

Roger Williams University

DOCS@RWU

---

Management

Business Theses

---

2013

## Mobile Advertising and its Acceptance by American Consumers

Kate E. Boudreau

Roger Williams University, kboudreau812@g.rwu.edu

Follow this and additional works at: [https://docs.rwu.edu/management\\_theses](https://docs.rwu.edu/management_theses)



Part of the [Marketing Commons](#)

---

### Recommended Citation

Boudreau, Kate E., "Mobile Advertising and its Acceptance by American Consumers" (2013).  
*Management. 2.*

[https://docs.rwu.edu/management\\_theses/2](https://docs.rwu.edu/management_theses/2)

This Thesis is brought to you for free and open access by the Business Theses at DOCS@RWU. It has been accepted for inclusion in Management by an authorized administrator of DOCS@RWU. For more information, please contact [mwu@rwu.edu](mailto:mwu@rwu.edu).

**MOBILE ADVERTISING AND ITS ACCEPTANCE  
BY AMERICAN CONSUMERS**

**KATE E. BOUDREAU**

MAY 2013

BACHELOR OF SCIENCE IN MARKETING

GABELLI SCHOOL OF BUSINESS

ROGER WILLIAMS UNIVERSITY

BRISTOL, RHODE ISLAND 02809

AN HONORS THESIS SUBMITTED TO THE FACULTY OF  
ROGER WILLIAMS UNIVERSITY IN FULFILLMENT OF  
THE REQUIREMENTS FOR THE THESIS WITH DISTINCTION

**KEYWORDS:**

Mobile, advertising, acceptance, United States, Finland

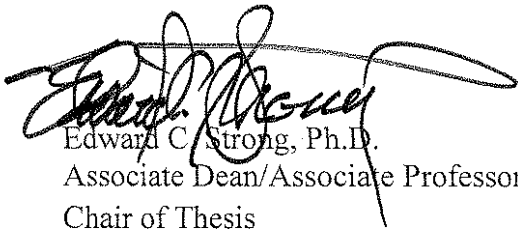
MOBILE ADVERTISING AND ITS ACCEPTANCE BY AMERICAN  
CONSUMERS



Kate E. Boudreau  
Marketing Major  
Gabelli School of Business  
Roger Williams University

5/13/13

The Thesis of Kate E. Boudreau is approved by:



Edward C. Strong, Ph.D.  
Associate Dean/Associate Professor  
Chair of Thesis  
Gabelli School of Business  
Roger Williams University

5/8/13



Richard A. Bernardi, Ph.D.  
Professor of Accounting  
Gabelli School of Business  
Roger Williams University

5/8/13



Jerry Dauterive, Ph.D.  
Dean and Professor of Economics  
Gabelli School of Business  
Roger Williams University

5/8/13

## **ABSTRACT**

Mobile advertising creates opportunities for marketers to capture the attention of consumers on a one-to-one basis. However, there is little data proving the success of mobile advertising models. This study examined the drivers that influence consumer's acceptance of SMS-based mobile advertisements and the differences in responses between two cultures, Finland and the United States. My questionnaire and conceptual model was taken from a study done in Finland in 2007. My results indicated that utility, context and trust are positively related to the acceptance of mobile advertising while sacrifice is negatively related. Control did not have a clear relationship to acceptance because three of the four questions about control averaged more than 6.0 on a seven-point scale meaning there was no variation in the responses. However, when a separate regression was done on the remaining control question, a strong positive relationship between that question and acceptance was found.

## **INTRODUCTION**

Mobile phones are making it faster and easier than ever to connect with people. We have the power of information at our fingertips; we can communicate over long distances with just the push of a button. Global penetration of mobile phones has reached 87% with 6 billion subscriptions (The World in 2011 - ICT Facts and Figures). According to research conducted by mobiThinking on mobile marketing, 5.6 trillion text messages were sent in 2011 and traffic is expected to increase to 9.4 trillion by 2016 (mobiThinking). With the world becoming increasingly crowded with advertising messages, it's getting difficult for marketers to cut through the clutter. It is important that marketers think creatively and find new ways of reaching consumers through channels that are less saturated. Mobile advertising presents the opportunity to create one-to-one dialogue with consumers. This allows marketers to customize the messages to be relevant to the targeted consumers which builds brand equity and ultimately wins over the consumer.

This study examines the factors that influence acceptance of mobile advertising between two countries, Finland and the United States, to determine if culture played a role in acceptance. My sample consists of 106 Smartphone users of varying ages living across the United States. The data suggests that there are both differences and similarities between the two countries when it comes to acceptance, some of which may be explained by cultural factors. Cultural values played a more significant role in the differences in answers when the respondents were asked about trust and control. The results of this study highlight factors that are important for marketers to consider when they are

advertising their products to consumers in new markets through this newer and less understood channel.

## **LITERATURE REVIEW**

### **What is M-Commerce?**

Mobile commerce is marketing communication sent to mobile devices promoting goods, services and ideas (Pousttchi & Wiedemann, 2007). Basically, this includes any kind of business transaction in which at least one party to the transaction uses a mobile communication device (Pousttchi & Wiedemann, 2007). This type of communication can happen between people or inanimate objects (e.g., an internet server or a computer-based data store). (Balasubramanian et. al., 2002). Mobile commerce is particularly suited for the younger generation (Barwise & Strong, 2002), although with the continued rapid adoption of mobile technology members of older generations are rapidly becoming a part of mobile commerce.

Young users are heavy mobile information-gatherers and share their opinions with their contacts using their mobile devices (Adobe Systems Incorporated, 2010). The internet and mobile technologies have made marketing communications into a many-to-many conversation (Barwise & Strong, 2002). The mobility of wireless devices means that m-commerce is different than conventional e-commerce. Consequently, value propositions are likely to be new, different and novel for mobile e-commerce (Clarke, 2008). Specifically, m-commerce differs from e-commerce on the following value proposition attributes: Ubiquity, convenience, localization, and personalization (Clarke, 2008). Companies are building one-to-one relationships with consumers via mobile devices (Pousttchi & Wiedemann, 2007) and facilitating one-to-one dialogue (Okazaki, 2007).

