

Entrepreneurial marketing in the B2C mobile application business: A netnographic study across four expert blogs

Entrepreneurship

Master's thesis

Alexi Haapajoki

2014

Author Aleksi Haapajoki

Title of thesis Entrepreneurial marketing in the B2C mobile application business: A netnographic study across four expert blogs

Degree Master of Science in Economics and Business Administration

Degree programme Entrepreneurship

Thesis advisor(s) Jukka Partanen

Year of approval 2014**Number of pages** 79**Language** English

Abstract

This study provides insight into the use of entrepreneurial marketing in the mobile app context, with aim of answering the research question: *how can entrepreneurial marketing can be used to affect mobile application adoption and retention?* The motivation for the study stems from the lack of research on entrepreneurial marketing in the mobile application context and the scarcity of research on mobile application marketing. A thorough review of studies relating to entrepreneurial marketing, mobile commerce, mobile advertising and mobile applications was conducted in order to establish the theoretical foundations of this study. On the basis of the literature review the I-A-R framework was constructed which explores marketing through customer intelligence, acquisition and retention.

Netnography was utilized to study experts across four company blogs. These blogs present North American companies that offer services and/or platforms related to mobile app marketing mainly to small and medium sized enterprises. Due to the large amount of data, the findings were first categorized according to the I-A-R framework, and then a summarized and presented along with a revised framework.

The revised framework presents a four stage mobile app marketing process. These stages represent the app developer's approach towards making apps, the development of the app, user acquisition, and user retention. In terms of the research question, the two most important ways that EM can be used in the mobile app context are: creating apps that users have an incentive to share in order to leverage a small marketing budget for user acquisition and establishing relationships as a customer loyalty strategy.

Keywords Mobile technology, entrepreneurial marketing, mobile application marketing

Table of Contents

1. INTRODUCTION.....	1
1.1. Background	1
1.2. Research gap and problem	2
2. LITERATURE REVIEW.....	4
2.1. Entrepreneurial Marketing	4
2.1.1. Definition of Entrepreneurial Marketing.....	4
2.1.2. Differences between Traditional Marketing and Entrepreneurial Marketing	6
2.1.3. Alternative marketing approaches.....	11
2.2. Mobile Business	15
2.2.1 Mobile Commerce.....	15
2.2.2. Mobile advertising.....	18
2.3. Mobile applications	22
2.3.1. Emergence of the mobile app business	22
2.3.2. Mobile apps as a medium for m-commerce and m-marketing.....	23
2.3.3 Mobile application marketing research	25
2.4. Mobile App Context and Theoretical Framework	27
2.4.1. Mobile commerce in the mobile application context	27
2.4.2. Mobile advertising in the mobile application context	28
2.4.3. Need for entrepreneurial marketing in mobile application context.....	28
2.4.4. Theoretical Framework	29
3. METHODOLOGY	32
3.1. Context	32
3.2. Methods Adopted	33
3.3. Sample and Research Techniques	35
3.4. Data Analysis	36
3.5. Methodological Issues.....	37
4. FINDINGS	38
4.1. Customer Intelligence	38

4.1.1. Conceptual stage	38
4.1.2. App monetization	40
4.1.3. Feedback gathering	41
4.2. Customer Acquisition.....	44
4.2.1. App Store Optimization	44
4.2.2 Social Media and video marketing.....	47
4.2.3. Website and e-mail marketing.....	49
4.2.4. Public Relations.....	50
4.2.5. Networking and word of mouth	51
4.2.6. Advertising and cross-promotion	52
4.2.7. Alternative markets and app stores	54
4.3. Customer Retention.....	56
4.3.1. App Experience	56
4.3.2. Updates.....	57
4.3.3 Building Relationships	58
4.4. Other Findings.....	60
5. SUMMARY AND REVISED FRAMEWORK.....	62
5.1. Conceptual Stage.....	62
5.2. User Acquisition.....	63
5.3. User Retention.....	63
5.4. Feedback	64
5.5. Feedback from blog owners	65
5.6. Revised Framework.....	65
6. DISCUSSION AND CONCLUSIONS.....	67
6.1. Theoretical Implications.....	67
6.2. Managerial Implications.....	71
6.3. Limitations and further research	71
7. REFERENCES	73

List of Tables and Figures

Table 1. Contrasting Conventional Marketing and Entrepreneurial Marketing.....	7
Table 2. Entrepreneurial Marketing Compared to Traditional marketing concepts.....	8
Table 3. Popular Online Communication Venues.....	13
Table 4. Classification of mobile marketing applications.....	21
Table 5. Mobile App Business Models.....	24
Table 6. Key information about selected blogs.....	36
Figure 1. Mobile B2C business model.....	15
Figure 2. Activities in a world without mobile technologies.....	16
Figure 3. Activities in a world with mobile technologies.....	17
Figure 4. Mobile application distribution process.....	23
Figure 5. Mobile Application context and interactions.....	27
Figure 6. I-A-R conceptual framework of this study.....	29
Figure 7. A representative Range of Methodologies and their Related Paradigms.....	33
Figure 8. Mobile app marketing process based on the findings.....	66

1. INTRODUCTION

1.1. Background

In July 2008 Apple introduced the App Store, a digital distribution platform for mobile phone software also known as applications (apps) for the iPhone. Prior to Apple's App Store mobile app developers had to deal with difficulties such as low revenue share, lack of information, regional fragmentation, and establishing bilateral contracts with mobile device manufactures for application certification, approval, targeting and pricing (Karla and Bröker, 2011). The introduction of this new platform resulted in significant changes in mobile business towards what is called the App Economy. The combination of touch screen and the distribution concept of the App Store became standard with practically all smartphone platforms and mobile device manufacturers (ibid).

The success of the app store concept is highlighted by explosive growth in the amount of apps available, revenue made by apps and increased smartphone adoption. The app industry has grown from practically non-existent in 2008 to making revenue of USD \$18 billion in 2012 with over 2 million apps available in the three most popular app stores (Takahashi, 2013; Tristan, 2013). At the same time smartphone penetration has reached over 50% in several major markets worldwide and is predicted to reach that level worldwide in 2017 (Emarketer, 2013a). Essentially, the introduction of the new concepts by Apple has aided the smartphone and mobile app technologies in rapidly crossing the chasm of the revised technology adoption lifecycle by Moore (2006). This means that while previously apps were used by an early market, the introduction of the App Store has resulted in apps being used by majority markets.

This kind of rapid change in the industry creates substantial opportunities, but with growth of the market mobile app developers are also facing several challenges. First, while an app in the Apple app store gets 40,000 downloads on average (Tristan, 2013), the top apps skew this statistic since the top couple thousand apps are getting significant

downloads while in around half of the apps get no downloads (Meyer, 2012). This highlights the challenge that smaller developers face in terms of getting discovered in the app stores. Second, the average retention of app users is very low for example research by Flurry found the average user retention rate to be 35% over a period of 90 days (Farago, 2012). Lastly, Gartner (2013) found that 89.6% of downloaded apps in 2012 were free and predict that the percentage will increase to 94.5% in 2017. This means that developers need to increasingly utilize advertising, in app purchases and other monetization methods to make money from their free apps. These challenges highlight the increasing importance of mobile app marketing in order to stand out from the competition, retain users and to monetize apps effectively.

1.2. Research gap and problem

The academic research on the mobile business has mainly concentrated on the concepts of mobile commerce and mobile advertising. The majority of this research precedes mobile applications and focuses on the use of older technologies such as Short Messaging Service (SMS) and Wireless Application Protocol (WAP). The early research on mobile apps mainly concentrates on the technical aspects of building an app and effective app stores. Only few articles concentrate on aspects related to marketing of apps, none of which specifically deal with user acquisition and retention.

Hills, Hultman and Miles (2008) advocate for EM research in all contexts, but no study exists that combines EM theory with the mobile app store context or mobile theory. The mobile app context seems to be appropriate for EM research as Morris, Schindehutte and Laforge (2002) argue that EM is better suited to emerging markets with high turbulence than traditional marketing.

Therefore this study positions itself with the objective of improving the understanding of mobile app marketing through the entrepreneurial marketing perspective. This objective is addressed through the following research question:

How can entrepreneurial marketing be used to affect mobile application adoption and retention?

Adoption and retention were specifically chosen as important aspects of the research based on entrepreneurial marketing theory and being the challenges that app entrepreneurs face. Therefore, one of the aims of this study is to provide practical implications to managers and app entrepreneurs that are facing these challenges. In terms of theory, this study attempts to extend EM literature in high velocity context and in two-sided markets under the mobile application distribution model.

2. LITERATURE REVIEW

This chapter introduces the literature on entrepreneurial marketing, mobile commerce, mobile advertising and mobile apps. These theories are combined into a theoretical framework which has a role in guiding the subsequent research.

2.1. Entrepreneurial Marketing

This section examines the different definitions of entrepreneurial marketing (EM), the differences between EM and traditional marketing and several alternative marketing methods associated with EM.

2.1.1. Definition of Entrepreneurial Marketing

Marketing and Entrepreneurship have traditionally been seen as separate business disciplines, but with the increasing amount of research on small and medium sized enterprises (SMEs) it has become important to define how smaller companies conduct their marketing (Hills, Hultman and Miles, 2008). It is important to note that since innovation is seen as a prerequisite for entrepreneurship, not all small-business owners are entrepreneurs. Therefore entrepreneurial marketing (EM) has often been defined as “marketing of small firms growing through entrepreneurship” (Bjerke and Hultman, 2002, p.15).

Although, it is accepted that that entrepreneurial marketing is different from traditional marketing, no clear single definition of EM exists. Ioniță (2012) notes that “Lacking a unique definition makes research efforts remain fragmented and misaligned” (p.132). In literature, two main categories of definitions can be found. The first category is similar to Bjerke and Hultman’s (2002) definition, in that it looks at how marketing is done by entrepreneurs in new ventures (Stokes, 2000). Maritz, Frederick and Valos (2009-2010) argue further that integration of generic marketing and entrepreneurship principles has

dominated this type of literature. The second category considers EM “as an integrative conceptualization that reflects such alternative perspectives as guerrilla marketing, radical marketing, expeditionary marketing and others” (Morris, Schindehutte and Laforge, 2002, p.1). One of the key distinguishing features of this category is that it can be applied by larger companies since it is considered as a strategic orientation (Kraus, Harms and Fink, 2009) or mindset (Morris, Schindehutte and Laforge, 2002). This category could also be seen as innovative marketing.

Additionally, Ionitã (2012) finds two more categories of EM definitions. The third category considers that “EM is both wholly traditional AM (Administrative Marketing) and wholly entrepreneurship and not a subset of marketing combined with a subset of entrepreneurial processes” (Morrish, Miles and Deacon, 2010, p.304). The fourth category of definition considers EM to be part of the life cycle of the company, where EM occurs at the first and/or last stages in a company’s marketing evolution (Ionitã, 2012). This is because in the early stages companies tend to use informal marketing, but as the company matures the marketing approach becomes more formalized until the formalized approach becomes excessive and a form of EM called Intrapreneurial marketing is needed.

It is also important to note that marketing can be applied on different levels. Martin (2009) identifies three levels of marketing that apply to EM and Traditional marketing (TM): culture, strategy and tactics. Marketing as a *culture* looks at the values and beliefs within an organization regarding the relationship with customers. Marketing as a *strategy*, in turn, aims to achieve competitive advantage within a certain context, whereas marketing as *tactics* looks at methods of resource leveraging and risk management.

2.1.2. Differences between Traditional Marketing and Entrepreneurial Marketing

Kraus, Harms and Fink (2009) conceptualize EM as: “a particular type of marketing that is innovative, risky, proactive, focuses on opportunities and can be performed without resources currently controlled” (p.16). Similarly, Morris, Schindehutte and Laforge (2002) identify seven underlying dimensions of EM as proactiveness, calculated risk-taking, innovativeness, opportunity focus, resource leveraging, customer intensity and value creation. In addition, Morris, Schindehutte and Laforge argue (in Table 1) that TM tends to be objective and happening in a stable market, while EM’s creativity is well suited to turbulent markets. Furthermore, they state that even though Table 1 serves as a good way to distinguish EM from TM, in reality a spectrum of marketing approaches exists between these two approaches.

	Traditional Marketing	Entrepreneurial Marketing
Basic Premise	Facilitation of transactions and market control	Sustainable competitive advantage through value-creating innovation
Orientation	Marketing as objective, dispassionate science	Central role of passion, zeal, persistence and creativity in marketing
Context	Established, relatively stable	Envisioned, emerging and fragmented markets with high levels of turbulence
Marketer's role	Coordinator of marketing mix; builder of the brand	Internal and external change agent; creator of the category
Market Approach	Reactive and adaptive approach to current market situation with incremental innovation	Proactive approach, leading the customer with dynamic innovation
Customer Needs	Articulated, assumed, expressed by customers through survey research	Unarticulated, discovered, identified through lead users
Risk Perspective	Risk minimization in marketing actions	Marketing as a vehicle for calculated risk-taking; emphasis on finding ways to mitigate, stage or share risks
Resource Management	Efficient use of existing resources, scarcity mentality	Leveraging, creative use of the resources of others; doing more with less; actions are not constrained by resources currently controlled
New product/service development	Marketing supports new product/service development activities of Research & Development and other technical depts.	Marketing is the home of innovation; customer is co-active producer
Customer's role	External source of intelligence and feedback	Active participant in firm's marketing decision process, defining product, price, distribution and communications approaches

Table 1. Contrasting Conventional Marketing and Entrepreneurial Marketing (Morris, Schindehutte and Laforge, 2002)

In addition, Stokes (2000) identifies four major differences between traditional and entrepreneurial marketing: Customer versus Innovation orientation, top-down versus bottom-up strategies, 4Ps (Product, Price, Promotion and Place) versus interactive and

word-of-mouth marketing, and Market research versus Networking. These concepts and their relation to marketing principles are examined in Table 2.

