPU (Average Revenue Per User), and thus not compensating for the declining voice revenue (Mölleryd, Markendahl&Mäkitalo 2009). They are in tough spot with flat rates and constantly falling price rates, especially in Europe. European market is matured and the competition is fierce. The larger operators are expanding into the emerging markets, such as China and India, where subscriber growth is still available. The operators are in need of other sources of income, so they are also charging users for new services, such as content delivery and mobile TV.

  According to Johan Åsén, in order of controlling the entire mobile market they could be losing their important central place in this ecosystem.

• **Technology Providers**
  There are a lot of technology providers in this industry. Today the most experienced technology provider companies are the smaller ones. Companies like AdMob, Velti, Amobee are the top of the game. They are small in size but they are pretty much controlling the market. This industry is evolving fast and companies are shaping. We have been seeing the MVNO (Mobile Virtual Network Operator) operator Blyk restructure in to a Technology provider/media agency and work alongside operators like Orange and Vodafone.

  Now we are seeing the larger companies in the communication industry jumping in. Companies like Ericsson, Google, Yahoo, Nokia, Microsoft etc are establishing and finding their place in mobile advertising value chain.
5.4. The Revenue Share Between the Actors in the Value Chain

It is hard to define the value chain and to calculate results from the different actors. Our toughest job has been to gather specific data from all of the actors in the ecosystem. Most of the companies will not share their revenues and spending or even specific pricing. So we had to put this puzzle together with bits and pieces from different companies, cases and presumptions.

Let us assume an advertiser puts together a campaign in partnership with a technology provider, ad sales company and a network operator.

- **Messaging Results**
  If the campaign runs on SMS-channel then the technology provider/ad sales charges the advertiser 1,50kr/SMS. Technology providers/ad Sales Company can either buy bulk SMS from Ericsson IPX or send the messages thru a network operator for 0,30-0,40kr/SMS. So let’s assume that the advertisers want to send out 10,000 SMS. Then the campaign will cost the advertiser 15,000kr. The technology provider/ad sales company will earn 11,000-12,000kr out of 15,000kr giving them a share of 73-80% while network operators or Ericsson IPX share in 3,000-4,000kr giving them a 20-27% share.

- **Banner Results**
  A result from a banner campaign could get more complicated. We could divide the spending into two segments. The first segment is the production segment and the second segment is the buying segment.

Let us fabricate a fictive banner campaign and partnering up with technology provider. The budget for this campaign will be set to 200,000kr. Out of these 150,000kr will go to the production segment for strategic planning and building the banner campaign. Then they will buy space on operator’s mobile portal from the buying segment for 50,000kr.

This buying segment will be shared between the Ad server company and the network operator. On this segment the split will be 80/20 in favor for the network operator. This means that out of the 200,000kr budget, Mobiento receives 160,000kr and Tele2 40,000kr.
6. Conclusion

In this chapter, our results are discussed and conclusion is drawn on what the most profitable and efficient solution there is within mobile advertising, why mobile advertising has not been developed further by the market,

6.1. How Profitable is Mobile Advertising?

This is a tough question to answer but from interviewing different companies we have come to the conclusion that it is not that profitable at the moment. This is a business for the future. Most of the companies do not want to comment this question but it seems to be a growing part of the value chain actor’s revenues.

According to Johan Åsén who works at Aftonbladet mobile, the revenue from mobile advertising is not enough to pay the salaries of their mobile department employees.

Blyk was an UK-based MVNO who had targeted 16-24 year old and offered them 217 free minutes and 43 free text messages a month and in return received a couple of ads on the mobile phones per day. Their end-users opted in to join and made a profile with interest to complement their demographic profile. They had a goal of 100,000 customers after a year but they doubled their goal and ended up with 200,000 users. Still this was not profitable so they had to restructure from being a Mobile Virtual Network Operator and became a technology provider/media agency working alongside network operators.

Virgin Mobile’s started a service called SugarMama where end-users could interact with advertisers and in return earned free minutes. This was not profitable either and Virgin shut down.

Mobile advertising is a great new format but agencies and advertisers are not investing enough. There is not enough advertisers to fill the publishers advertising space according to Johan Åsén.