Change is rapid in the mobile industry; the technology is continuously enhanced and refined. Consumer adoption of digital mobile technology in most countries has been even faster than adoption of the internet (Merisavo et. al, 2007). The interactive access to content available on the internet, access to auctions and the possibility to order tickets or to access travel information anywhere contributed to a fast development of the mobile Internet (Buellingen & Woerter, 2004). Tablets, smart phones, and social media encourage growth and consumer connections in media and entertainment ("Media CEO's Look to Smartphones, Tablets for Digital Growth", 2012).

M-commerce is bringing about a massive change in the way users consume products and services (Clarke, 2008). Since the success of m-commerce applications is dependent on the ease of use and the delivery of the appropriate information at the correct moment, value-for-time propositions will be a key dynamic in determining the success of any m-commerce business (Clarke, 2008). Mobile commerce relaxes the independent and mutual constraints of space and time, so it is both spatially and temporally flexible and allows for communication while in motion (Balasubramanian et. al, 2002).

Mobile commerce is per se not included in the traditional e-commerce market models. M-commerce will be able to increase the overall market for e-commerce, because of its unique value proposition of providing easily personalized, local goods and services anytime and anywhere. (Durlacher Research Ltd, 2000,p12).

This channel will eventually be the digital hub for content creation, consumption, web access and online transactions (Adobe Systems Incorporated, 2010).



## **Reasons for Mobile Advertising**

Consumers carry their phones everywhere (Merisavo et. al., 2007). Over the past decade or so, the primary use of cell phones has been text messaging (Adobe Systems Incorporated, 2010). The use of Short Message Service (SMS, a.k.a texting) and Multimedia Message Service (MMS, used for inclusion of images or videos with text messages) has increased and today is it the primary method of communication on cellular devices (Adobe Systems Incorporated, 2010). Although this medium is underutilized in today's business economy, further research into mobile advertising will be important in the future due to the rapid adoption and improvements of mobile technologies.

The proliferation of mobile Internet devices is creating an unparalleled opportunity for e-commerce to leverage the benefits of mobility (Clarke, 2008). As of 2012, 53.2 million people in the US used an iPad once a month or more (Del Rey, 2012). In 2000, Jeff Bezos, CEO of Amazon.com predicted, "If you look five to ten years out, almost all of e-commerce will be on wireless devices" (McGinity, 2000). This is even more apparent today since the introduction of smart touch screen devices. The wireless Web's potential for bringing people together and expanding commerce is even greater than that of the wired Internet (AlterEgo, 2000).

For some years, a number of social, technological and economic trends have produced an environment which promotes the demand and distribution of mobile communication services. This causes a dramatic change of the mobile communications value chain. New actors (e.g. e-commerce firms, Internet portal providers) and new services (e.g. m-commerce, portal services) enlarge the value chain in both ways, functionally and institutionally. Mobile network operators can gain advantages out of the changed economic environment, through occupying the gatekeeper role. (Buellingen & Woerter, 2004, p.1844).

However, U.S. providers have lagged in m-commerce development since the U.S. market has been PC-oriented for Internet technology. The U.S. leads the world in almost every e-commerce metric, while Europe and Japan have taken early leads in m-commerce due to their higher level of adoption of mobile devices. In fact some countries in Europe, like Spain and Italy, based on their extensive usage of mobile phones may completely bypass PC-oriented e-commerce directly to m-commerce (Brandt, 2000). This becomes more apparent when we look at recent data (shown in Figure 3) which shows the Americas lagging behind other regions in mobile cellular subscriptions (CIA World Factbook, 2012).

Location-based advertising is another key issue in mobile advertising. The location of target consumers is of particular interest to marketers (Balasubramanian et. al, 2002). Location targeting can be done using social media outlets as there is a natural convergence of mobile and social due to Facebook (Adobe Systems Incorporated, 2010). Social media sites such as Facebook and Foursquare check-ins can be used for location based advertising (Adobe Systems Incorporated, 2010). Also, these social media channels help communicating brand information without appearing to be advertisements (Adobe Systems Incorporated, 2010). The benefits to the customer from these advertising methods are increased value of information and increased value of entertainment (Yuan et. al., 1998). Entertainment communicates information subliminally, which leads to positive brand building (Pousttchi & Wiedemann, 2007). Increased customer engagement improves customer satisfaction (Adobe Systems Incorporated, 2010). The personal nature of the cell phone can help marketers with profiling and targeting consumers (Barwise &

Strong, 2002). Once the consumer is engaged, these personal ties to the brand may make consumers less receptive to competitors (Merisavo et. al, 2007).

Mobile advertising is a very promising direct marketing channel because it is empowered by the Web's interactive and quick response capabilities. This channel allows messages to be personalized according to the recipient which increases the relationships between advertisers and consumers (Xu, 2007). Marketers must be cautious however not to make the messages too personal for fear of turning off consumers. Permission from the consumer is the key. Successful mobile campaigns are short and sweet; entertaining; focused on a consumer's area of interest; promotional; eye catching or offer a prize (Barwise & Strong, 2002); whereas, spam is brand suicide (Pousttchi & Wiedemann, 2007).

Although the original study focused on SMS text advertisements, MMS is equally as popular as SMS with mobile device users. SMS advertising is cheaper than a phone call, while MMS helps overcome limitations of text-only messaging (Xu, 2007). In the new decade, the call for information technology will be information, any time, any place and on any device (Clarke, 2008). "The wireless world is a parallel universe almost as large as the Net, and the two are beginning a fascinating convergence," said Swapnil Shah, director of Inktomi Europe, a search engine and caching solutions company back in 2000 (Rao, 2000, p. 1). Today these two universes are one. This more personalized channel (mobile advertising) creates opportunities for marketers to advertise, build and develop relationships with consumers and receive a direct response (Merisavo et. al, 2007). Ultimately, when implemented properly, mobile advertising can help enhance retail profits and moderate competition (Balasubramanian et. al, 2002).