MARKETING PRINCIPLES	TRADITIONAL MARKETING	ENTREPRENEURIAL MARKETING
<i>CONCEPT</i>	Customer-orientated: Market-driven, product development follows	Innovation oriented: Idea-driven, intuitive assessment of market needs
<i>STRATEGY</i>	Top-down segmentation, targeting, and positioning	Bottom-up targeting of customers and other influence groups
<i>METHODS</i>	The marketing mix Four/Seven P's	Interactive marketing methods Word-of-mouth marketing
<i>MARKET INTELLIGENCE</i>	Formalised research and intelligence systems	Informal networking and information gathering

Table 2. Entrepreneurial Marketing Compared to Traditional marketing concepts (Stokes, 2000)

Innovation orientation

“Rather than investing time, money and managerial effort up front in market research, new ventures can move directly to selling a potential or actual product or service to customers on the basis of affordable loss” (Read et al., 2009, p.15). The previous quote highlights the idea that new ventures often start with an idea and try to find a market for it by taking a calculated risk. Stokes (2000) continues this line of thought by arguing that intuitive feel, creativity and innovation are important in entrepreneurship rather than careful research of customer needs.

Bottom-up strategy

Large businesses tend to go through the motions of segmentation, targeting and positioning to find buyer groups. In contrast, “smaller firms practice a ‘bottom-up’ targeting process in which the organization begins by serving the needs of a few

customers and then expands the base gradually as experience and resources allow” (Stokes, 2000, p.8). Personal networks play an important role in trying to attract an initial customer base (Kraus, Harms and Fink, 2009), which is then extended by looking for more customers of the same profile (Stokes, 2000). This bottom-up targeting process can be seen as a trial and error process of testing the market opportunity that the entrepreneur has identified (Ionitã, 2012).

Interactive and word-of-mouth marketing

Although the 4Ps of marketing can be adapted to the entrepreneurial context (Gilmore, 2011), Martin (2009) argues that the 4P’s can lead to missing of the fundamental points of marketing which are adaptability, flexibility and responsiveness. In addition Martin (2009) argues that SMEs face unique marketing opportunities and concerns, and would therefore benefit from marketing theory that considers the SME context. Stokes (2000) argues that instead of the 4P’s, entrepreneurs tend to prefer direct interchanges and personal relationships. This involvement with the customer means that entrepreneurs are less likely to use mass promotions in marketing. Morrish, Miles and Deacon (2010) note that a fundamental difference between TM and EM is that in EM firms, the entrepreneur and customer are often core actors of the business with equal importance in shaping the company’s culture, strategy and behavior.

Schindehutte, Morris and Pitt (2009) identify an entrepreneurial alternative to the 4Ps by providing the 4Cs: co-created, communication within communities, customizable personal value, and choice and convenience. Co-creation is similar to Morrish, Miles and Deacon’s (2010) idea that customers have a large role in the shaping of the company which is especially highlighted by the increasing popularity of crowd-sourcing. Communication within communities refers to the idea that instead of information, consumers want to interact with like-minded people and brands. Customizable personal value means that companies think about value first rather than costs of serving customers and that the company makes the customer feel that they are not one of many customers. Choice and convenience means going to where the

customers are. Zontanos and Anderson (2004) provide another alternative to the traditional 4Ps by providing their own 4Ps of person, process, purpose and practices. They argue that these are better framework for understanding entrepreneurial relationship marketing.

Stokes (2000) argues that entrepreneurs use interactive marketing to maintain their unique competitive advantage of interacting with individual customers, while relying on word-of-mouth marketing to develop market base through recommendations. This is similar to Zontanos and Anderson's (2004) findings which are labelled under relationship marketing and also includes the notion of building trust. Kraus, Harms and Fink (2009) highlight that one of the key challenges for new ventures is the lack of trust that must be overcome as their products are unknown to the customer. Morris, Schindehutte and Laforge (2002) highlight that EM takes a creative approach to customer acquisition, retention and development, and therefore relationship marketing is distinct from EM since it "focuses on managing existing relationships, while EM focuses on innovative approaches to creating new relationships or using existing relationships to create new markets" (p.7).

Networking

Being close to their customers, successful entrepreneurs are able to find new ideas and opportunities by using their network of personal and inter-organizational contacts. In addition, they use informal information gathering techniques and their industry contacts to monitor performance and react to competitive threats, rather than formal market research (Stokes, 2000). Read et al. (2009) find that expert entrepreneurs are sceptical of marketing research and suggest that marketers facing uncertainty should consider alternatives to conventional marketing research. Furthermore, they go on to say "Expert entrepreneurs replace market research with cocreational or partnership strategies with potential customers, suppliers and investors who they work with directly" (p. 14-15). These kinds of strategies can be seen as resource leveraging and risk managing (Morris, Schindehutte and Laforge 2002). Networking can be done in many ways, but the

overwhelming purpose is to get business done effectively. Furthermore, networking varies according to the stage of the business: at the development stage networking focuses on establishing networks, while at the established phase networking becomes about encouraging employees to create stronger collaborations and alliances as well as to maintain current relationships (Gilmore, 2011).

2.1.3. Alternative marketing approaches

In addition to the underlying dimensions and differences to traditional marketing, EM is often seen as a collection of alternative marketing approaches. Kraus, Harms and Fink (2009) identify three best-known and most successful alternative EM marketing approaches: Guerrilla Marketing, Buzz Marketing and Viral Marketing. These three approaches are partially overlapping because they are based on the concept of word-of-mouth marketing (ibid). Maritz, Frederick and Valos (2010) argue that another important marketing perspective is Social media marketing (they use the term Social-network marketing and social media), by describing it as a: “interface between technology, radical innovation and EM” (p.79).

Guerrilla, Buzz and Viral Marketing

Hutter and Hoffmann (2011) describe guerrilla marketing as a way to best succeed in the competition for the consumers’ attention while avoiding high costs of traditional marketing efforts. Furthermore, Hutter and Hoffmann (2011) argue that guerrilla marketing can include other marketing methods such as buzz marketing, viral marketing and ambush marketing. Guerrilla marketing occurs through the use of the surprise effect, the diffusion effect and the low cost effect (ibid). The surprise effect works through surprising the consumers with unusual activity to draw their interest in the advertising message with the goal of creating a “wow factor” (Kraus, Harms and Fink, 2009). The diffusion effect works by providing ways of increasing the number of individuals exposed to the marketing message without increasing marketing campaign cost. This is done through the use of Viral Marketing, Buzz Marketing and Guerrilla

PR. Viral Marketing is a set of methods intended to spread the marketing message from person to person like a virus, the success of which requires the person to have a benefit from forwarding the marketing message (Kraus, Harms and Fink, 2009). Similarly, Buzz Marketing attempts to spread the advertising message by luring consumers to share it, usually by selecting and motivating influential persons to start the spread of such message or rumour (Notarantonio and Quigley, 2009). While Viral Marketing can be seen as an impersonal and technological-backed version of buzz marketing (Kraus, Harms and Fink, 2009), Guerrilla PR attempts to construct marketing campaigns so that they appeal to the media, which will spread the message (Hutter and Hoffmann, 2011). The high diffusion and the way guerrilla campaigns are often setup means that campaigns have a low cost effect and are very efficient. There are also methods such as Ambush marketing (the deflection of public attention surrounding an event toward a non-sponsoring company instead of the sponsoring company) that companies can use to leverage a free riding effect (ibid).

Social Media Marketing

Maritz, Frederick and Valos (2010) highlight that Social Media marketing has come from a shift in how people are using the internet in creating and participating in social spaces on the internet and is an extension of convergence marketing, which assumes that new technology and behaviours do not totally replace the old and therefore it is beneficial to have a hybrid marketing strategy across technological channels (Wind and Mahajan, 2002). Similarly, Barger and Labrecque (2013) discuss the difficulty of measuring the effectiveness of social media as consumers can receive information across several online and offline channels, and therefore it is difficult to determine how much a specific channel contributed to the desired action (such as a purchase) taking place.

Regardless, social media marketing is seen as a very effective and as a crucial part of succeeding in online marketing (Vinerean et al., 2013). Schlinke and Crain (2013) argue that a company should consider their goals, strategy, implementation and the risks of

social media before committing resources to social media marketing. Table 3 highlights the orientation and communication types of the most popular online communication venues. It is important to consider the purpose and audience in these venues, as a single marketing message may not work across these platforms and the style of communication needed to be effective in a certain venue might not be consistent with the brand image (Barger and Labrecque, 2013). Table 3 also includes blogs, which are not considered as a social media by Schlinke and Crain, but they are seen as channel to promote deeper and richer content and therefore have a distinct role in marketing. Berger and Labrecque (2013) also identify that different online social channels have differing relative amounts of information per post, which needs to be considered in channel choices and in the composition of the marketing message.

Venue	Orientation	Communication type
Facebook	Social	Casual
LinkedIn	Business	Professional
Twitter	Content-focused	Professional-Casual
Blogs	Content/Opinion	Informational

Table 3. Popular Online Communication Venues (Schlinke and Crain, 2013)

In addition, Vinerean et al. (2013) argue that companies should attempt to understand different social media consumer types and create a buyer persona which is developed and adjusted on the basis of customer research.

Although social media marketing can be seen as a marketing communication channel, Laroche et al. (2012) highlight the building of brand communities as a way to serve customers that is more efficient and easier to manage than one-on-one relationships. In addition, brand communities can foster co-creation of value, brand trust, brand loyalty and increase feelings of community among members. The rationale behind this is that consumers like the idea of contribution, creation and joining communities because of their needs of belongingness. These ideas resonate well with the first two of

Schindehutte, Morris and Pitt's 4Cs: co-created and communication within communities.

2.2. Mobile Business

Leem, Suh and Kim (2004) provide a good overview of the mobile B2C business that is divided into three domains: (1) Commerce, (2) Intermediary and (3) Information (Figure 1). Commerce covers the direct commercial transactions of digital goods such as games and e-books, any physical items bought through the mobile platform and services such as reservations and ticketing. Intermediary delivers contents such as stock information, news and weather. Information covers the sending of personalized service/content and advertising. Of these domains of Mobile B2C Business, Commerce and Information have been prominent in literature and will hence be explored in more detail in this chapter, namely through the concepts of mobile commerce (m-commerce) and mobile marketing (m-marketing).

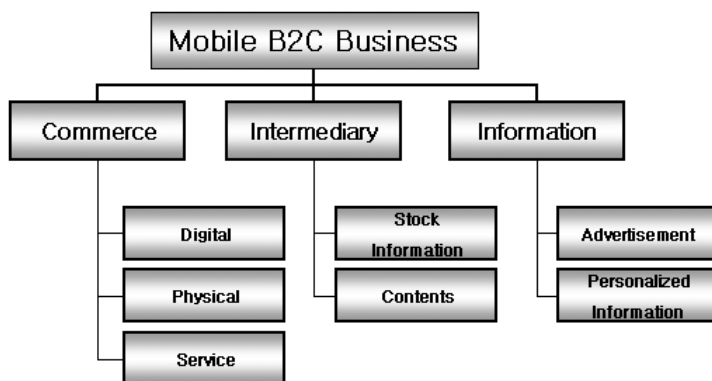


Figure 1. Mobile B2C business model (Leem, Suh and Kim, 2004)

2.2.1 Mobile Commerce

In the last fifteen years there have been great changes in methods of doing business with the emergence of electronic commerce (e-commerce) which has become significant in our everyday lives. With the development of mobile devices and wireless communication technology, it is possible to access the internet anywhere you go. This has resulted in increased commerce through mobile devices.

Chung-Shing and Ho (2010) define mobile commerce (m-commerce) as using this mobile technology to conduct “any transaction with a monetary value – either direct or indirect”. Martín, López-Catalán and Ramón-Jerónimo (2012) identify several other definitions which are narrower, in only including direct monetary value transactions. Some scholars have seen m-commerce as a subset of e-commerce (Ngai and Gunasekaran, 2007). Although e-commerce and m-commerce has several similarities in functions and processing (Xu and Yang, 2012), there are certain specific value propositions to m-commerce that set it apart from e-commerce (Chung-Shing and Ho, 2010). These value propositions also mean that traditional e-commerce models cannot be used in the context of m-commerce (Clarke III, 2008). Or as Chung-Shing and Ho put it: “Just as the implementation of an e-commerce strategy is not merely an extension of traditional business online, the formulation and implementation of an m-commerce strategy is also not simply an extension of e-commerce practices” (p.41). Furthermore, Balasubramanian, Peterson and Jarvenpaa (2002) note that mobile technology can break some of the space and time constraints that are present in a world without mobile technologies therefore creating new unique opportunities such as the ability to buy books anywhere at any time (Figure 2&3).