The actors in Sweden who is getting the most of the profits is the large network operators. This is because of their reach. Many end-users start their Internet browsing the network operator portal.
6.2. What is the most profitable and efficient solution?
We believe after all our interviews and reading a lot of case study is that mobile advertising should not be seen as a solution itself. Mobile advertising is a great way to reach customers and the best way to do this is by allowing mobile to be a part of the advertisers marketing mix. For the moment most of the advertisers and agencies are experimenting with mobile advertising. We have seen that by using traditional and mobile advertising together is the most profitable and efficient solution. Such as the case studies that were presented in chapter 4. By using posters on the streets or in a store and being able to take a picture of the QR code or texting in a pull message for more information and getting the consumer to engage is the most profitable and efficient solution within mobile advertising. Also money is saved when messages no longer get sent to all handsets.

6.3. The Inertia
What is holding the mobile industry back? Every year since 2006 experts have been claiming that the year they are in would be the year of Mobile Advertising. What is holding mobile advertising back from breaking through?

There have been small boomshere and there but the real boom will come within three years according to Joachim Alvarez, Product Manager Bonnier Responsmedier Mobile Services. Whenever the big traditional companies buy these small mobile companies there is a small boom itself because these are signs that the big shots are investing in this format.

There are a couple of factors holding Mobile Advertising back.

- **Knowledge**
  Not enough knowledge from the agencies. Joachim Alvarez from Bonnier Responsmedier described how they still have discussions with the agencies about fonts and colors in the SMS. Agencies are starting to take this more seriously but they still have a lot improve.

  As long as old traditionalists making the decisions at the agencies this industry will not boom. They have to see that Mobile is not a smaller form of Internet so they need mobile units. And start giving mobile its ownspace instead of being an extension of Internet unit.

- **Pricing**
  Pricing could be seen from different angles. From the end user it is expensive to browse the mobile web so until the pricing is reasonable the boom will be absent. For example in North America they use their
Receiving Party (also) Pays model, which makes it expensive for consumers to receive messages. We are noticing that mobile Internet plans with unlimited surf are getting more popular. With that people can click on banners without worrying about the costs.

The costs are seen high from an advertiser point of view as well without really having a good way of measuring the level of success. There is not any impartial organization to measure with predefined standards for mobile advertising yet.

Content Providers and the rest of the market is experimenting and they are trying to negotiate the best revenue share. For now most of the players are thinking the same thing. Network operators are trying to control the entire market by either charging high prices or creating the contents themselves. So in order of trying to dominate this industry they are in fact slowing the process. If we look at Japan and South Korea we can see that content providers get 80% of the revenue share instead of 50/50 share in most of Europe and North America.

- **Technology**
  Most of the production spending is put on adjusting the game/application, banner sizes, microsites or whatever the channel is, to all the different handsets so it works when they want to engage with the campaign. It could be up to 2000 different handset models so it a lot of work.

This industry is in need of standards and we believe that the lack of standards is a big obstacle. Joachim Alvarez from Bonnier believes that Google Android will help the industry of setting some standards. Smartphone’s today tend to look the same and could have de same resolution. That could help the content providers or application developers to work with one or a few resolutions on the end-users handsets. Just like with computers who have different sizes and types but the applications seem to work on every device.
6.4. The Future

So what does the future bring? We believe that Mobile Advertising is going to be a common part of the marketing mix. Maybe not all alone but together with traditional medias as well. Like Quick Response code or invitation on posters in subway and busses, streets and stores with URL or SMS number. To think globally is all wrong because every region is different from one another. The different regions have different online traditions and behaviors, have different acceptance to advertisements and different cultures.

We believe that operators will get a smaller role in the future when the end-users are starting to have their own start sites. It is the same development Internet had. 10 years ago agencies did not have knowledge about Internet and pricings were high just like mobile Internet is today. 10 years ago when the end-user started Internet the first start site was the operators portal just like mobile internet is today.

We believe companies like Google is going to become one of the biggest players of tomorrow in the Mobile Advertising industry. With Android and the close relation to Apple’s iPhone in the handset market and being the biggest mobile search player gives them good conditions.
7. References

Research PDF’s
Mobext Insight; Global Mobile A Worldview, Consumer Trends and Practical Opportunities in Mobile Marketing, August 2009

Yankee Group; Blyk’s Priceless Lessons in Mobile Advertising, August 13 2009

Rebecca Lucander& Johan Radojewski; Investigating Mobile Inertia, 2009-06-11

Mölleryd, Markendahl and Mäkitalo Analysis of operator options to reduce the impact of the revenue gap caused by flat rate mobile broadband subscriptions, 2009


Robert Thurner; Commercial Director of Incentivated, IAB 2009

eMarketer; Mobile Advertising and Usage, April 2009

ABI Research; Mobile Marketing and Advertising: Mobile Continues its Climb While Print and Online Falter, Q2 2009