## **Limitations of Mobile Advertising**

Although mobile advertising allows for personalization, it cannot eliminate interruption that occurs when these ads pop-up on your mobile device while you are searching the internet. With the adoption of mobile advertising comes its share of challenges that must be addressed. Newer technology makes it easier to block information through privacy settings. This results in an increasing ability to block ads and a diminishing cost of blocking ads (Yuan et. al., 1998). The decision to block advertisements depends on the cost of blocking and the cost of exposure. A consumer's view towards mobile advertising and the brand depends on the exposure. Enhancing the value of the ads and reducing the cost of accessing and searching will make it worthwhile for many more customers to access and search for advertising about products and make it less likely that they will block or ignore them (Yuan et. al., 1998). The major challenge is getting time and attention from consumers. The internet is already overloaded with ads that annoy consumers (Pousttchi & Wiedemann, 2007). There is also the concern of privacy related to mobile advertising (Okazaki, 2007). Merisavo et. al. (2007) believe that consumer trust in the use of personal data and laws protecting them might affect their acceptance. It is necessary to get consumers to opt into mobile advertising in order to ensure acceptance (Pousttchi & Wiedemann, 2007). Regardless, mobile advertising must provide clear benefits before a company will adopt this technique.

Mobile advertising is not a large part of most companies' advertising budgets if it is included at all. There is a lack of training about how to monetize mobile audiences (Del Rey, 2012). Furthermore, the attitude towards advertising is generally negative (Xu, 2007). It presents many opportunities but does not come without its limitations. "The

problems it must overcome include: uniform standards, ease of operation, security for transactions, minimum screen size, display type and bandwidth and billing services” (Barnett et. al., 2000). Even today in 2013, with all the advance in mobile technology, mobile advertising is not without its glitches. Due to certain technological limitations, limited service availability in remote areas, and varying mobile consumer behavior patterns, business strategies developed for m-commerce applications will find it necessary to emphasize characteristics different from traditional e-commerce strategies (Barnett et. al., 2000).

## **Conclusion**

Society today is dependent upon technology. Global commerce would come to a standstill if we were without our computers and cell phones. However, this is not all bad. Technology has allowed us to create and explore in ways like never before. The magnitude and continual advancement of the mobile Internet revolution will pressure e-commerce business models, create apertures for new mobile Internet companies, engender a stream of change among established e-commerce paradigms, and lead to a reconfiguration of value propositions in many industries (Evans & Wurster, 1997). Those best able to provide value-added user experiences, through content aggregation and portal development, will achieve long-term success. Merely extending the current Internet presence will not be enough (Clarke, 2008).

## **METHODOLOGY**

Merisavo et. al. (2007) tested a structural equation model of their survey responses. The model related five sets of independent variables to a set of dependent variables. They related constructs representing utility, content, control, sacrifice, and trust to what they called acceptance. Trying to compare the present research to those results without replicating Merisavo et. al., exactly, the variables from the present research were analyzed in the following way: Factor analysis was used to create a factor from each of the sets of questions Merisavo et. al. used to create their constructs (Utility, Content, Control, Sacrifice, Trust, and Acceptance – see Figure 2) and then the five “independent” factors were used in a regression with the factor Acceptance as the dependent variable.

### **Survey Instrument**

Since the objective of this study was to replicate the survey discussed by Merisavo et. al. (2007), it was necessary to reproduce, as nearly as possible, the instrument used in their study. The article discussing their study included a series of questions they used. While the article (and the questions included) were in English, it appeared – based on their non-idiomatic form – that the questions had originally been in Finnish. The questions were re-worded into idiomatic English, and then each question was provided with a seven-point response scale from Strongly Disagree (1) to Strongly Agree (7). While Merisavo et.al. (2007) provided some of the questions with a “Don’t know” alternative, none of the questions in this study included that alternative since the authors did not specify which questions had it and which did not. The questions as stated

in the Merisavo et. al. (2007) article are shown in Appendix 1 and the re-wording for the present study is shown in Table 1.

### **Sample**

Merisavo et. al. (2007) reported a sample size of 4,062 respondents with a high proportion of young and lower-income individuals; 70% of the respondents were below the age of 36 years and 69% reported an annual income of less than \$25,500. Because of budget limitations, it was decided to utilize a smaller but more diverse sample for this study. A total of 106 respondents was obtained from the SurveyMonkey Audience respondent panel (described at <http://www.surveymonkey.com/mp/audience/>). The survey was conducted over the internet between March 12<sup>th</sup> and March 17<sup>th</sup>, 2013.

Of the respondents, 51.9% were male and 48.1% were female. The sample was comprised of respondents across the age distribution. Fifty-four percent were under 45 years of age, with the 45-60 year old group making up 35% of respondents. Nine percent of respondents were high school graduates, 35% had completed an Associate's or Bachelor's degree, and 22% held a graduate degree. Approximately 53% of respondents were employed and working 40 or more hours per week. Thirty-seven percent reported an annual household income of less than \$50,000, 26% earned between \$50,000 and \$100,000, 19% earned between \$100,000 and \$150,000, and 18% earned more than \$150,000. Every region of the country was represented among the respondents.

## RESULTS

Figure 2 shows the final structural model that the original authors developed with standardized path estimates and t-values. Four of the five hypotheses (shown in Appendix 2) were supported in both the Finland and U.S. studies to varying degrees. Each sample behaved as predicted except on the matter of Control and Acceptance which resulted in very different responses between the two countries. Their first hypothesis was supported, as shown in Table 2, by a very strong path ( $\beta = 0.41$ ) between the consumers' perceived utility of mobile advertising and the willingness to accept mobile advertising. From our U.S. sample, the first hypothesis was also supported by a positive relationship between Utility and Acceptance though slightly weaker than the Finland study ( $b = 0.35$ ). Hypothesis 2 was also supported by a strong positive path ( $\beta = 0.27$ ) from the utilization of contextual information to the willingness to accept mobile advertising. From our U.S. sample, the second hypothesis was again supported by a positive relationship, this time showing a more positive correlation than Merisavo et al. ( $b = 0.38$ ). In the Finnish study, the consumers' perceived control of mobile advertising did not significantly affect their willingness to accept mobile advertising ( $\beta = 0.03$ ), and therefore their results did not support Hypothesis 3. This finding might indicate that consumers take it for granted that marketers do not send them mobile advertising messages without their permission, and thus the whole question of control is less important to them (Merisavo et al., 2007). However, the U.S. sample showed a negative relationship between Control and Acceptance ( $b = -0.07$ ). In Hypothesis 4 we predicted that the consumers' perceived Sacrifice is negatively related to their willingness to accept mobile advertising. The Finnish study supported this hypothesis. The results show a strong negative path



( $\beta = -0.32$ ) between perceived Sacrifice and the willingness to accept mobile advertising. In the U.S. sample, sacrifice was negatively related to acceptance as well but the relationship was non-significant ( $b = -0.12$ ). Finally, Hypothesis 5 was supported in the Finnish study as the consumers' Trust in privacy and the laws regulating mobile advertising was positively related to their willingness to accept mobile advertising ( $\beta = 0.11$ ). However, this relationship was relatively weak, which implies that consumers do not consider these issues very important. In the U.S. sample, trust was a more important factor ( $b = 0.28$ ). In fact, the majority of respondents replied that they do not trust marketers or their service provider to keep their personal information safe and use it only for the purpose for which they granted permission nor do they trust laws on privacy to protect them.