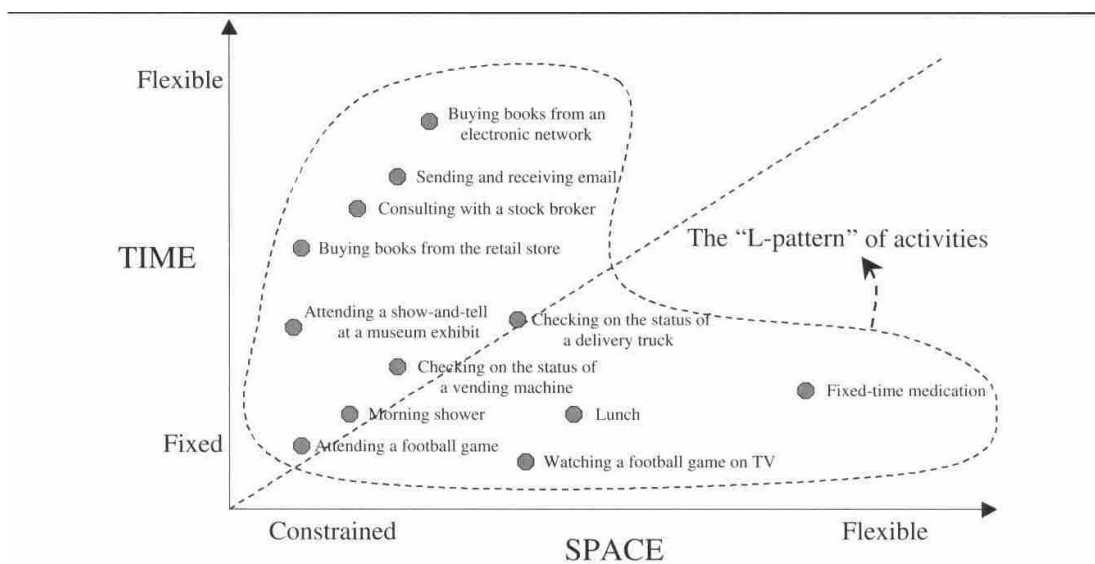


Figure 2. Activities in a world without mobile technologies (Balasubramanian, Peterson and Jarvenpaa, 2002)

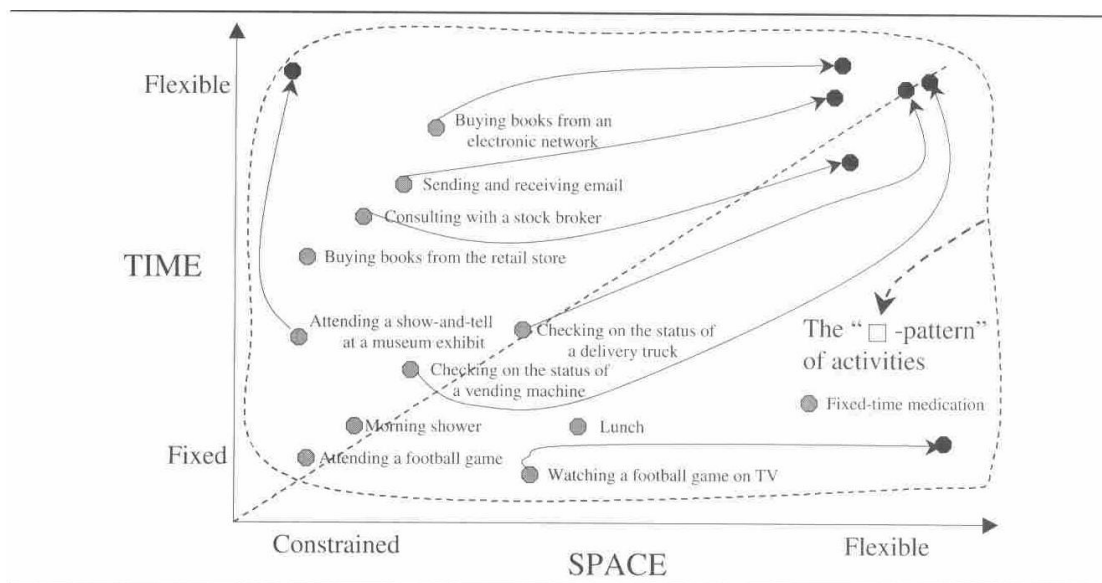


Figure 3. Activities in a world with mobile technologies (Balasubramanian, Peterson and Jarvenpaa, 2002)

Value propositions of m-commerce

Clarke III (2008) identifies four value propositions of mobile commerce: Ubiquity, Localization, Personalization and Convenience. Ubiquity refers to the ability to receive information and perform transactions from any location instantly. Localization refers to the use of GPS and other positioning abilities to deliver content that is relative to a specific location. Personalization is created as mobile phones are usually used by a single person and therefore it is possible to send personalized content to different segments. Convenience refers to the ability of m-commerce to make life more convenient by for example offering the ability to pay for a soda with a mobile phone. Similar value propositions are provided by Mahatanankoon, Wen and Lim (2005) and Chung-Shing and Ho (2010).

Further, Wagner (2011) argues that through the use of mobile location based services (MLBS) which leverage these value propositions, the mobile phone is much more than a pocket sized personal computer in providing contextually and personally important

information. However, one of the big concerns is privacy of location data, especially in social network services where anybody can potentially access information about the user and their location.

Finally, Balasubramanian, Peterson and Jarvenpaa (2002) provide insight by proposing that m-commerce applications can be categorized along three dimensions: (1) the extent to which the m-commerce application is location-sensitive, (2) time-critical and (3) whether the information is controlled by the user or the provider. A high location-sensitivity refers to services relate to the surrounding physical environment such as MLBS, while other services are intended to overcome space boundaries such as being able to shop on the mobile phone. Time-criticality is often linked to exchange of information related to a scheduled event, for example buying a book in a online store may not be considered time critical while bidding on the same book in a online auction certainly is. The last dimension looks at the control of information; the user can be in control by requesting information (e.g. about close-by restaurants) or the provider can send periodical information (e.g updates on their favourite bands or marketing messages). This last dimension resonates with trigger of communication which will be discussed in more detail in the next section of mobile advertising.

2.2.2. Mobile advertising

The term mobile marketing (m-marketing) seems to be used interchangeably with mobile advertising (m-advertising) in the literature. Traditionally, the communication of m-marketing has been considered to be one way sharing of information and offers (Huang, 2011). Deighton and Kornfeld (2009) argue that the use of direct marketing models in digital media marketing does not reflect the reality of the medium (i.e. that the users are not passive), but rather more interactive methods should be used. Shankar and Balasubramanian (2009) extend this mobile marketing definition: “Mobile marketing refers to the two- or multi-way communication and promotion of an offer

between a firm and its customers using a mobile medium, device, or technology” (p.118).

Unique characteristics of mobile advertising

In addition to the value propositions of m-commerce, Mirbagheri and Hejazinia (2010) identify unique characteristics of the mobile marketing channel: high penetration, availability anytime and anywhere, interactivity, virality, high response rate and relatively low cost. The penetration rate of mobile phones is now at 96% worldwide and at 128% in developed countries (ITU, 2013), which means that a wide range of people can be reached through the mobile medium. Availability anywhere and anywhere means that as long as mobiles are turned on, the target audience can be reached. The mobile as a medium can be used interactively and campaign results can be gathered quickly. However, Smutkupt, Krairit and Khang (2011) found that in the case of permission-based SMS marketing the increase in brand awareness was higher with customized messages than interactive messages. The mobile channel is capable of viral marketing also known more specifically as electronic viral marketing (Wolfgang, Key and Wiedemann, 2009) which can multiply the reach of the campaign. The response rates of SMS campaigns can be as high as 30%, averaging at 10% to 20% as compared to 5% for e-mail marketing (Kavassalis et al., 2003). Mobile marketing campaigns tend to be low cost and cost-effective. For example: the cost of advertisement on mobile apps is significantly cheaper than web or print (Fiegerman, 2012).

Mobile advertising strategy

SMS has been proven to be a successful mobile marketing method and the focus of mobile marketing strategy previously has been on developing effective strategies around the Short Messaging System (SMS) platform. Varnali and Toker (2010) argue that existing applications and business models (focusing on the use of SMS) can quickly become obsolete with the introduction of new technology or new consumer trends. Huang (2011) identifies that due to mobile technology development beyond SMS, mobile marketing services are likely to be deployed over a multichannel mobile

communication platform. The traditional linear model of mobile marketing has been to consider users passive which has resulted in messages that easily be considered unwanted. The consumer-centric and interactive models presented by Huang (2011) consider that marketing occurs through the acceptance of the intended audience, and this consumer-centric mobile communication occurs across several channels such as games, music, maps and images.

Furthermore, a three dimensional V-I-P model for mobile marketing stakeholders is provided by Huang (2011). This model assumes that two users (brand owners and consumers) are being connected by supportive providers such as mobile network operators and service operators. This model shows that the value (V) for brand owners using mobile marketing is direct or indirect monetary value, while the consumer receiving the marketing is not seeking a monetary value from using the mobile marketing service, although they may be interested in getting monetary benefits from the marketing messages (Drossos et al., 2007). Providers of alternate marketing solutions and academic researchers have interest (I) in mobile marketing, but are not involved by direct value gain and have little power to control this process. From the consumer's and brand owner's perspective, interest is their intention to use the services. While these two parties do not necessarily have an interest in the mobile marketing operations themselves, consumers are interested in receiving relevant information that they have given permission to receive (Bamba and Barnes, 2006) and the lack of interest by brand owners can cause them to use other services instead. Power (P) looks at the significance of the stakeholder in using and how impactful the service will be. Consumers are seen as having the most power as they are the main source of revenue in mobile marketing, and are the main determinants of mobile marketing acceptance and effectiveness (Smutkupt, Krairit and Khang, 2011). Huang also provides an alternate consumer centric version of this model which labels the three dimensions as: benefits, intention to use, and use and impact

Finally, Kaplan (2012) classifies mobile marketing applications according to type of communication (push or pull) and the degree of consumer knowledge which allows for more personalized messages (low or high). Table 4 highlights four different groups of communication by combining these two aspects.

		Trigger of communication	
		Push	Pull
Degree of consumer knowledge	High	Victims AT&T sent SMS text messages to 75 million customers suggesting they watch <i>American Idol</i> and vote for candidates using their AT&T phone	Patrons Pop icon Britney Spears enabled fans to receive—for \$2.99 per month— <i>Britney's Diary</i> : a weekly text message about her life during a concert tour
	Low	Strangers Toyota teamed up with Fox Broadcasting to insert 10-second commercials into 26 short mobile movies, so-called 'mobisodes,' for the TV show <i>Prison Break</i>	Groupies Calvin Klein used Quick Response codes on billboards in New York to allow users to pull up an exclusive 40-second commercial

Table 4. Classification of mobile marketing applications (Kaplan, 2012)

Push message groups are referred to as 'Victims' and 'Strangers' which reflects the notion that firms should only contact users that they have explicitly obtained permission from in order to avoid irritating recipients by sending unwanted messages (Smutkupt, Krairit and Khang, 2011). On the other hand, pull communications can be used to effectively market and sell information as can be seen in the case of 'Groupies' and 'Patrons'. Permission is seen as one of the critical issues in m-advertising in addition to acceptance, usability and value/profit (Huang, 2012).

2.3. Mobile applications

This section explores the mobile app industry in more detail. First, the emergence of the mobile app business will be explored. Second, the relation between mobile apps and the above mentioned theories of m-commerce and m-marketing will be examined. Finally, the research on mobile apps will be presented.

2.3.1. Emergence of the mobile app business

Before the emergence of mobile applications as we know them today, the development of mobile services was controlled by network operators, phone manufacturers, and a handful of application and content providers (Holzer and Ondrus, 2011). “Application and content providers had to deal with difficulties, such as lack of information, low revenue shares, and regional fragmentation. Additionally the traditional channels had been suffering from long, proprietary and fragmented processes of application certification, approval, targeting and pricing, all of which needed to be established via bilateral contracts” (Karla and Bröker, 2011, p.71)

The introduction of a new mobile application distribution process by Apple in July 2008 (Figure 4), along with a software development kit (SDK) has provided an opportunity for new developers to release their own mobile applications (Sangani, 2010). Furthermore, app stores make it easy and secure to buy apps where consumers would otherwise face transaction costs (Gans, 2012). This concept of the ‘app store’ was followed by similar concepts from other smart phone manufactures such as Research In Motion (RIM) and operating system providers such as Microsoft and Google (Gans, 2012). Most of these app stores are similar in terms of revenue share, in taking 30% in exchange for providing the application portal and handling payments (Karla and Bröker, 2011).

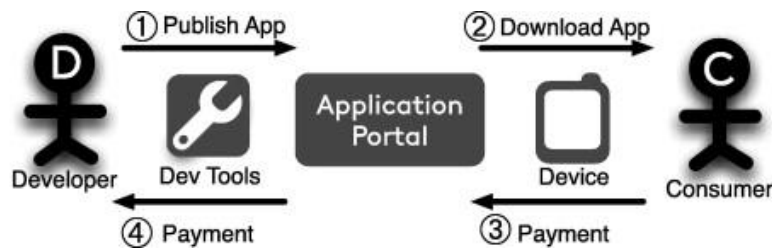


Figure 4. Mobile application distribution process (Holzer and Ondrus, 2011)

2.3.2. Mobile apps as a medium for m-commerce and m-marketing

As mentioned, the majority of research in m-commerce and m-marketing has concentrated on the use of mediums such as SMS and Mobile Internet. Yet, apps have tremendous opportunity as a mobile commerce channel (Taylor, Voelker and Pentina, 2011). Smith (2009) highlights the capabilities of Apple’s iPhone in having the “capability to make mobile transactions very simplistic and quick within an application” (p.70). Technological and consumer behavior change has led to mobile applications generating revenue of \$18 billion in 2012 (Takahashi, 2013), while the m-commerce (not including sales of applications) was a \$65.6 billion industry in 2011 (ABI Research, 2012).

Smith (2009) identifies a category of marketing coined as “application marketing”, which provides traditional and innovative ways to market inside mobile applications. Taylor, Voelker and Pentina (2011) note that although text messaging has represented the majority of mobile advertising, mobile marketing banner formats such as Apple’s iAd and Google’s AdMob were predicted to surpass text messaging in 2012. Although Fiegerman (2012) expressed that marketers were still hesitant to advertise on mobile, the growth of mobile advertising has been faster than predicted in 2012-2013 due to strong performance of Google and strong entrances by Facebook and Twitter. As a result, eMarketer (2013b) has increased predictions of US mobile advertising spending for 2013-2017. Although it is predicted that SMS messaging will continue to grow from 2011 to 2015, the medium was predicted to lag behind the growth of banner and search

engine advertising (Johnson, 2011). eMarketer (2013b), for instance, no longer considers SMS messaging important by leaving it out of their predictions.