Pyramid Research; Mobile Marketing in Emerging Markets, February 2009


MMA; Mobile Advertising Guidelines, October 2008

MMA; Mobile Marketing Industry Glossary, 2008

MAA; Implementing A Multi-Channel Mobile Advertising Platform, February 2008

Jupiter Research; Mobile Marketing in Europe, December 26, 2007

TanjaStorsul&PålSørgaard; US Mobile Operators and their Content Services, 12/2006

Interviews
BengtThorngren, Professor Handelshögskolan (09-06-26)
Patrick Parodi; CMO at Amobee (09-07-13)
Johan Näslund; Director at Adiento! (09-08.20)
Adam Fors; Director, Content Business Management, TeliaSonera (09-08.24)
Josep-Maria Nolla; Product Management and New Markets, Tele2 (09-08-28)
Victor Jungsand; Tre (09-08-31)
Fredrik Wallner; Microsoft advertising (09-09-17)
Joachim Alvarez, Bonnier Responsmedier (09-09-23)
Tanya Fields, Director of Mobile Data Group, Telefonica (09-10-01)
Internet articles
Heather Way, E-Commerce Times, In Mobile Advertising Experimentation Is The Name of the Game

MobiADNews, Jaguar Uses Mobile To Launch New XF Sedan
29.95.2008 http://www.mobiadnews.com/?p=2353

Giselle Tsirulnik, Mobile Marketer, Mobile Campaign drives the promotion of Jaguar's XF model,

AdMob Reports On Global Spread Of iPhones

Ad Supported SMS Services

These sites meant a lot to us where we read most of the articles.
http://www.mmaglobal.com/resources/case-studies
http://www.mobilemarketer.com/
http://www.mobiadnews.com/
http://communities-dominate.blogs.com/brands/
## Appendix I–Glossary