From these results, one can conclude that utility, context and trust are positively related to acceptance, while sacrifice is negatively related to acceptance. Control, which might seem to be logically related to acceptance (the more willing a person is to allow others to determine what advertising will be sent to them, the more a person should be willing to accept advertising), does not have a clear relationship to acceptance. One of the reasons that control is not a strong driver of acceptance, however, is that there is not much variation in the variables underlying control. Three of those four questions average over 6.0 on a seven-point scale. The one question used in creating the control construct that does not have a high average was "I would be willing to receive mobile advertisements if I give my permission," which had an average of 3.5. When a separate regression of that question's response on acceptance was made, the coefficient was .651 and the significance was  $p < .001$ . This signifies a strong positive relationship between

that question and the acceptance construct.  $R^2$  for the equation was 0.42 which indicates that a large proportion of the total variability in acceptance is accounted for by variability in this one question. There is, therefore, a strong relationship between one of the components of control and acceptance.

## **INTERNATIONAL IMPLICATIONS**

The present study results are similar to the earlier study's results for utility, context, control, and trust, while the relationship between sacrifice and acceptance is non-significant in the present study. The sign of that relationship, however, is negative as it was in the Merisavo et. al.(2007) study. The original authors' structural equation model results are shown in Figure 2 and the very roughly similar model of the present study's results are shown in Table 2.

Not surprisingly, the means between the Finnish study and the U.S. study are significantly different in 19 of the 22 questionnaire elements. However, the differences appear to be systematic. Finnish respondents score higher (agree more) on questions dealing with the value and acceptance of mobile advertising (questions 1 through 6 in Table 1), on questions of trust (questions 17 through 19 in Table 1), and on the three "dependent" variables (questions 20 through 22 in Table 1). U.S. respondents agree more on the "problem" questions (questions 10 through 12 and questions 15 and 16 in Table 1). There were no significant differences between the two populations on questions of controlling permission to receive mobile advertising, and that the problem with mobile advertising was loss of privacy and the amount of time it takes to read and respond to them (questions 9, 13, and 14 in Table 1).

It is interesting to see that in the U.S. sample, participants felt very differently about perceived control. Sixty-eight percent of respondents strongly agreed that controlling permission to receive mobile advertisements was very important to them. Furthermore, 71% strongly agreed that it is important that they can refuse mobile advertisements. The majority of respondents also agreed that the biggest problem with

mobile advertising is not being able to control them. When asked if they would receive mobile advertisements in the future, only 34% of respondents said they would be somewhat likely to receive mobile advertisements if they gave their permission. Based on Hofstede's Theory of Cultural Dimensions, this difference could be attributed to the very high individualist nature of the U.S. In this type of culture, people are expected to look after themselves and their immediate family. This can also be attributed to the fact that the United States is a Masculine society and Finland is categorized as a feminine society. A masculine society like the U.S. values success and rewards for achievements rather than cooperation and caring. They strive to be the best they can be with the mindset that the goal is to win (Hofstede, 2013). Due to the desire to win and the "every man for himself" perception of these two dimensions, it is not surprising that the U.S. sample participants are not trusting of marketers and service providers.

What this appears to indicate is that U.S. respondents see less value in mobile advertising and greater difficulties with receiving mobile advertising than do Finnish respondents. Whether this is due to national characteristics or to the evolution over the intervening six years of the devices and the advertising that appears on them is impossible to determine. Some of the main differences seen from the survey results are that the Finnish population puts more trust in marketers than the U.S. population and does not consider control to be an important issue in terms of mobile advertising. As mentioned before, if we look at Hofstede's Theory of Cultural Dimensions in Figure 1, we see that Finland has a low score of 26 on the Masculine/Feminine dimensions scale deeming Finland a "feminine" country. A feminine country favors equality, compromise, support from managers with a focus on well-being. On the other hand, the U.S. scores a

62, deeming it a masculine society. This type of society strives to be the best they can be and is motivated to work based on monetary rewards. The goal in a masculine society is to win. Both Finland and the United States are considered Individualist societies. This means in both countries people are expected to look after themselves and immediate family and employer/employee relationships are based on mutual advantage. However, Finland scores a 63 in this dimension scale while the U.S. tops the charts, scoring a 91 (Hofstede). These two dimensions mentioned above help explain why Finland consumers are less worried about being in control and more trusting of marketers to use their information for designated purposes whereas U.S. citizens are not trusting of businesses. Questions 17, 18 and 19 (shown in Table 1) concern trust in marketers, privacy laws and service providers. As seen in Table 3, there is a full one point difference in the way Finns and Americans answered the questions. Americans were far less trusting than Finns. The significance of the U.S. Individualist score supports the fact that American consumers consider control to be extremely important and do not trust marketers because there is a cultural norm of looking out for one's best interests.

### **Limitations and Implications for Future Research**

One of the limitations of the study is the differences in number of participants. Merisavo et al. (2007) conducted their study with a very large sample of 4,062. Due to financial constraints, our study was conducted with 106 respondents. Clearly this is a very large difference between the two sample sizes however, even with the small U.S. sample size, large differences were found between the two cultures. Future research could use a much larger sample size closer to the Finland study to determine if these finds

remain true. Another limitation is the age of the respondents. The Finland study surveyed mostly young people. Seventy percent of the population was under the age of 36 and 35% were students. Our study was conducted using respondents with a large age range of 18 to over 60 years old— almost 50% of the respondents were between the ages of 40 and 60 years. There were also several questions in the survey that respondents chose not to answer. Although there was usually only one or two respondents that skipped the question, there is a possibility that it could have slightly skewed the results. However, we believe it is not enough to significantly change the outcome. Finally, we reworded the translated questions the study published by Merisavo et al. (2007) from non-idiomatic to idiomatic English to be more easily understandable for our respondents. Although the two studies asked the question in a slightly different way, what we were asking remained the same.