Table 5 highlights five main Mobile App Business models. Free applications provide m-advertising opportunities while freemium, paid and sales applications provide m-commerce opportunities. Content extensions, on the other hand, show that apps can be used in other ways to add value to existing services or products. In addition, Skyhook Wireless (2009) argues that apps that are used frequently and for a long time after download are most suitable to advertising, while apps such as games (played intensely for a short time and then discarded) or utilities (used less frequently during a long period of time) may be better suited to paid or freemium business models.

App Type	Description	Ideal Revenue Model	Are there any subdivisions of this app type?	Examples
Free	Apps available from app stores free of charge	Advertising	Advertising can be in the form of direct sponsorship by one brand or advertising provided by ad enablers or ad networks	Flixster
Freemium	Free application with less functionality accompanied by a paid app with additional features	Revenue from upgrades	n/a	RunKeeper Free / RunKeeper Pro, GasBag / GasBag Pro
Paid	Applications that charge per download through app store	Revenues from downloads	Differentiated by price, with higher value added apps at higher price points	Tweetie
Content extensions	Apps that enhance existing service or product	Loss leader, revenue generated elsewhere	n/a	Bank of America, Facebook
Sales	Apps through which you can buy a product or service	Profits from sales or affiliate commission	Can also be affiliate sales model	Shazam, Amazon, ShopSavvy

Table 5. Mobile App Business Models (Skyhook Wireless, 2009)

2.3.3 Mobile application marketing research

As a quite new phenomenon, research on mobile app marketing is still in its infancy. Most of the articles found on the subject have been released in the past 12 months. So far research has mainly focused on the adoption of mobile applications and the benefits companies get from developing them. Taylor, Voelker and Pentina (2011), for example, researched mobile application adoption through a social network perspective. The results of the study indicate that social networks play an important role in app adoption and that a consumer is more likely to adopt mobile apps if their most influential contact is using them. No specific word-of-mouth process was found for a single app, but rather a consumer is likely to adopt an app when their close contact is using many similar apps. Furthermore, it was found that there is an increased tendency to adopt apps for social exchange purposes (e.g. games) when the strongest influencer is a social contact (e.g. a friend instead of a family member). These findings indicate that it is important to take in account the influence of social peers and that networking functions should be included to promote specific apps. Furthermore, it is highlighted that understanding of mobile app adoption and usage patterns are important for optimizing mobile marketing campaigns.

Lica (2010), in turn, looked at the best practices for mobile apps that have social sharing functions through four case studies of successful apps. The findings demonstrate that social networking functions should add value, should be easy to use and privacy should be taken very seriously. Lica (2010) also points out that apps should not be a version of a website or desktop software, but rather complement already existing services by providing a simple, yet profound experience that can be experienced anywhere.

Hsiu-Yu, Liao and Ling-Hui (2013) explored pay-per-use mobile application use through the roles of consumption values and found that emotional and epistemic values to be most prominent factors in mobile app adoption. The implication of this study is that mobile apps should appeal to curiosity by being eye-catching and providing novel

functions (epistemic value) that enrich the user's lives by providing enjoyment (emotional value). Even though users might have higher adoption rate of experimental apps that provide emotional and epistemic value, in the case of branded apps, informational/user-centered apps were more effective at shifting purchase intentions (Bellman et al., 2011). The suggested rationale for this was that informational apps tend to focus the user's attention internally, while experimental apps shift focus to the device making it more difficult to make personal connection with the brand.

Finally, Liu et al. (2011) found that in the context of mobile-health applications users gave high ratings to innovative apps which used the unique features of mobile devices. In addition, the use of visualization, better use of context-aware features and extension of usefulness through external medical sensors were suggested. Similarly, Kuan-Yu, Yu-Lun and Chia-Chun (2012) found that in the hotel industry apps that had distinguishing features from similar apps were most effective. Around 50 to 65 percent of bookings through mobile apps were found to be for the same day, meaning that mobile apps have a distinct role in the electronic booking of the hotel rooms. Furthermore, apps are identified as a good long-term marketing tool that can potentially bring in exponential revenue, but with a fixed development cost.

2.4. Mobile App Context and Theoretical Framework

Figure 5 shows the different stakeholders of the mobile application context and their interactions based on theoretical review. This context will now be explored further through looking at processes involved and the intersection of mobile business theory with entrepreneurial marketing theory.

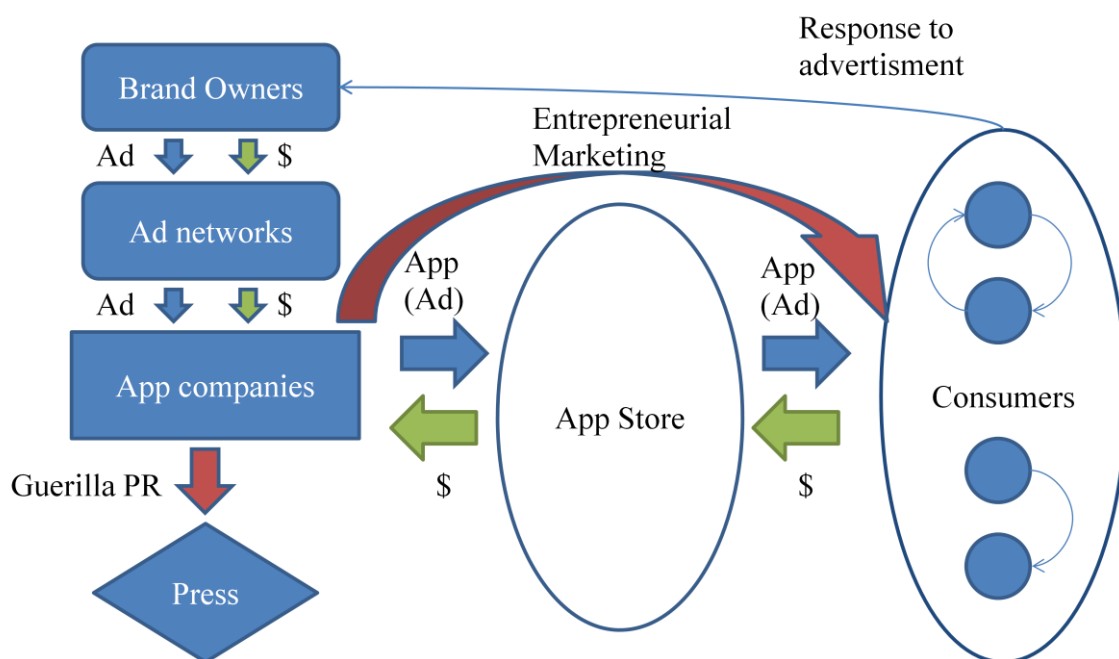


Figure 5. Mobile Application context and interactions

2.4.1. Mobile commerce in the mobile application context

Figure 5 expresses the Mobile Commerce as a process between app companies and consumers that is intermediated by the app store. This is based on Figure 4 in section 2.3.1., which highlighted that a developer publishes an app in the app store which is then downloaded by the user and payments (minus a fee) are distributed by the app store back to the developer. Karla and Bröker (2011) extend this model by proposing that media firms, content providers and content aggregators have a role in the application

creation process. These companies have been collectively named App companies in Figure 5.

2.4.2. Mobile advertising in the mobile application context

Huang (2011) expresses that two users (brand owners and consumers) are connected by intermediary supportive providers in mobile advertising. Similarly, Figure 5 provides a simple process for advertising: brand owners send their advertisements to advertising (ad) networks, which are integrated to mobile apps and then published in the app store for download by consumers. After advertisements are shown, ad networks charge brand owners and pay app developers.

Skyhook Wireless (2009) expands this process by adding two more intermediary players: ad agencies and ad enablers. Brand owners may decide to use an ad agency to plan and create campaigns which are then sent to ad networks. Ad enablers aggregate advertisements from several ad networks and therefore allow the developer to benefit by better availability of advertisements and possibly higher payment per shown advertisement.

2.4.3. Need for entrepreneurial marketing in mobile application context

Morris, Schindehutte and Laforge (2002) defined the best fit of entrepreneurial marketing as: “Envisioned, emerging, and fragmented markets with high levels of turbulence” (Table 1). This description certainly fits the mobile application market well, but there is also an additional rationale as to why mobile application developers may want to use entrepreneurial marketing. While app stores simplify the process of distribution and payments, they also limit the marketing possibilities inside the marketplace by providing only a standardized application page with limited information such as description, reviews and photos. Therefore, mobile application developers must look for alternative ways to communicate with consumers. One way is to use Guerrilla PR to craft messages that appeal to the media (Hutter and Hoffmann, 2011) and another way is to directly communicate with customers.

2.4.4. Theoretical Framework

The theoretical framework of this study builds on Huang’s (2011) consumer-centric version of the VIP model that includes Benefits, Intention to use, and Use and impact (B-I-U). This model has been combined with entrepreneurial marketing principles highlighted by Stokes (2000) to form the I-A-R (Intelligence, Acquisition, Retention) framework presented in Figure 6.

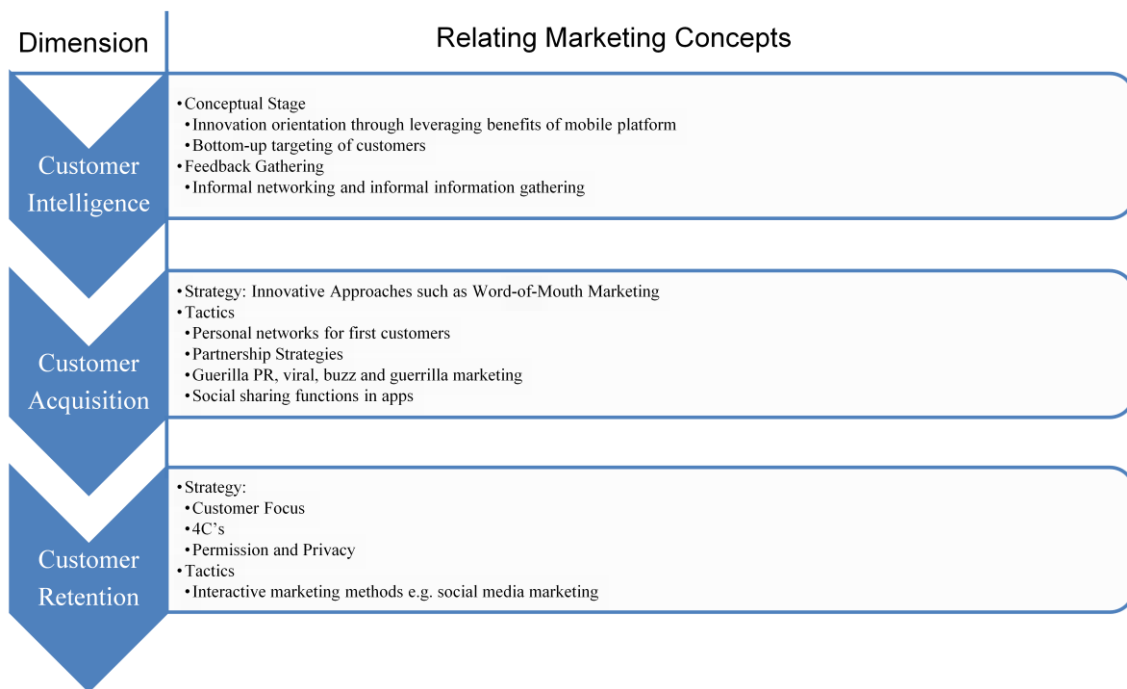


Figure 6. I-A-R conceptual framework of this study

Customer Intelligence

Customer intelligence in EM initially occurs through innovation orientation which assumes intuitive assessment of market needs and moving to test assumptions on the basis of affordable loss by bottom-up targeting of customers (Stokes, 2000). In the mobile context, successful innovation means leveraging of the value propositions of mobile such as the four value propositions provided by Clarke III (2008) or using mobile to break some of the previous space and time constraints Balasubramanian,

Peterson and Jarvenpaa, 2002). Innovative use of these unique characteristics of mobile devices has been found to be necessary to achieve high app ratings in the mobile health context (Lu et al., 2011), to create effective apps in the hotel industry (Kuan-Yu, Yu-Lun and Chia-Chun, 2012) and to affect app adoption in the case of pay-per-use applications (Hsiu-Yu, Liao and Ling-Hui, 2013). Feedback of marketing also known as market intelligence in EM is gathered informally through contacts involved in the industry (Stokes, 2000) and through partnerships with customers, suppliers and investors (Read et al., 2009).

Customer Acquisition

In new ventures personal networks play a significant role in getting the first customers since such firms face a lack of trust (Kraus, Harms and Fink, 2009). Aside from these early customers, EM focuses on creative approaches to customer acquisition that are resource leveraging and risk managing. Morris, Schindehutte and Laforge (2002) note that marketing efforts such as collaborative marketing programs with other companies, joint development projects, staged product rollouts and strategic alliances are examples of EM that can be risk managing and leverage resources. The most prominent EM marketing methods are guerrilla, buzz and viral marketing which are all based on the concept of word-of-mouth marketing that attempts to get consumers to share the marketing message. Guerilla PR attempts a word-of-mouth marketing effect to spread messages in the media (Hutter and Hoffmann, 2011). With the increasing amount of social interaction happening online, social media has become a very important channel for sharing information (Vieneran et al., 2013). In the mobile app context, Taylor, Voelker and Pentina (2011) highlight the importance of including social networking functions and the influence of social peers in influencing app adoption. Similarly, Lica (2010) highlights the importance of social sharing functions, but also argues that they must add value to the user while being easy to use and taking privacy into account.