<table>
<thead>
<tr>
<th><strong>Ad Impression</strong></th>
<th>An advertisement impression transpires each time a consumer is exposed to an advertisement (either prepended or appended to an SMS message, on mobile web or web page, within a video clip, or related media).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advertisement</strong></td>
<td>Any collection of text, graphics or multimedia content displayed and accessible inside of an application for the purposes of promoting a commercial brand, product or service.</td>
</tr>
<tr>
<td><strong>Aggregator</strong></td>
<td>An organization that acts as a middleman between application and content providers, and mobile carriers. Provides message traffic throughput to multiple wireless operators or other aggregators; provides mobile initiative campaign oversight, and administration, as well as billing services.</td>
</tr>
<tr>
<td><strong>Average Revenue Per User (ARPU)</strong></td>
<td>A commonly used financial benchmark to measure the average revenue generated by a mobile carrier’s mobile subscriber, or “user.”</td>
</tr>
<tr>
<td><strong>Bluetooth</strong></td>
<td>A communication protocol that enables mobile devices equipped with a special chip to send and receive information wirelessly over short-ranges, using the 2.4 GHz spectrum band.</td>
</tr>
<tr>
<td><strong>Call to Action (CTA)</strong></td>
<td>A statement or instruction, typically promoted in print, web, TV, radio, on-portal, or other forms of media (often embedded in advertising), that explains to a mobile subscriber how to respond to an opt-in for a particular promotion or mobile initiative, which is typically followed by a Notice.</td>
</tr>
<tr>
<td><strong>Click</strong></td>
<td>The act of when a mobile subscriber interacts with (highlights and clicks on) an advertisement (banner, text link) or other actionable link, that has been served to their screen.</td>
</tr>
<tr>
<td><strong>Click to Call (CTC)</strong></td>
<td>A service that enables a mobile subscriber to initiate a voice call to a specified phone number by clicking on a link on a mobile web site. Typically used to enhance and provide a direct response mechanism in an advertisement.</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Click-through Rate (CTR)</strong></td>
<td>A way of measuring the success of an online or mobile advertising campaign. A CTR is obtained by dividing the number of users who clicked on an ad on a Web page by the number of times the ad was delivered (impressions).</td>
</tr>
<tr>
<td><strong>Content Provider</strong></td>
<td>A company that creates and offers content, e.g. graphic products, ringtones, games, news, information and entertainment services, etc.</td>
</tr>
<tr>
<td><strong>Cost per Thousand (CPM)</strong></td>
<td>A metric used to price advertising banners. Sites that sell advertising may guarantee an advertiser a certain number of impressions (number of times an ad banner is served and presumably seen by visitors) and then set the cost based on the guarantee, multiplied by the CPM rate.</td>
</tr>
<tr>
<td><strong>Coupon</strong></td>
<td>A ticket, message, and/or document that can be exchanged for a financial discount on a product or service.</td>
</tr>
<tr>
<td><strong>Dynamic Ad Delivery</strong></td>
<td>Based upon predetermined criteria, Dynamic Ad Delivery is the process by which a mobile advertisement is delivered, via a campaign management platform, to a publisher’s mobile content.</td>
</tr>
<tr>
<td><strong>End-User</strong></td>
<td>A person who accesses and uses a product. (e.g. a user who watches a video using their mobile device).</td>
</tr>
<tr>
<td><strong>General Packet Radio Service (GPRS)</strong></td>
<td>A packet-switching technology that enables high-speed data transmission of up to 115kbps. An enhancement for GSM, often described as 2.5G.</td>
</tr>
<tr>
<td><strong>Global Positioning System (GPS)</strong></td>
<td>A system of satellites, computers and receivers that can determine the latitude and longitude of a given receiver (within it’s system) located on Earth. It pin-points the receiver’s location by calculating the time it takes for signals from different satellites to reach the receiver.</td>
</tr>
<tr>
<td><strong>Graphic Banners</strong></td>
<td>A graphic mobile ad represented by a banner featuring an image. Similar to a web banner, but with lower size constraints.</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Handset</strong></td>
<td>Term used in reference to a mobile phone, mobile device, or mobile terminal.</td>
</tr>
<tr>
<td><strong>Image Ad</strong></td>
<td>An image on a mobile web site with an active link that can be clicked on by the wireless subscriber. Once clicked, the wireless subscriber is redirected to a new page, another mobile web site or other destination where an offer resides.</td>
</tr>
<tr>
<td><strong>Impressions</strong></td>
<td>A business metric for counting the number of times mobile subscribers have viewed a particular page, mobile advertisement on a mobile internet site or embedded within a text message or similar mobile medium.</td>
</tr>
<tr>
<td><strong>Information on Demand</strong></td>
<td>Content delivered in the form of an Alert. Subscriber receives updates of weather, traffic, horoscopes, jokes of the day, etc via SMS text, at a predetermined time and frequency.</td>
</tr>
<tr>
<td><strong>Landing Page</strong></td>
<td>A secondary page to which a user is directed when they click on an ad, where they are provided additional information and/or a mechanism to make a purchase. The user is often driven to a landing page via an ad banner, link or other offer related communication.</td>
</tr>
<tr>
<td><strong>Location Based Services (LBS)</strong></td>
<td>A range of services that are provided to mobile subscribers based on the geographical location of their handsets within their cellular network. Handsets have to be equipped with a position-location technology such as GPS to enable the geographical-trigger of service(s) being provided. LBS include driving directions, information about certain resources or destinations within current vicinity, such as restaurants, ATMs, shopping, movie theaters, etc. LBS may also be used to track the movements and locations of people, as is being done</td>
</tr>
</tbody>
</table>
via parent/child monitoring services and mobile devices that target the family market.

**Location Information**

Information that enables a Mobile Marketer to identify the specific location of a particular wireless device. Zip codes and area codes typically do not alone provide the specificity to qualify as Location Information. However, a Global Positioning System (GPS) is an example of a functionality that provides Location Information.

**Messaging**

Collectively, SMS and MMS messages sent to mobile phones/devices. This definition does not include advertisements delivered on WAP sites or advertisements delivered into games on mobile devices.

**Mobile Virtual Network Operator (MVNO)**

A mobile service provider that leases/uses the network infrastructure of a major mobile carrier. Examples are: Amp’d Mobile, which uses Verizon’s network and Blyk, which used the Orange network.

**Opt-in**

The process where a Subscriber provides explicit consent, after receiving Notice from the Mobile Marketer.

**Opt-out**

The process through which a Subscriber revokes consent after receiving Notice from the Mobile Marketer. An example of an Opt-out process includes, but is not limited to, a Subscriber replying to an SMS message with the phrase “stop.”

**Premium Short Message Services (PSMS)**

Billing mechanism by which the mobile subscriber is charged above standard text messaging rates for mobile content and/or subscription.