### **Implications for Marketers**

As cell phone usage continues to rise in new and existing markets, more research should be done to gauge the potential for mobile advertising in other countries. Research published in the CIA World Factbook ranks Finland 18<sup>th</sup> in terms of mobile phone penetration while the United States is only ranked 114<sup>th</sup> (shown in Figure 3). Above Finland, countries in the Middle East and Asia have far higher mobile phone penetration. Some examples are Qatar, United Arab Emirates, Saudi Arabia and Kuwait which all rank above Finland in mobile penetration (CIA World Factbook). Also, Table 4 shows that Egypt is the number one country in terms of the population that mostly use their mobile phones for internet access with 70% of its population rarely using desktops to

access the internet. Table 5 shows that in 2011, Asia and the Pacific ranked higher than Europe and the Americas in mobile cellular subscriptions at 2,897,000. Another fact to consider is that developing countries ranked even higher in mobile cellular subscriptions at 4,520,000. When considering moving products or services into new markets, marketers should consider researching the factors relating to acceptance of mobile advertising in countries like the Middle East, Asia and developing countries where there may be more potential due to the large number of mobile phone users.

Furthermore, this study indicates that marketers should pay particular attention to the utility and context of mobile advertisements. They should also take into consideration that U.S. consumers are wary about giving out personal information to marketers for fear of it being used inappropriately. They also must remember that it is important to these consumers that they are in control of messages they receive. That being said, marketers must respect these wishes and only send mobile advertisements once they receive permission from the consumer. This will help to build trust between the marketers and the consumers. Also, as mentioned in Merisavo et al. (2007), consumers are more likely to receive mobile advertisements from trusted brands such as McDonalds and Coca-Cola therefore companies should work on building strong brand equity (Merisavo et al, 2007).

## REFERENCES

- Adobe Systems Incorporated. *Smart Marketing for Smartphones - Why Mobile Marketing Matters*. Ed. Casenave, Brandon and Husson, Thomas. San Jose, CA: Adobe Online Marketing Suite, 2010. Print.
- AlterEgo. "Building the intelligent internet: Making the case for adaptive network services." 2000.Web. <[www.alterego.com](http://www.alterego.com)>.
- Balasubramanian, S., Peterson, R. A. & S. Jarvenpaa, L. "Exploring the Implications of M-Commerce for Markets and Marketing." *Journal of the Academy of Marketing Science* 40.4 (2002): 348-61. Web. Dec. 2012.
- Barnett, N., Hodges, S., & Wilshire, M. "M-Commerce: An Operator's Manual." *McKinsey Quarterly* 3 (2000): 162-171. Print.
- Barwise, P. & Strong, C. "Permission-Based Mobile Advertising." *Journal of Interactive Advertising* 16.1 (2002): 14. Print.
- Bauer, H. H., Barnes, S. J., Reichardt, T., & Neuman, M. M. "Driving Consumer Acceptance of Mobile Marketing: A Theoretical Framework and Empirical Study " *Journal of Electronic Commerce Research* 6 (2005): 181-192. Print.
- Brandt, J. R. "Dail 'm' for 'Mobile'." *Industry Week* May 1.4 (2000)Print.
- Buellingen, F., & Woerter, M. "Development Perspectives, Firm Strategies and Applications in Mobile Commerce." *Journal of Business Research* 57.12 (2004): 1402-1408. Print.



- Campbell, S. W. "A Cross-Cultural Comparison of Perceptions and Uses of Mobile Telephony." *New Media & Society* 9 (2007): 343-363. Print.
- Chen, P. "Broadvision Delivers New Frontier for e-Commerce." *M-commerce* October (2000): 25. Print.
- Choi, Y., Hwang, J. & McMillan, S. J. "Gearing Up for Mobile Advertising: A Cross-Cultural Examination of Key Factors that Drive Mobile Messages Home to Consumers." *Psychology & Marketing*, 25.8 (2008): 756. Print.
- CIA World Factbook. "Country Comparison: Telephones - mobile cellular per capita." 2012. Web. <<http://www.indexmundi.com/g/r.aspx?v=4010>>.
- Clarke III, I. "Emerging Value Propositions for m-Commerce." *Journal of Business Strategies* 25.2 (2008)Print.
- Court, D., Elzinga, D., Mulder S., & Vetvik, O. J. "The Consumer Decision Journey." 2009. Web. <[http://www.mckinseyquarterly.com/The\\_consumer\\_decision\\_journey\\_2373](http://www.mckinseyquarterly.com/The_consumer_decision_journey_2373)>.
- de Haan, A. "The Internet Goes Wireless." *EAI Journal* April (2000): 62-63. Print.
- Del Rey, J. "Will Mobile's Massive Growth Ever Equal Real Revenue?" *Advertising Age* October 1 2012: 18. Print.
- Durlacher Research Ltd. "Mobile commerce report." 2000. Web. <[www.durlacher.com](http://www.durlacher.com)>.

- Evans, P. B. & Wurster, T. S. "Strategy and the New Economics of Information." *Harvard Business Review* 75.5 (1997): 70-82. Print.
- Frolick, M. N. & Chen, L. "Assessing M-Commerce Opportunities " *Information Systems Management* 21.2 (2004): 53-61. Print.
- Hoffman, G. "Start Game." *Communications International* April (2000): 18-22. Print.
- Hofstede, G. "United States: The Hofstede Center." Web. <<http://geert-hofstede.com/united-states.html>>.
- Anonymous. "It Keeps Growing...and Growing..." *Harvard Business Review* October 2012: 32. Print.
- KPMG. "Creating the new wireless operator." 2000. Web. <[www.kpmg.com](http://www.kpmg.com)>.
- Leppäniemi, M., Karjalainen, H., and Salo, J. "The Success Factors of Mobile Advertising Value Chain." *E-Business Review* 4 (2004): 93. Print.
- McGinity, M. "The net/wireless Meeting of the Minds." *Inter@ctiveWeek* March 6.2 (2000)Print.
- Anonymous. "Media CEO's Look to Smartphones, Tablets for Digital Growth." 2012. Web. <[http://www.emarketer.com/\(S\(au5r1f45yuympgb5d4vnh355\)\)/Article.aspx?R=1009371](http://www.emarketer.com/(S(au5r1f45yuympgb5d4vnh355))/Article.aspx?R=1009371)>.