Customer Retention

Establishing of personal relationships through the use of interactive marketing and creative approaches to customer retention are seen as the way EM can be used to maintain close relationships with customers (Stokes, 2000; Morris, Schindehutte and Laforge, 2002). Schindehutte, Morris and Pitt (2009) identify 4C's which are seen as an entrepreneurial reconceptualization of the marketing mix that attempts to address what is important to the customer thereby creating a more meaningful relationship. Laroche et al. (2012) highlight that in addition to being a traditional marketing channel, social media can be used to create communities that foster co-creation and make customers feel as part of the community. Bellman et al. (2011) identified that branded apps with epistemic and emotional value have a higher adoption rate, but informational/user centered apps were more effective in shifting purchase intentions. The suggested rationale is that experimental apps shift focus to the device making it more difficult to make a personal connection with the brand, implying that connection with the brand is an important factor beyond the initial customer acquisition.

Mobile advertising theory highlights that apps with advertising need to be careful not to send unwanted messages to users. As Kaplan (2012) highlights:

“If a customer installs your application, or checks in at one of your outlets for that matter, this can be seen as a strong sign of trust and indicates willingness to enter a commercial friendship with your company. Firms should avoid abusing this trust; for example, by bombarding their users with off-the-shelf advertising messages or customer surveys. Otherwise, companies risk the friendship breaking up before it has actually started.”

Similarly, Huang (2011) highlights that mobile advertising needs to happen with user permission and adds that interactivity is the key distinguishing factor as mobile advertising moves away from SMS.

3. METHODOLOGY

This chapter introduces the methods, approach, sample and issues of this study.

3.1. Context

The research context of this study is North American companies that offer services and/or platforms related to mobile app marketing mainly to small and medium sized enterprises. These companies contain experts that can provide substantial insight into mobile application marketing having worked with several clients. This specific research context was chosen due to sampling considerations explored in more detail in section 3.3.

The context of the mobile business, in turn, has been previously researched in detail. However, most of the studies relate to m-commerce and m-advertising using older technologies, and the specific research on mobile apps is still in its infancy. This means that several predictions can be made based on older theories that may or may not be valid in the current context. Therefore, the main aim of this research is to first to build theory (inductive approach) and second to test the applicability of existing theory (deductive approach). This constant use of both inductive and deductive approaches is abductive approach (Dubois and Gadde, 2002). Furthermore, a qualitative research method is appropriate since it aims at a greater understanding of the phenomenon and is exploratory, rather than attempting to measure and test hypothesis (Glenn, 2010).

Figure 7, shows how different mixes of the inductive and deductive approach, and methodology relate to paradigms.

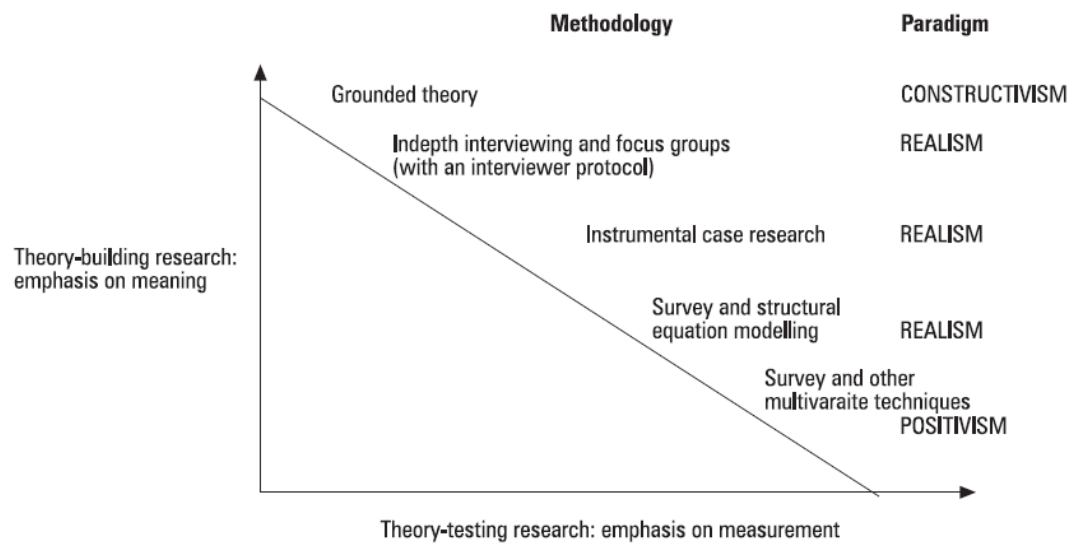


Figure 7. A representative Range of Methodologies and their Related Paradigms (Healy and Perry, 2000)

The selected paradigm for this study is (critical) realism, since the view relates well with the goals of the study and the qualitative research method (Figure 7). Easton (2002) highlights that realism has become the prevalent philosophy of science in marketing and suggests that a particular version – critical realism has become a popular approach to marketing studies due to its well-articulated nature. Critical realism focuses on contingent relationships between phenomena and structure, while maintaining that a reality exists that is mind-independent (Mir and Watson, 2001). For the critical realist, the aim is to answer questions such as: “Why did this exchange take place between this buyer and this seller on this occasion?” (Easton, 2002, p.106).

3.2. Methods Adopted

Netnography was chosen as the research method in order to efficiently obtain a significant breadth of information while maintaining deep insight with careful sampling decisions. Xun and Reynolds (2010) establish that the application of ethnography to computer-mediated environments called netnography, has become a more popular choice amongst marketing researchers wanting to gain insight into the online experiences of consumers. As compared to ‘traditional’ ethnography, netnography is

less time consuming, less expensive, naturalistic, and can be unobtrusive (Kozinets, 2002). On the other hand, due to its timeliness and low cost netnography can easily lead to poor research. There are generally two main ways that netnography can be used: either to study cybercultures and virtual communities or as an exploratory tool to study general topics (Kozinets, 1998).

Similarly to 'offline' ethnographic studies the choice of method can be participant observation, non-participant observation or interview and is an epistemological issue grounded in the philosophical assumptions (Xun and Reynolds, 2010). Another consideration is choosing the forum, as there is a large variety of forums that people use to interact online. Blogs were chosen as part of this non-participant study of mobile app professionals because blogs have a high relative amount of information per post, potentially containing deep insight (Barger and Labrecque, 2013). Puri (2007) identifies blogs as excellent for spotting trends, which can be tracked over time. Also, blogs usually contain a profile of the blogger making it easier to study a certain sample. Lastly, Puri (2007) highlights that blogs tend to encourage an unusual amount of honesty, and since the information is published, privacy is less of an issue.

Although both ethnography and netnography are inherently open-ended practices, Kozinets (2002) provides five procedures from participant observation ethnography: (1) Making cultural entrée into the community (2) gathering and analyzing of data (3) ensuring trustworthy interpretation (4) conducting ethical research (5) providing opportunities for culture member feedback. First, making a culture entrée entails having specific research questions and identifying the appropriate online forums. Then, the researcher needs to find out as much as possible about the participants that they are attempting to understand. Two types of data are collected: the actual communications and the researcher's inscription of observations, members, interactions and meanings. These are then analyzed by a combination of classification and coding, and interpretation by the netnographer. Trustworthy interpretation means understanding the limitations of netnography and not making generalizations to other communities than

the one studied unless there is evidence to do so. Research ethics mainly look at privacy and anonymity issues which are not present in the study of blogs. Lastly, presenting findings to the people who are being studied can give further insight to the findings and alleviate some of the ethical issues of research.

3.3. Sample and Research Techniques

Purposeful sampling was used to select the blogs to be studied. Palinkas et al. (2013) note that purposeful sampling “involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest” (p.2). Similarly, Kozinets (2002) argues that the researcher can ultimately judge which communities are to be included in netnography among criteria that fits the research, but highlights that in general communities are preferred to have:

- “(1) a more focused and research question—relevant segment, topic, or group;
- (2) higher “traffic” of postings; (3) larger numbers of discrete message posters;
- (4) more detailed or descriptively rich data; and (5) more between-member interactions of the type required by the research question.” (p.63).

Of these points, number three and five relate to participant observation studies and therefore are not applicable to this study.

Using these criteria, several Google searches were made with a combination of such keywords as: mobile, application, marketing, blog. This initially resulted in over 100 blogs that mentioned mobile application marketing. Of these, 27 were initially selected based on the criteria of being active for over one year, having the last post within 60 days, and more than five posts clearly relating to mobile app marketing. The aim was to identify blogs that had enough content on the subject under study and were still active. Next, nine blogs were chosen with the criteria of having over ten posts on mobile app marketing, displaying dates for blog posts and having a profile of the company or writers. This stricter criteria ensured that in addition to having higher traffic of postings, the posts could be viewed in the context of time and their writers. Finally, four blogs

were chosen on the basis of maximum variation. This type of purposeful sampling design highlights the differences between the cases (Palinkas et al., 2013) and therefore allows for a wider perspective into mobile app marketing. The selected blogs and key information about them have been presented in Table 6.

Company name	App-promo	Startapp	Appclover	Apptentive
Company focus	App marketing services	Mobile advertising platform	App marketing courses and services	In-app feedback tool
Blog focus	App marketing and app store optimization	App development and monetization	App marketing and monetization	App marketing and customer relationships
Amount of posts	115	300+	125	142
Amount of bloggers	N/A, not identified on blog	Mainly three	Over 40 contributors	Mainly two with several guest bloggers
First post	April 2012	July 2011	May 2012	April 2011
Other materials on the blog	Yearly developer survey results	-	Several interviews with entrepreneurs	Several roundtable discussion videos

Table 6. Key information about selected blogs

3.4. Data Analysis

The blogs were initially scanned in order to exclude material that was clearly not related to marketing such as mobile app development posts, promotional news about companies or their products, event recaps and news about the marketplace which did not have a marketing implication. Next, the selected blog posts were read and coded according to the theoretical I-A-R model along with the inscription of observations and meanings in accordance with Kozinets' (2002) second procedure. Also notes were made on the basis of audio and video material on the blogs. At this stage a large amount of blog posts

were excluded from the research on the basis of obviously not providing insight to the marketing of mobile B2C applications.

Because of the large amount of data remaining, the notes and blog posts were compared in order to determine sub-categories under the I-A-R framework and the findings portion of this study was written. This process further narrowed down the main body of research which consists of 111 blog articles and 28 notes on audiovisual material. Once the findings had been determined, they were presented in summarized format to the blog owners via e-mail in accordance to Kozinets' (2002) procedure of providing opportunity for culture member feedback and as a method of triangulation. The findings were then summarized into the refined framework.

3.5. Methodological Issues

The main issue in studying blogs is that the intentions of the writers are not always known. Puri (2007) described blogs and bloggers as unusually honest, but bloggers on company blogs might have quite different goals such as marketing their company, products or services (Schlinke and Crain, 2013).

Furthermore, Puri (2007) identifies two issues considering representativeness: is online representative of offline and having a representative sample online. First, the issue of is online representative of offline seems to have arguments for and against, but as Kozinets (2002) points out we should only make generalizations to other communities than studied when there is theoretical evidence to do so, meaning that our findings can be specific to company blogs that focus on writing about mobile app marketing. Second, the findings certainly might not be representative of the blogs online, since our sample was not chosen on the basis of representativeness, but rather on other criteria such as the focus of the blog on the particular topic of mobile app marketing. We can therefore say that our findings are only likely to be representative of blogs with over 100 posts with a focus on mobile app marketing.

4. FINDINGS

This chapter presents the empirical findings of the study. The results are organized into three groups according to the I-A-R framework.

4.1. Customer Intelligence

4.1.1. Conceptual stage

All of the researched blogs contain posts on how to start developing an idea towards a mobile app, but have different perspectives on how this should be done and whether to pursue novel ideas or improve on existing apps. The Apptentive blog promotes the use of lean development and minimum viable product approach, where an app is developed on the basis of a hypothesis to a state where it has “enough functionality to deploy its capabilities, but is not coded to complete operation” (Tope Abayomi on Apptentive blog). Then this app is further developed based on the feedback from users that like the app.

“When you launch an app, the first 4-8 weeks you’re just trying to figure out if this concept in your head resonates with people and that, the most important thing we believe is the people it’s resonating with – that’s your easy pickings. You’ve got to talk to them and understand what they like about it and then build on that. And that’s the surest way to take a small audience, and maybe its 15 or 20 people who like you, and turn it into a larger sustainable audience, because you are really focused on why your app is special” (Robi Ganguly, Apptentive blog video)

Elaine Heney on the Appclover blog also advocates validating assumptions as soon as possible by getting a small section of the app built, but also adds that the experience of publishing an app will allow you to make more educated choices in the future. Because of this, she recommends publishing ten small apps in two months before working on a

bigger app idea. This is in line with App-promo's 2013 developer survey that indicated that there is a correlation between developer experience and success.

In contrast, the Startapp blog highlights the need to understand the user through conducting market research and understanding the app's position in the market before development. Similarly, a post in the App-promo blog asks the developer to think about market positioning, branding and the app's purpose. These are combined to explain the exact benefit that your app has to the user in a few words, which is the unique selling proposition. Also the 5Ws (Who, Why, When, Where, What) are proposed as a way for the developer to understand the demographic and to help them think like the user throughout the app project. In addition, it is proposed that the growth potential of a possible app idea should be researched: "For long-term success you need to make sure it fits right inside the category and has good growth potential" (Wayne Harrel, Appclover blog). It was noted during research that when the concept of market research was mentioned on these blogs, it usually referred to demand estimation, for example, by using tools such as Google Keyword tool to gauge overall popularity of a certain topic or identifying opportunities by looking at top app charts consistently.