**Pre-roll**

The streaming of a mobile advertising clip prior to a mobile TV/video clip. The mobile ad is usually 10-15 seconds in length.
<table>
<thead>
<tr>
<th><strong>Publisher</strong></th>
<th>A company that provides WAP sites and/or facilitates the delivery of advertising via one or more WAP sites. Also, a publisher of mobile content, such as games and personalization products.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pull Messaging</strong></td>
<td>Any content sent to the wireless subscriber upon request, shortly thereafter, on a one-time basis. For example, when a customer requests the local weather from a WAP-capable browser, the content of the response, including any related advertising, is Pull Messaging.</td>
</tr>
<tr>
<td><strong>Push Messaging</strong></td>
<td>Any content sent by or on behalf of advertisers and marketers to a wireless mobile device at a time other than when the subscriber requests it. Push Messaging includes audio, short message service (SMS) messages, e-mail, multimedia messaging, cell broadcast, picture messages, surveys, or any other pushed advertising or content.</td>
</tr>
<tr>
<td><strong>Revenue Share</strong></td>
<td>Each party behind the mobile marketing initiative splits the revenue derived from the mobile marketing program.</td>
</tr>
<tr>
<td><strong>Ringbacks</strong></td>
<td>The audio or “ring” the caller hears when calling a specific mobile number. Can be a Mastertone, Polytone or Voicetone and is either a device default or set by the handset owner when personalizing his/her mobile device. Ringback length is based on Carrier requirements.</td>
</tr>
<tr>
<td><strong>Ringtones</strong></td>
<td>The audio, or “ring” a handset owner hears when a call is received. Can be a Mastertone, Polytone or Voicetone and is either a device default or set by the handset owner when personalizing his/her mobile device. Ringer length is based on Carrier requirements.</td>
</tr>
<tr>
<td><strong>Roaming</strong></td>
<td>A service allowing mobile subscribers to use their handsets on the networks of other mobile carriers.</td>
</tr>
<tr>
<td><strong>Service Provider</strong></td>
<td>A third party that performs or assists in the performance of a function or activity involving the use or disclosure of Personally Identifiable Information or Non-Personally Identifiable Information on behalf of a Mobile Marketer.</td>
</tr>
<tr>
<td><strong>Smartphone</strong></td>
<td>A handheld device that integrates mobile phone capabilities with the more common features of a handheld computer or PDA. Smartphones allow users to store information, e-mail, install programs, along with using a mobile phone in one device.</td>
</tr>
<tr>
<td><strong>SMS Message</strong></td>
<td>A message sent via a Short Message Service. 160 characters in length and most commonly referred to as a text (or txt).</td>
</tr>
<tr>
<td><strong>Streaming Video</strong></td>
<td>When a mobile video is “streamed” to a handset it starts playing when the first bits of the video stream are received. The technologies used allow ad servers to track the viewing of a video ad placed at the beginning, middle or end of a mobile video. Commonly used video streaming ad servers would be able to provide advertisers with detailed statistics on how many sections or what percentage of a particular video ad has been viewed by a unique individual. The most popular underlying technology is RTSP. Due to the nature of the underlying technologies used, the quality of the received video differs based on varying network conditions. It should also be noted that since the video file is usually not stored on the receiving handset, this methodology raises less copyright concerns.</td>
</tr>
<tr>
<td><strong>Unsolicited Messages</strong></td>
<td>Commercial SMS or MMS messages sent to subscribers without seeking prior approval.</td>
</tr>
<tr>
<td><strong>Walled Garden</strong></td>
<td>The service provider – for example, the mobile carrier – provides a restricted list of services to the consumer (deck/portal), but disables the ability of the consumer to access services outside of that list.</td>
</tr>
</tbody>
</table>
Appendix II – Interview Guide

- Name of the company
- Respondents Name and title

Interview questions
- When did you release your first mobile advertising campaign?
- What is your view of Mobile Advertising?
- How will this industry evolve over the next 5 years?
- How has Mobile Advertising changed the view of marketing and advertising?
- What is the reaction among consumers and advertisers?
- How much is invested on Mobile Advertising?
- How has the economic downturn affected this industry?
- What is holding this industry back?
- Which channels and solutions are the most popular?
- What channels and solutions will get popular over the net 5 years?
- How profitable is Mobile Advertising today? And how profitable will it be?
- Every year is the year of Mobile Advertising, When do you think it would break through?
- What is the revenue share? What is the percentage among the players?
- What are your price rates?
- What is your most successful campaign?
- How much is the turnover in your Mobile Advertising department?
- What is your Mobile Advertising strategy? (How do you make Mobile Advertising profitable?)