- Merisavo, M., Kajalo, S., Karjaluoto, H., Virtanen, V., Salmenkivi, S., Raulas, M., & Leppäniemi, M. "An Empirical Study of the Drivers of Consumer Acceptance of Mobile Advertising." *Journal of Interactive Advertising* 7.2 (2010): 41-50. Print.
- mobiThinking. "Global mobile statistics 2012 Part C: Mobile marketing, advertising and messaging." June 2012. Web. <<http://mobithinking.com/mobile-marketing-tools/latest-mobile-stats/c>>.
- "More Than Half of Mobile Users Avoid Certain Apps Due to Privacy Concerns." 2012. Web. <<http://pewresearch.org/pubs/2345/mobile-phone-apps-privacy-concerns-personal-data>>.
- Okazaki, S. "From the Guest Editor: Special Issue on Mobile Advertising Issues and Challenges." *Journal of Interactive Advertising* 7.2 (2007): 1-2. Print.
- Pousttchi, K. & Wiedemann, D. "A Contribution to Theory Building for Mobile Marketing: Categorizing Mobile Marketing Campaigns through Case Study Research." *Munich Personal RePEc Archive* 2925 (April 2007)Print.
- Rao, M. "EM-Wire: E-Commerce, m-Commerce Poised for Rapid Take-Off in Europe." *Electronic Markets: The International Journal of Electronic Commerce & Business Media* April (2000)Print.
- Schenker, J. "Europe's High-Tech Start-Ups have Stolen a March on Silicon Valley by Launching New Mobile Services." *Time Europe* February 7.1 (2000)Print.

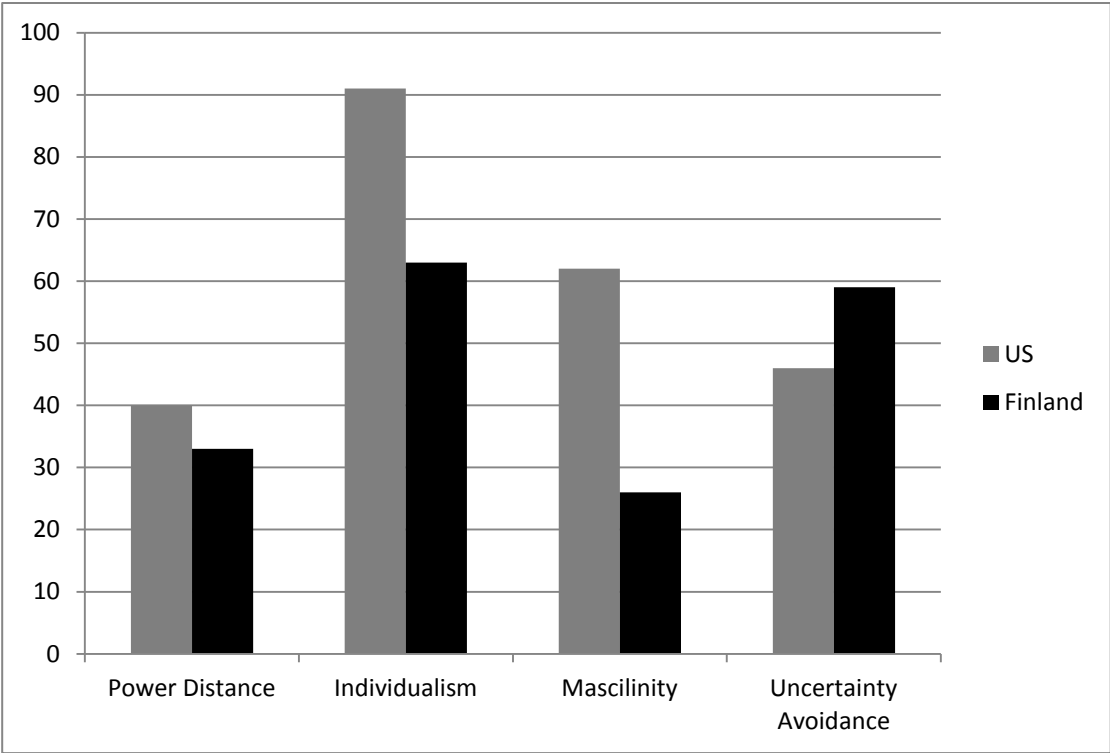
*The World in 2011 - ICT Facts and Figures*. Telecommunication Development Bureau:  
ICT Data and Statistics Division, 2011. Print.

Xu, D. J. "The Influence of Personalization in Affecting Consumer Attitudes Toward  
Mobile Advertising in China." *Journal of Computer Information Systems* 47.2  
(2007): 9. Print.

Yuan, Y., and Caulkins, J. P., & Roehrig, S. "The Relationship between Advertising and  
Content Provision on the Internet." *European Journal of Marketing* 32.7/8 (1998):  
677. Print.