Todd Bernhard on the Appclover blog highlights that many developers cave in to the "temptation to look at the bestselling apps and try to make your own version" in their efforts to make money. Instead he recommends developers to make apps based on "what they know" by addressing deficiencies of existing apps with realistic expectations. Similarly, Carter Thomas on the Appclover blog recommends taking an existing model and making it better, a process he calls Sickification, by adding unique functionality, having unique design, an awesome story and/or better marketing than the competition. This is can also be seen as a way to reduce risk when publishing mobile apps:

"Coming up with original concepts is not complicated but the downside of originality is that there is no market data ready. You never know how your original concept will be accepted by the wide public, so for every idea that gets

to production there are 4-6 prototypes declined and for every prototype there are over a dozen ideas declined. Some ideas go on hold because there is a sense that the time for them is yet to come, others go to oblivion. We try to keep this balance in our games between elements that worked well and that are familiar and need no explanation and fresh vision.” (Igor Karev Interview, Appclover blog)

These three approaches of minimum viable product, market research and partial innovation present three different perspectives on how app entrepreneurs can attempt to lower the risks associated with developing an app by providing a process for idea selection and market testing.

4.1.2. App monetization

Monetization can be added after an app is released, but several of the experts argue that it is best to consider monetization even before building the app. This allows the developer to consider if the idea is viable to meet expected monetary goals and to start exploring different monetization strategies.

“Start with understanding your revenue expectations. Are you trying to recoup the cost of developing the app? Or are you looking to turn a profit? Do you see this app as your primary business? Or will this app drive sales for a business already established? Once your expectations are clear, it’s time to ask yourself how your app will meet these needs and what monetary goals will you set to gauge it’s success.” (App-promo blog)

“Do your research! Explore different monetization strategies and different app monetization platforms. Find a strategy that will work best with your particular app. For example, you may find that the “freemium” strategy is best for your specific app. You may even find that pay-per-download is the best model for

you, or that an app monetization platform like ours is the best fit for you. If you take the time to plan out your monetization strategy in the beginning, you won't have to scramble once your app is launched!" (Cassidy Smith, Startapp blog)

Although monetization is app-specific depending on factors such as user experience with monetization method and user demographics, an overwhelming trend toward apps becoming free was found across the blogs. This means that an app must be very unique in order for the paid monetization model to be effective or needs to have good retention to be able to make money by utilizing advertising or selling further functionality. In addition free apps tend to receive many times more downloads versus paid apps.

"The amount of time that you can actually "tie up" their focus or their attention on what your app is doing, the better it is to be able to create revenue with that, because you've got their attention for longer of course. That's something to be able to think about when you're creating your game or functionality app, whatever you're doing — your utility app — is to be able to create something that actually captures that person's attention for longer periods of time, which allows you to be able to gain access to creating more revenue streams from that user as well." (Len Wright in Carter Thomas interview, Appclover blog)

It is therefore useful to consider monetization in the conceptual stage in order to explore different monetization options, their effect on retention and downloads, and to determine what kind of retention and download numbers are needed to meet monetary goals.

4.1.3. Feedback gathering

It was noted during the research that majority of the blog posts and interviews did not cover marketing feedback. This is probably due to marketing being viewed as a one way process because many of the posts concentrate on marketing tactics or tips, rather than

marketing as a culture or strategy. The material that covers feedback highlights three ways of understanding feedback: analytics, heuristical market scanning and customer feedback.

Analytics is covered specifically by one post on Appclover and App-promo blogs, which highlight that it is important to decide on metrics that are give a deeper understanding of how the app is succeeding as a business rather than concentrating on vanity metrics like downloads. The posts explore three main ways of using analytics: to understand the app store, the user and the effectiveness of marketing. App store analytics allows the developer to realize key trends in the market place, to monitor their own app and to look at the performance of competing apps. By implementing in-app user analytics services, the developer can get detailed information on how the app is navigated by the user that can be used to “adjust the product roadmap to increase user engagement, retention and monetization” (Robin Campbell, Appclover blog). Marketing Analytics looks at how well the marketing converts into users which can be tracked inside the app to see how effective that channel or campaign is in introducing active users:

“Take a look at the activity within your app during marketing. Do you see spikes in activity that correlate to your campaign elements? How do these compare to the increase you may be seeing in downloads? Are new users staying and using your app or downloading and leaving?” (App-promo blog)

While app store analytics is used to understand trends in the app store through numerical data, Carter Thomas in an interview on the Appclover blog highlights his own heuristical way of looking at the app markets in order to highlight trends and to get feedback on what sorts of apps are doing well in the marketplace:

“I look at the charts every morning. I look at my sales data and all that stuff, but then I sit down and I look at the top 100 in every category. I spend about half an

hour doing that. I look and see who's new, who just got in there, what they did. That helps me see where the market is going for every category. That's kind of the first thing. You start to see trends very, very quickly when you look at who is in the top 100; you start to be able to predict that pretty well.”

Similarly, several of the blog posts explored the expert's opinion in how a certain change in the app economy is likely to affect developers.

Getting feedback directly from the users is naturally covered mostly by the Apptentive blog as the company offers an in-app feedback system that attempts to improve on the limited ability of users to give feedback via the app store. Rather than being a replacement for analytics and data gathering, feedback is seen as a way to understand a user's problem or suggestion while the data helps with discerning which feedback is most important.

“If app developers are focused on listening to their customers, there will be a large amount of feedback. Being able to observe allows app developers to prioritize what feedback is important and should be acted on.” (Ezra Sigel, Apptentive blog)

Developers can also get valuable feedback before the app is launched by asking potential users try early versions of the app or through a more formalized process of beta testing.

The three different methods of feedback provide three distinct perspectives into understanding the user. Analytics provide data on how users are reacting to the app, marketing campaigns and to the app market. Heuristical scanning, on the other hand, attempts to build an instinctive understanding of trends in the market in order to be able to predict future outcomes. Lastly, User Feedback allows the users to express how they feel about an app beyond their actions.

4.2. Customer Acquisition

4.2.1. App Store Optimization

The experts across all four blogs agree to the high importance of search and browsing in the app store as a method for consumers to discover mobile apps. Although all four blogs discuss App Store Optimization (ASO) as a way to affect searches, there seem to be differing notions to the definition and extent of ASO. App-promo's blog describes ASO's goal as: "to enhance the major product page elements to improve search discovery, increase chances of standing out in a list view and better salability of the page to convert to download or purchase". The other blogs take a narrower view in looking at search discovery and the subsequent conversion strategies such as making better app icons separately.

In terms of search discovery, the blogs mainly cover optimizing and tracking of keywords which are important since a developer only gets to enter a limited number that are embedded in their app page. Optimizing keywords relies on tools such as Google Keyword Tool and Appcodes to find what keywords consumers are using in their searches and what keywords your competitors are using. Appclover's Matt Palmer notes in an interview that keywords are a balance between popular, highly searched keywords such as "game" or "free" and less searched long tail keywords that are specific, but with less competition which makes it more likely for the app to be found. The importance of incorporating keywords into the title of the app is highlighted by App-promo's blog and Ezra Siegel on the Apptentive blog who found a 10% increase in average ranking for apps that incorporated keywords into the app name. Several of the experts have a formal approach to keyword research, but it can also be argued keyword optimization is not an exact science:

"Since many of the keyword research tools currently available are less than accurate, you should always err on the side of common sense before trusting

them implicitly. The keywords you select should be as much a product of your own intuition and experimentation as the results of tool-driven keyword research and competitor analysis.” (Ravi Kamran, Appclover blog)

Once the right keywords are found they can be tracked over time to see which ones are most effective. The next step is to consider the app page which Carter Thomas on Appclover describes as the first impression. A video titled “The 10/30 Mobile App Engagement Process” posted on the Apptentive blog highlights the importance of having an app page that quickly communicates the value and quality of the app since users spend around 10 seconds looking at the app page when deciding if they are going to download the app. The icon, screenshots and reviews are seen as the most important aspects of the app page. The app icon is not only important in terms of branding, but also in terms of user acquisition and retention:

“How compelling and clear your app icon is for a user will translate not just to acquisition of new users but will also factor into the decision making process for which app to open from the device home screen.” (App-Promo blog)

Screenshots allow the app developer to “show your app in action and this is what is going to convince the user to download” (App-promo blog). Ian Sefferman in a video on Apptentive argues that consumers look at the screenshots to distinguish the quality of apps: “because you can pretty quickly discern this is a crappy app versus this is a legit app, from the screenshots” (Apptentive blog).

The importance of reviews was found to be threefold for customer acquisition: First, the rating associated with the review has some impact on rankings in both Google Play and Apple App Store. A post on the Apptentive blog highlights that there is evidence of ratings affecting rankings in the Apple App Store from July 2013 onwards, while the Appclover blog highlights Google Play Store taking this into account in December 2012. Second, the ratings and reviews seem to have a big impact on downloads:

“The ratings and review stuff just cannot be underestimated in its importance. There are a lot of psychological studies about how important ratings and reviews are to us as consumers for digital goods, because a digital good is by definition ephemeral; you can’t actually hold it, you can’t look at it, you can’t feel it. As a result, we really rely upon one another in our experiences with these digital goods to make purchasing decisions.” (Robi Ganguly, Apptentive blog video)

Third, ratings and reviews are an area of App Store Optimization that the app developer does not have direct control over, but can be affected by either paying for reviews (as suggested by Carter Thomas on the Appclover blog) or by proactively asking your users to review your app. Furthermore, the Apptentive and Startapp blogs discuss that a developer should prompt for reviews at the right time and from the right people by asking for reviews from users that use an app more frequently and/or have used it several times. Many developers prompt for a review when the user first opens the app this is seen as a mistake since the user has yet to experience the app. The importance of reviews is summed up by the following quotation:

“Ratings & reviews affect your ranking and can influence the decision to download your app. Building an app that people love is HARD work, and your efforts should be acknowledged. You have an audience that may use your app everyday, loves it, but still never takes the time to give you a review. It’s your job to go out there and proactively reach out and lead your customers to action. Sometimes all it takes to increase your ratings and reviews is a simple question asked in the right way and at the right time.” (Ezra Siegel, Apptentive Blog)

4.2.2 Social Media and video marketing

Using social media and video were mentioned often in posts relating to the marketing of apps. John Souza on the Appclover blog points out that using social media effectively can increase the traffic to your app by 30-40%. This requires exposure by expanding networks online, being consistent and providing frequent relevant content. Social media is seen as a way to establish communities of people that are interested in the mobile app, creating ‘buzz’ around the mobile app and communicating with interested consumers.

Igor Karev reveals in an interview on the Appclover blog that his game company (Tatem Games) uses social media to find new audiences by monitoring and discussing topics such as paleontology, hunting and iPhone games which are related to their dinosaur hunting game app. Erick Ho on the Appclover blog adds that the monitoring of viral trends is important since making a variation of an existing viral trend, such as Harlem Shake at the time, can be a good way to attract new users and attention to social media efforts. In contrast, Carter Thomas on the Appclover blog argues that the best way to use social media is by leveraging established social media outlets since a large investment of time is needed to build a new social media following:

“Social media is best used when you partner with a powerhouse – cooperative marketing will help you more than trying to move the world yourself. Reach out to people and companies much the same way you do with bloggers and ask for similar trades – free app downloads for a post on Facebook to their 20,000 fans, etc. You’ll be amazed at how open social media managers are to this – it’s good content, it’s taken care of, and it fills their quota for coming up with new things each day” (Carter Thomas, Appclover Blog)

Social media networks can be used for example in “creating buzz on your social media pages by offering fans or followers promo codes or special discounts that they use when your app is finally launched” (Cassidy Smith, Startapp blog). Bobby Gill on the

Appclover blog suggests that anticipation can be built by giving followers small bits of information about development of the app, because “everyone loves being on the inside”. The App-promo blog points out that contests and pricing promotions are a good way to get new users since they attract a lot of traffic “due to their time-sensitive and often urgent nature”. Igor Karev from Tatem Games in an interview with Appclover reveals that their main social media effort is having contests, trivia or discussions on their Facebook page “to keep people entertained and keep a closer connection to them”.

Social media is also a very effective place to learn about the consumers interested in the mobile app. Meloine Deodaro on the Appclover blog highlights that social media analytics can be revealing of your demographic: “even simple things like knowing if your following is predominantly male or female can save you a lot of time and money”. Similarly, you can ask your following questions, feedback or ideas to better them and build relationships.

In addition to being good content for social media, video can help the potential user understand and experience the app quickly without downloading. This leads to more qualified downloads since both potential users and journalists are able to quickly determine if the app is something they want to explore further. A video should therefore be short, informative and entertaining. In addition, a quality video helps with branding (i.e. people remembering the app) and creating credibility. Several blog posts recommend the app video to be submitted to app contests and awards since an engaging video is a powerful way to show the uniqueness and need for the app. Winning an award further increases credibility and can be showcased in the marketing material. Videos also provide a good way for the app to be found since they are indexed in internet search engines and video site search makes up a good proportion of internet searches. Furthermore, the video can be shared on social media and the app’s website which can result in the video and app ‘going viral’.

“Show real-life cases that give customers a relatable reason for using your app and, chances are, you’ll see an increase in downloads. The ultimate goal is for your app to go viral but don’t worry if it doesn’t. If your video merely serves the purpose of educating your customers and making them feel more comfortable downloading it, it’s well worth it.” (Sean Casto, Appclover blog)

The goal of both social media and video is therefore to increase a potential user’s interest, build credibility and ultimately to get the person to use the app.