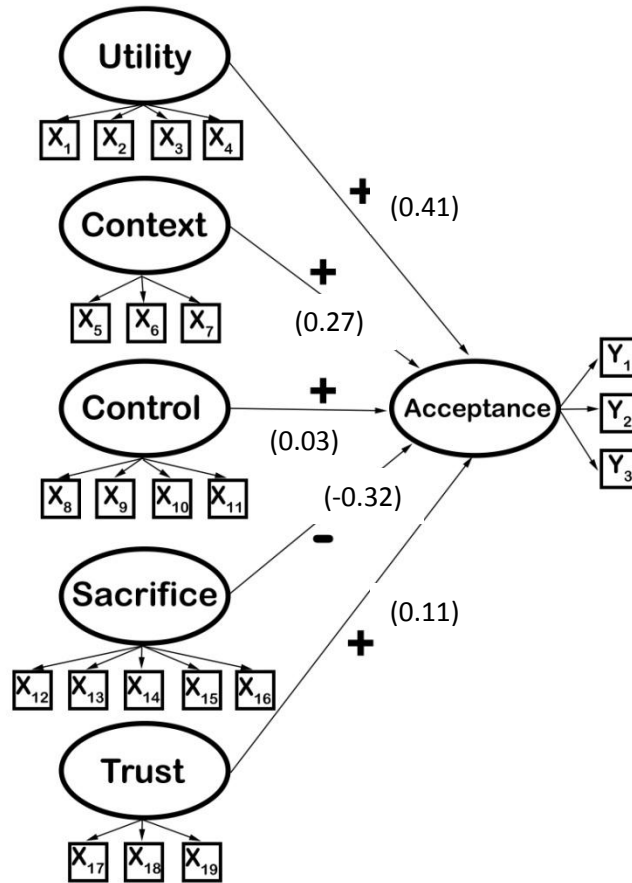
**FIGURE 1**

**Hofstede's Cultural Dimensions :  
United States vs. Finland**

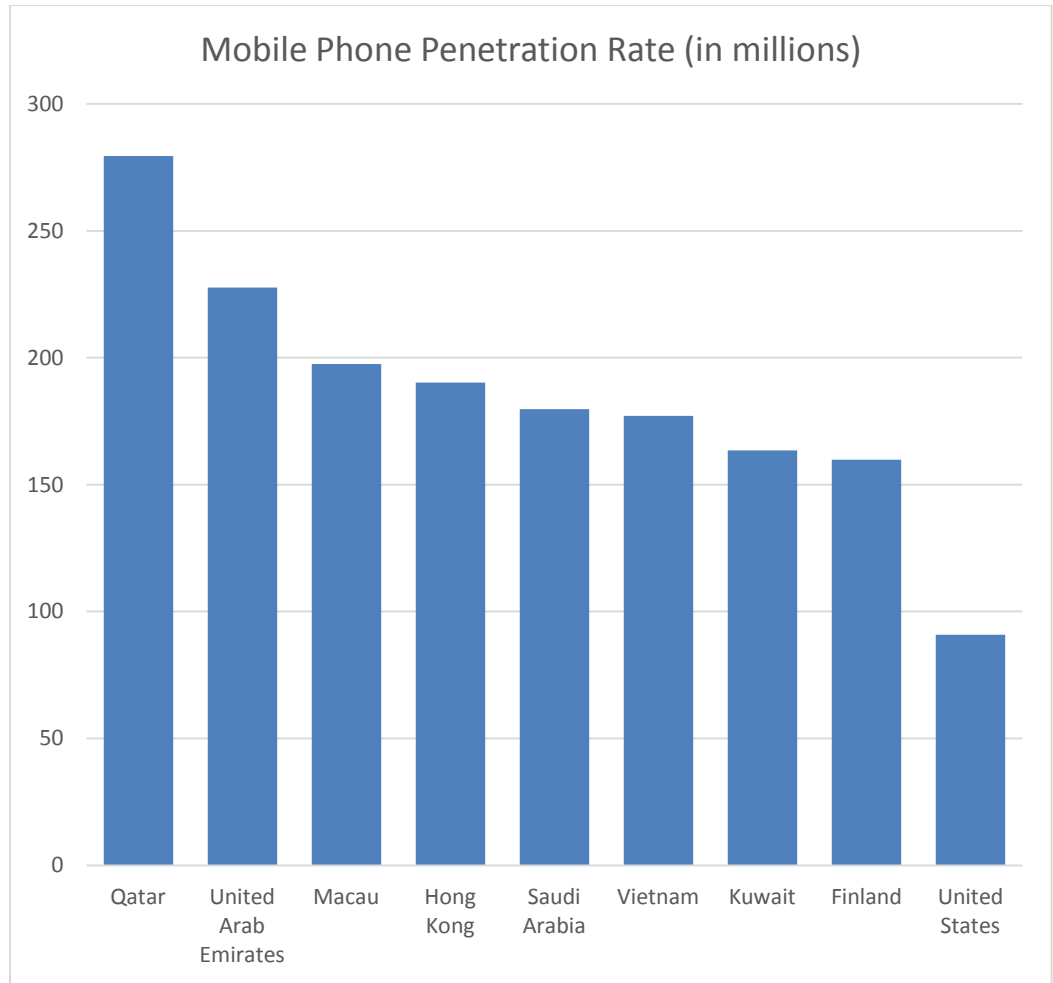


**FIGURE 2**

**Merisavo et. al. Conceptual Model**



**FIGURE 3**



<b>Table 1</b>	
<b>US Study Questions</b>	
Questions making up constructs studied by Mersavo, et. al.	
Construct	Question
Utility	1. I believe mobile advertisements can help save me money.
	2. I believe mobile advertisements can help save me time.
	3. I believe mobile advertisements can provide me with useful information
	4. I believe mobile advertisements can provide me with an entertaining experience.
Context	5. Information specific to where I am would be useful to me
	6. Information specific to a time or date would be useful to me
	7. I would enter a personal user profile
Control	8. I would be willing to receive mobile advertisements if I give my permission
	9. It is important to me that I control permission to receive mobile advertisements
	10. It is important to me that I can refuse to accept mobile advertisements.
	11. It is important to me that I have the ability to filter mobile advertisements to match my needs.
Sacrifice	12. The biggest problem with mobile advertisements is not being able to control them
	13. The biggest problem with mobile advertisements is the loss of privacy.
	14. The biggest problem with mobile advertisements is the time it takes to read or respond to them
	15. The biggest problem with mobile advertisements is that they are annoying or irritating.
	16. The biggest problem with mobile advertisements is that it blurs the boundaries between home, work, and leisure.
Trust	17. I trust that my mobile service provider would only use my personal data for purposes that I have approved.
	18. I trust that a marketer would only use my personal data for purposes that I have approved.
	19. I trust that the consumer is protected by law related to data privacy.
Acceptance	20. I have positive feelings towards mobile advertisements
	21. I am willing to receive mobile advertisements in the future.
	22. I will read all the mobile advertisements that I receive in the future.



<b>Table 2</b>				
Strength and significance of relationships between constructs and "Acceptance" of mobile advertising				
	Merisavo, et. al.		Boudreau	
Construct	Coefficient	Significance	Coefficient	Significance
Utility	.41	p < .01	.35	p < .05
Context	.27	p < .01	.38	p < .05
Control	.03	n.s.	-.07	n.s.
Sacrifice	-.32	p < .01	-.12	n.s.
Trust	.11	p < .01	.28	p < .01
Note: The comparison is between similar but not identical models				

**Table 3**

*\*Highlighted items show questions where the respondents agreed more*

Question	Finland Mean	US Mean	t-statistic	significance
1	4.48	3.36	7.17	<.01
2	4.11	3.23	5.60	<.01
3	4.44	3.51	5.82	<.01
4	3.41	2.99	2.75	<.01
5	4.73	3.95	4.60	<.01
6	4.22	3.70	3.07	<.01
7	3.80	2.85	5.94	<.01
8	6.09	3.49	13.24	<.01
9	6.05	6.16	-0.69	n.s.
10	6.04	6.37	-2.54	<.05
11	5.63	6.14	-3.69	<.01
12	5.07	5.94	-6.81	<.01
13	5.09	5.27	-1.17	n.s.
14	4.60	4.78	-1.14	n.s.
15	4.87	5.63	-5.25	<.01
16	4.08	4.58	-3.11	<.01
17	4.78	3.70	5.58	<.01
18	4.09	3.02	5.37	<.01
19	4.48	3.56	4.85	<.01
Y1	3.82	2.79	6.76	<.01
Y2	3.59	2.95	3.74	<.01
Y3	4.41	2.39	12.65	<.01

**Table 4**

<b>Percentage of mobile Web users who never or infrequently use the desktop Web</b>			
<b>Country</b>	<b>Percentage mobile-only</b>	<b>Country</b>	<b>Percentage mobile-only</b>
Egypt	70%	Indonesia	44%
India	59%	Thailand	32%
South Africa	57%	China	30%
Ghana	55%	US	25%
Kenya	54%	UK	22%
Nigeria	50%	Russia	19%
<b>Source: On Device Research</b> (December 2010)		<b>Survey group:</b> 15,204	<b>via: mobiThinking</b>

**Table 5**

<b>Key Global Telecom Indicators for the World Telecommunication Service Sector in 2011</b> (all figures are estimates)									
	<b>Global</b>	<b>Developed nations</b>	<b>Developing nations</b>	<b>Africa</b>	<b>Arab States</b>	<b>Asia &amp; Pacific</b>	<b>CIS</b>	<b>Europe</b>	<b>The Americas</b>
<b>Mobile cellular subscriptions (millions)</b>	5,981	1,461	4,520	433	349	2,897	399	741	969
<b>Per 100 people</b>	86.7%	117.8%	78.8%	53.0%	96.7%	73.9%	143.0%	119.5%	103.3%
<b>Fixed telephone lines (millions)</b>	1,159	494	665	12	35	511	74	242	268
<b>Per 100 people</b>	16.6%	39.8%	11.6%	1.4%	9.7%	13.0%	26.3%	39.1%	28.5%
<b>Active mobile broadband subscriptions (millions)</b>	1,186	701	484	31	48	421	42	336	286
<b>Per 100 people</b>	17.0%	56.5%	8.5%	3.8%	13.3%	10.7%	14.9%	54.1%	30.5%
<b>Fixed broadband subscriptions (millions)</b>	591	319	272	1	8	243	27	160	145
<b>per 100 people</b>	8.5%	25.7%	4.8%	0.2%	2.2%	6.2%	9.6%	25.8%	15.5%
<b>Source: International Telecommunication Union (November 2011)</b>								<b>via: mobiThinking</b>	

**APPENDIX 1**  
**Original Questions from Study by Merisavo et. al.**

Construct	Question
Perceived utility of mobile advertising	<ol style="list-style-type: none"> <li>1. I think that saving money is important in mobile advertising</li> <li>2. I think that saving time is important in mobile advertising</li> <li>3. I think that useful information is important in mobile advertising</li> <li>4. I think that entertaining experience is important in mobile advertising</li> </ol>
Utilization of contextual information in mobile advertising	<ol style="list-style-type: none"> <li>1. I would view mobile advertising related to me being in a specific location (e.g. stores, parking) as useful</li> <li>2. I would view mobile advertising related to a specific time or date (e.g. anniversary, changes in stock prices) as useful</li> <li>3. I would be prepared to spend time providing my personal details (a user profile ) to make mobile advertising to better match my needs</li> </ol>
Perceived control of mobile advertising	<ol style="list-style-type: none"> <li>1. I would only be prepared to receive mobile advertising if I had provided my permission</li> <li>2. It is important for me that I can control the permission to receive mobile advertising</li> <li>3. It is important for me that I can refuse to receive mobile advertising</li> <li>4. It is important for me that I can filter mobile marketing advertising to match my needs</li> </ol>
Perceived sacrifice of receiving mobile advertising	<ol style="list-style-type: none"> <li>1. The biggest problem related to receiving mobile advertising is loss of control</li> <li>2. The biggest problem related to receiving mobile advertising is loss of privacy</li> <li>3. The biggest problem related to receiving mobile advertising is the time involved in dealing with it</li> <li>4. The biggest problem related to receiving mobile advertising is that I feel it is annoying or irritating</li> <li>5. The biggest problem related to receiving mobile advertising is that it blurs the distinction between home, work and leisure</li> </ol>
Trust in privacy and laws of mobile advertising	<ol style="list-style-type: none"> <li>1. I believe that my mobile operator uses my data only for a purpose that I have approved</li> <li>2. I believe that a marketer would use my data only for a purpose that I have approved</li> <li>3. I believe that the consumer is protected by laws related to data privacy</li> </ol>
Acceptance of mobile advertising	<ol style="list-style-type: none"> <li>1. I feel positively about mobile advertising</li> <li>2. I am willing to receive mobile advertising messages in the future</li> <li>3. I would read all mobile advertising messages I receive in the future</li> </ol>

## APPENDIX 2

### Hypotheses [from Merisavo et. al.]

**H1:** Consumers' perceived utility of mobile advertising is positively related to their willingness to accept mobile advertising.

**H2:** Consumers' utilization of contextual information in mobile advertising is positively related to their willingness to accept mobile advertising.

**H3:** Consumers' perceived control of mobile advertising is positively related to their willingness to accept mobile advertising.

**H4:** Consumers' perceived sacrifice in receiving mobile advertising is negatively related to their willingness to accept mobile advertising.

**H5:** Consumers' trust in privacy and the laws of mobile advertising is positively related to their willingness to accept mobile advertising.