4.2.3. Website and e-mail marketing

In addition to social media and video, websites and blogs are mentioned by a few experts as useful in communicating the benefits of an app and getting potential users excited before launch. A couple experts on the Appclover blog also emphasize the importance of using e-mail signup pages to capture e-mail addresses to be able to communicate with prospective users:

“Even with the simplest landing page, and no app developed, you can put your app website to use. Write your catchy app pitch, put some visuals (even if they’re not perfect yet) and a clear call to action for people to sign up for your newsletter. You’ll be able to keep them informed on your progress, get them to beta test your app and have them download it on launch day.” (Sylvain Gauchet, Appclover blog)

Furthermore, Sylvain Gauchet argues that the website also serves another important role in building credibility and communicating what the app is about. This is especially useful when contacting the media.

4.2.4. Public Relations

All of the blogs contain at least one post dealing specifically with public relations. These can be categorized into posts that deal mostly with press releases and posts that deal with building media relationships. The idea behind press releases is to get media to pick up the story of your app by including the necessary elements for journalists to get interested and to write about your app:

“You will want to make sure that you have all the necessary elements in your release for bloggers and the media to use to create a story. This should also include a quote from yourself, a brand owner or C-Level executive that can easily be lifted to include in any story” (App-promo blog)

Building media relationships beyond putting out press releases is seen as important because “Getting reviewed or written up by the right blogger will not only give you industry cred, but will dramatically increase the number of downloads for your application” (App-promo blog). Effectively establishing relationships entails putting time into finding the right bloggers or journalists well in advance before the app launch and personally connecting with them.

“It takes even more work to research the bloggers you’re trying to reach out to in order to understand their particular interests, where they focus their time and if you’re appropriate. But it’s the kind of work that’s worth investing in because it results in personal connections and relationships that enable you to be heard and can assist you in attracting allies instead of people you’re begging for favors.” (Apptentive blog, Robi Ganguly)

Media writers are seen as busy people; therefore several of the experts suggest that when approaching for a write up about a mobile app, it is best to make it quick for the person to understand the app by including a demo or video and a description of what the

value of the app is to the person using it. In addition, it is seen as good practice to make the message to the media person feel as special and personal as possible by including things such as promotional codes to download the app before release, personalized app pitch or custom press kits. Also the story of a small developer and the app is emphasized as being interesting to the media.

“You also want to potentially put some custom stuff together; unique things — unique banners, unique screenshots. If you have got to be approaching traditional media outlets, have a full media kit? Talk about the story, talk about how you came up with the concept, how it got out there. Give them as much meat as possible, and make it as easy as possible for them to go and promote your app and talk about it in a positive way” (Brad Davidson Interview, Appclover blog)

4.2.5. Networking and word of mouth

Although most of the blog posts on marketing of apps concentrate on extending networks via social media or other ways of generating interest of people outside of the app developer’s social circles, there are a few posts that deal with using the app developer’s existing network and offline networking to promote the mobile app. A post on app-promo blog suggests that “the best place to start (marketing) is with you and your networks” to “use your network to push the word out and ask your network to help share the announcement with their own networks”. Robi Ganguly points out that you can start using your networks already in the early stages of development:

“At the beginning of your app’s development, be sure to actually talk with your friends about the app. Involve them in the testing and let them play with the app, on their own. If you can involve them in the process early on, they’ll be much more likely to help promote your launch and assist in the discovery of early

adopters, because they'll understand who should be using the app and why.”
(Apptentive blog)

Marketing at conferences and events is also suggested in a few posts such as Abhinav Gupta's on the Appclover blog where he argues that in-person word of mouth marketing is the best form of marketing, but tends not to be utilized by app developers.

In an interview on the Appclover blog Luis Zlochevsky highlights that virality needs to be built into the app in order to leverage a small marketing budget. This means using elements such as integration of social media and making the app a “social experience” by for example having multiplayer in games. This idea is similar to Daniel Arad's post on the Startapp blog which states that social sharing works best when there is an incentive for users to interact socially with the app. Further he states that social functions should be subtle to not affect the app experience and easy to use to avoid accidental compromises of privacy. Johnathan Kay on the Appclover blog points out that early adopters are the key to establishing word-of-mouth and therefore developers should try to reward early users: “rewarding your first users can be nothing but productive, as these are the people that will determine whether or not they start spreading the word”. In addition, Robi Ganguly on the Apptentive blog points out that customer retention is important in getting users to share the app :”Customers who use your app regularly are also much more likely to talk about you app and recommend it to others”.

4.2.6. Advertising and cross-promotion

App-promo's 2012 and 2013 developer surveys show that there is a correlation between developer success and the amount of time and money spent in marketing of the app. Furthermore, 2013 developer survey also finds that advertising (ad) is underutilized as a method to increase discovery of apps with less than half of the developers using any type of ads. Similarly, to the developers the experts across the blogs did not see

advertising as a worthwhile marketing strategy with only a handful of articles on the topic.

Robi Ganguly on the Apptentive blog argues that several lucrative short-term advertising opportunities exist such as incentivized installs and gives three main reasons why they should not be used. First, companies that depend on pay-per-install campaigns are at risk since Apple has at times seen it as a breach of their terms of service. Second, the price of installs can rise to a level where such marketing is no longer profitable. Third, pay-per-install methods have been an easier way to get app downloads than organic channels (such as social media), but they do not give insight in to who is your customer and what marketing channels work for the app.

“Our suggestion to app developers is that while ad spending can be a component of your growth strategy, it’s never been a replacement for understanding your customer base and opportunity. If Apple ends up putting an end to pay-per-install programs, the companies that were solely relying upon it for growth will be hurt, but the companies that have a strong sense of who they are will be in a better position to succeed.” (Robi Ganguly, Apptentive blog)

In a similar way, the only post across the blogs that specifically looks at using advertising highlights that it is important to know your audience, select the best opportunities based on your audience and to test advertising. Targeting of advertising is seen as a process where the developer learns about the user through the ad feedback:

“At launch, the choices you make for your demographic will most likely be based on stereotypes, commonsense and experience. But as your app matures in the marketplace and through the various marketing and ad campaigns you run you should be looking to the data available to you to refine your target” (App-promo blog)

Using a developer's existing apps to promote new apps known as cross-promotion or house advertising is mentioned briefly on the Appclover, Apptentive and Startapp blogs, but is highlighted as a vital strategy by several of the interviews with successful developers. It was noted that this strategy has emerged as more apps are becoming free.

“Most Appreneurs have a portfolio of apps if for no other reason than to cross promote. It's pretty well known these days that if you're going to make money in the iTunes Store you need to have a portfolio of apps. Then you can push advertising across all your apps for click through's. This creates a snowball effect, which helps Appreneurs remain profitable after the initial spike release of new apps. Each spike release feeds the portfolio and keeps stale apps on top.”
(Jeff Williams, Appclover blog)

The Appclover blog also highlights a few instances for doing more traditional cross-promotion via a partnership with other companies or individuals that have a similar target audience.

“What I like to do is set up a partnership with someone who is relevant to your app via YouTube. Now how this works is essentially you show some of their videos in your app and they promote your app in their videos. It's a killer combination when executed correctly. Now not all apps can use this tactic but you would be surprised how many can. The first time I did this an app went from unranked to number 187 in the entire app store. 1200+ apps sold in just one day.” (Taylor Pierce interview, Appclover blog)

4.2.7. Alternative markets and app stores

Most of the blog posts concentrate on marketing apps in English in the two most popular app stores: Google Play and Apple App Store. However Cassidy Smith on the Startapp blog highlights that as the North American and Western European markets

have matured, the competition has increased to a level where smaller companies have trouble getting their app to stand out from others. Therefore emerging app markets such as China, Brazil, India, Turkey and Russia provide great opportunity by having less competition. However these markets mostly use their own app stores and require translation, changes to make the app less dependent on high speed connectivity and changes to monetization methods. Not all app developers are willing to take such drastic steps and Jason Corcoran on the Appclover blog highlights that taking simpler steps such as using symbols instead of text and translating an app can lead to increased exposure in the two most popular app stores.

In addition to emerging markets, several blog posts highlighted alternative Android app stores to Google Play that can be used increase downloads of apps with little or no changes to the app. These smaller markets give developers a better chance to be discovered and often have different features and demographics that can benefit developers.

“The alternative app stores usually have additional marketing opportunities you can take advantage of such as advertising and paid features. They also provide analytics and reports that can provide further insight into your users to feed back into marketing. The more places your app exists, the better chance your audience can find and download your app. “(App-promo blog)

The above quote highlights that while the alternative markets play a role in increasing exposure of the app, they can also provide feedback. Cassidy Smith on the Startapp blog extends this notion by arguing that smaller app stores are great way for developers to initially start gaining recognition and getting feedback on their apps. This means that in addition to gaining more downloads and accessing a different demographic, alternative app stores can act as a test market.

4.3. Customer Retention

4.3.1. App Experience

App experience is seen across the blogs as the key factor behind retention, but only a few posts go into specifics of how a good app experience is created. Matthew on the Startapp blog highlights that apps such as Angry Birds have become popular due to initially having a simple interaction model and “adding more detail to the user’s mental model at just the right time”. This means that the app is easy to learn, but the complexity of the app is revealed over time. Johnathan Kay on the Appclover blog adds that developers should utilize unlockable features and achievements to give users incentive to spend time on the app and communicate to the user that more features are coming soon creating anticipation. Even with a great in app experience, retention can be hindered if the app does not integrate with the existing workflow of the user:

“I can think of a calendar app. If a calendar app doesn’t integrate with my Google Calendar, then it’s not happening. It has to have that workflow, at the end it has to have some of the great experience to go along with it.” (Ian Seffereman, Apptentive blog video)

A majority of the discussion around app experience concentrates on how advertising has a negative impact on app experience. Matthew on the Startapp blog highlights that developers should try to balance between making money via advertising and keeping users happy. Afran Chaudhry on the Appclover blog, on the other hand, argues that user experience should always come first and only then should developers try to monetize in a way that has minimal user drop-off rate. He uses the example of an app that provides exercises when the user is at the gym where having advertising could be irritating to the point of app abandonment because the monetization interferes with the workout. However, not all advertising has a negative impact on the app experience. Lars Albright in an interview on the Appclover blog emphasizes that advertising should be engaging

and fun instead of the usual irritating experience. With his advertising company, Session M, he has noticed that the combination of value, relevance, experience and making the advertising optional are the keys that have led to users even coming back to the app more frequently: “consumers that are actively engaged in the Session M program are spending, coming back two times as often – doing 2x the sessions than non users”. Similarly, Terry Kavanagh from My Bean Jar in an Interview on the Appclover blog highlights that when coupon advertising is done in a relevant way at a moment of accomplishment, it can also have marketing impact beyond better user engagement:

“With a game publisher, it helps to be perceived as a reward; it’s not an ad. If I’m playing a game, and I am proud that I beat level III at some game, and again I get a coupon to clean my nonexistent chimney, it’s going to quickly become clear that that is not much of a reward to me. That won’t reflect well on the game either. If it is something that I — in some manner or another – preselected, then it’s a reward and I’m proud of it. Not only that, I’m going to brag about it. I’m going to hit the button that says, “Tweet this, Facebook this, e-mail that Terry Cavanagh won 10% off at the Gap playing Whomp-A-Weasel.” I’m not only going to brag about my accomplishment, but I have marketed the game and the advertiser at the same time.” (Terry Kavanagh interview, Appclover blog)

Both of these examples on effective advertising also reflect on app experience. As a video called 10/30 Mobile Engagement on the Appnitve blog demonstrates, an app needs to be fun/entertaining, intuitive, engaging, addictive, value adding, cross-cultural and viral in order to be successful.

4.3.2. Updates

Updates are seen as a way to show users that the more value is being added to the app and gives the app developer a way to get users to come back to the app. The developer can also show that they care about the user and have listened to their feedback.

“Updates are awesome for increasing revenue, re-activating daily sales, and strengthening your overall app strategy, for great app marketing. Your users took the time to download your app and want to feel like that’s worth something, so make it worth something. There is nothing more powerful than making a customer feel like you really care about them and updates are the ultimate way to do that.” (Carter Thomas, Appclover blog)

Ezra Siegel on the Apptentive blog noted that automated app updates in Apple’s newest mobile operating system will hurt retention since “the automatic updates take away one of the only touch points that companies have with their entire mobile customer base”. This is argued to make customer communication a higher priority for developers.

4.3.3 Building Relationships

Building relationships with customers is the main focus of the Apptentive blog and is also mentioned in a few interviews on Appclover blog. Ezra Siegel on the Apptentive blog highlights that although having a relationship with customers can yield better feedback and give them a better overall experience, it has become quite normal for companies to not have a relationship with their customers in the digital age. This problem is even more pronounced in the app store where “the big problem with App Store is that Microsoft, Google, Apple—they own the customer relationship—and so as a result, by default, you as a developer don’t know who those customers are” (Robi Ganguly, Apptentive video). This means that developers need to find out who their customers are by capturing their information inside the mobile app or by communicating with customers outside the app, for example, by engaging social media. An open-door policy is suggested as a way to create relationships and to maintain competitive edge against larger competitors:

“As an independent developer, you can create real, trusting relationships with your customer. When your customers know that they’re dealing with a real person, just trying to do their best, they are more lenient and understanding of any problems that arise. Investing the time and effort into your open door strategy is the best way to ensure that you stand out against your larger, less personal competitors” (Robi Ganguly, Apptentive blog)

This kind of open door policy means that users give feedback more frequently which allows the developer to understand the users better and to develop the app according to their feedback. Having better understanding of user needs can make the app feel more personalized:

“The difference between leaders and followers in markets is that the true leaders actually uncover the real customer needs faster and more regularly. Leaders create solutions that feel personalized because they are in-line with customer behavior and needs. The better you understand your customer, the more you’ll be able to provide solutions to their problems before they even have to ask you to solve it.” (Robi Ganguly, Apptentive blog)

Furthermore, communicating with the users that have given feedback can produce dialogue and produce a positive response toward the developer. Especially following up on feedback that is being implemented can give a sense of ownership of the app:

“I immediately realized that this incident provided a very valuable opportunity for us and decided to see how I could replicate its success with the ongoing conversations we were having about features with our other users. I began by grouping them across email and social media based on the similarities in their feature requests. Once we prioritized what would be ready for the next release, I went back to the users who had made the requests and let them know what to expect in the upcoming launch. Then, on the day of the next release, I let them

know that the feature they had requested was now available for download. The responses to my emails and tweets were amazing. Almost every user responded and every single one of those responses was extremely gracious and appreciative of having their voices heard in the development process. Sending a follow-up email turned what is often a unidirectional, static interaction into one that conveyed attention to detail, and an actual interest in discourse.” (Ralph Bouquet, Apptentive blog)

Ultimately by creating relationships with users, creating apps that they enjoy and making them feel like they have a voice in the development process the developer is creating customer loyalty.

“Being proactive to engage with your customers and be there ready to solve an issue at hand is the best loyalty strategy you can have ... Loyalty is about emotion, not logic. If you have customers that love your mobile app they will come back, it’s that simple. Creating customer loyalty doesn’t need to be about spending more money on campaigns and loyalty programs. It’s about creating an exceptional experience that customers can trust to receive every time.” (Ezra Siegel)

4.4. Other Findings

The findings were divided into the three groups, but it was noted that there is a lot of overlap between these groups. Most significantly monetization seems to affect and be affected by acquisition and retention, getting feedback directly from users seems to be a starting point for building relationships, and the method of acquiring users seems to affect retention. Furthermore, a few of the posts attempt to put things into perspective by stating that rather than being separate groups customer acquisition and retention are part of the same process or cycle:

“What’s great is that these things are totally a virtuous cycle. Putting resources towards search and your app store presence and things like that, will drive users. Focusing on the retention of users and getting better ratings puts you higher in searches because they factor in search, which will drive more users, which will drive more ratings.” (Ian Sefferman, Apptentive video)

Most of the posts do not make a distinction between the categories. Especially acquisition and retention strategies are written about without distinction, while posts about topics falling under customer intelligence are mostly looked at separately.

Also a few older posts on the Appclover blog that highlight using price cycling which is essentially changing the pricing of an app from paid to free and back to paid. This is not included in the findings since the entrepreneur suggesting this method did not mention it in a later interview and it was not mentioned in any more recent blog posts. Therefore it was assumed that this worked in a time when the majority of apps were paid, but less so as the apps moved towards being free.

5. SUMMARY AND REVISED FRAMEWORK

This chapter summarizes the findings of the study according to the components of the process of mobile app marketing presented at the end of the chapter.

5.1. Conceptual Stage

The conceptual approach to marketing and development of apps varied greatly across the blogs with three main categories emerging: minimum viable product, informal market research and partial innovation.

The minimum viable product approach relies on building a minimum viable product, launching it in the market to find core users, and iterating based on feedback. With the informal market research approach the developer attempts to understand the potential user and the app's position in the market before development. This is accomplished through coming up with a unique selling proposition for the app, attempting to think like the potential user, and through estimating market demand by constantly monitoring the app store for trends or using tools such as the Google Keyword tool. This approach uses beta testing in order to get early feedback to validate assumptions. The partial innovation approach attempts to improve on the deficiencies of existing apps. Original concepts were seen as risky since there is no market data available and therefore this approach attempts balance between elements that are known to work and innovation. Additionally risk can be managed by making the app about the developer's are of interest since an understanding of the potential customer already exists.

The choices in the conceptual stage were also found to affect user acquisition and retention. The importance of fundamental virality was highlighted in order to leverage a small marketing budget. This means that the app should be a "social experience" such as a multiplayer game and/or integrate social media in a way that incentivizes social sharing. Also the monetization choices made in the concept stage were found to have an effect on retention. Especially advertising was generally seen as degrading to the user

experience, although a few good examples of advertising were found where advertising was found to have a positive effect on retention.

5.2. User Acquisition

The findings revealed two important goals of user acquisition practices: visibility and credibility. Visibility deals with how an app is found. This includes both activities inside the app store such as optimizing keywords, and outside the app store such as marketing at conferences and using social media to increase the amount of followers. Credibility, on the other hand, strives to increase the probability that a potential user downloads the app and that a blogger or journalist takes the app seriously. Credibility can be built, for example, through awards, and having a website, a video and an app page that communicates a high quality app. Several of the findings on user acquisition highlighted that building visibility and credibility often happen simultaneously, for example, a video can build both credibility and visibility. Similarly, App Store Optimization attempts to address both visibility and credibility aspects of the app store presence.

5.3. User Retention

User experience and relationships were found to be the two important components of user retention. User experience was found vital since the way that the app engages the user and integrates with their existing workflow have a great impact on how likely a user is to return to the app. Since advertising was generally found to degrade user experience, using advertising as a method of monetization in free apps is complicated. Either the developer has to choose to balance between monetization and user experience or decide to treat user experience as a priority possibly forgoing revenue. Two examples of advertising that can be enhancing to the user experience were found. These used similar principals to what was found to be important in enhancing app experience such as adding value and utilizing achievements.

Updates were found to be often one of the only touch points that app developers have with their entire customer base and therefore very important in user retention. Beyond communicating added value and developer's propensity of listening to feedback through updates, the developer can establish relationships directly with users and/or through communities. An open-door strategy and following up with users that give feedback were found to be key in differentiating as a developer that seeks to proactively take the users into account in the app development process. Combining good user experience and building relationships with users was additionally found to be an effective customer loyalty strategy.

High user retention was found to have a positive impact on user acquisition through the users being more prone to recommend the app to others, and through better app store reviews that can lead to more visibility and credibility. First users were seen as especially detrimental in establishing word-of-mouth.

5.4. Feedback

The theoretical framework of this study grouped the conceptual stage and feedback gathering together, but the findings revealed that feedback gathering goals and methods differ in the stages of mobile app marketing. In the conceptual stage demand estimation is the key to decide what kind of app to start developing. The informal market approach relies on app store data and information on general interest towards app theme to estimate potential market demand, while the other two approaches mainly rely on the developer's intuitive hypothesis on demand. Testing during the development of the app provides the first opportunity to gauge how receptive potential users are. Marketing and app store analytics were found to be feedback methods in the user acquisition stage. Marketing analytics is used to measure how effectively the marketing campaigns are working, while app store analytics are used to monitor the overall performance of the developer's apps and to gain insight into competing apps. Feedback in the user retention

stage relies on in-app analytics and user feedback which are used to improve the app through updates.

5.5. Feedback from blog owners

A summarized version of the findings similar to what has been presented in this chapter was e-mailed to blog owners for feedback. Of the four blog owners only two responded. One of these blog owners responded that due to a project he does not have time to read and comment on the findings, while the other one confirmed that the findings seemed “reasonable”. Therefore, the feedback did not provide further insight, but validated that the findings were somewhat in line with one expert’s perspective.

5.6. Revised Framework

Figure 8 presents the revised framework of the study in the form of a four stage process of mobile app marketing. It differs significantly from the theoretical framework of this study by showing mobile app marketing as a four stage process. Concept and feedback have been separated as they have different implications in different stages of the process. Also the process highlights the findings of positive effects of user retention on user acquisition, the use of feedback to iterate or update the app, and the effect of conceptual decisions on acquisition and retention.

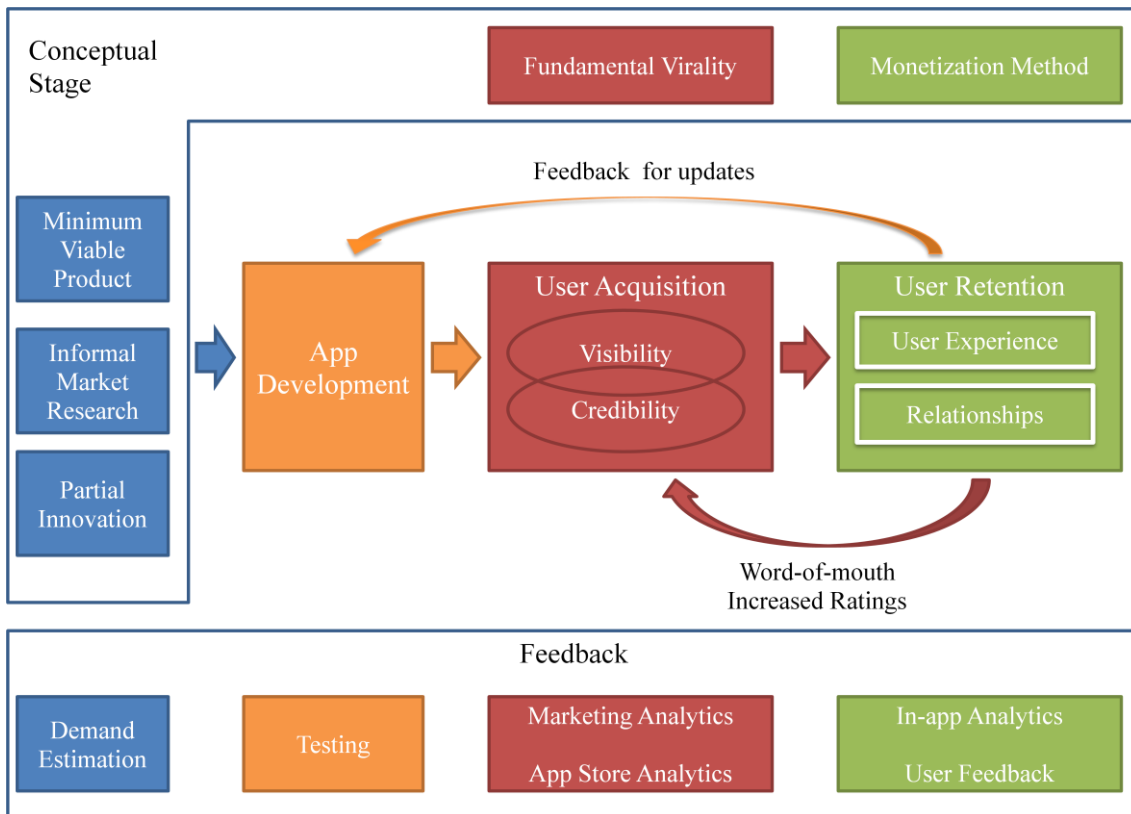


Figure 8. Mobile app marketing process based on the findings

6. DISCUSSION AND CONCLUSIONS

This chapter highlights the contributions of the study towards theory, practical use, and further research.

6.1. Theoretical Implications

The findings on conceptual approach highlighted three different viewpoints to the initial marketing and development of apps. The minimum viable product approach is very similar to Stokes' (2000) ideas of innovation orientation and bottom-up targeting of customers. However, all of the approaches present different perspectives on how to deal with the risks of innovation in the mobile app market. Therefore the risk approach found in the mobile app context is akin to Morris, Schindehutte and Laforge's (2002) underlying dimension of risk management which entails identifying risk factors and mitigating or sharing those factors. This kind of risk perspective was especially emphasized in the partial innovation approach where the absence of market data for innovative concepts was clearly highlighted as the risk factor in app development and mitigated by having a balance between known elements and "fresh vision". Correspondingly, the minimum viable product approach attempts to lower this risk of innovation by deploying an app that is not coded to complete operation and using user feedback to decide on the further development. These two approaches highlight ways that app developers can start building apps on the basis of affordable loss (Read et al., 2009) instead of market research. The informal market research approach, on the other hand, relies on using the data available to estimate demand and to highlight a market for the app thus attempting to lower risk.

Although the informal market research approach, use of analytics for feedback and app store optimization may appear to fall under traditional marketing, it is important to remember that traditional marketing and entrepreneurial marketing (EM) are not jointly exhaustive or mutually exclusive. This study supports Morris, Schindehutte and

Laforge's (2002) notion that EM implies a more frequent use of creative and innovative marketing rather than strict adherence to using EM methods and EM as the study of small firms growing through entrepreneurship (Bjerke and Hultman, 2002). The use of analytics, for example, is natural for entrepreneurs in the mobile app context since establishing this type of formal intelligence system requires few resources.

Morris, Schindehutte and Laforge (2002) proposed that "entrepreneurial marketers develop a creative capacity for resource leveraging" (p.8) and Stokes (2000) highlighted that entrepreneurs rely on word-of-mouth marketing to develop market base. The findings contained many examples of resource leveraging including several that rely on word-of-mouth methods. One of the most important findings was the notion that in order to leverage limited marketing funds smaller app developers need to make apps that are "social experiences" where there is an incentive for social sharing such as playing against friends in multiplayer games. This is a more fundamental idea towards making apps that promote word-of-mouth marketing than integration of social sharing functions as proposed by Lica (2010) and implies that an app is a resource that can be leveraged as a marketing catalyst. Taylor, Voelker and Pentina's (2011) findings of an increased tendency to adopt apps for social exchange purposes when the influencer is a social contact support the effectiveness of fundamental virality. Another important resource leveraging finding that was deemed critical for success is the concept of cross-promoting other apps by the same developer inside an app. This was proposed as a way of using apps as resources for traffic into other apps in order to increase overall downloads of the developer's "app portfolio" and to rejuvenate stale apps. Also two examples of bartering in order to get access to other people's resources were found. These included partnering with YouTube channels and trading content for mentions on social media.

Several marketing tactics and strategies related to guerrilla, viral and buzz marketing were found. One of the experts argued for looking at viral trends to make a variation of viral media for more media attention. Since viral marketing requires a benefit to the

person forwarding the message (Kraus, Harms and Fink, 2009) this tactic seems to assume that since a media is viral it must already have a benefit to a large group of people at that time and therefore making a variation is likely to go “viral” as well. “Virality” was further mentioned with the marketing of an app through video, but no specifics were given to how it will be achieved beyond basic sharing of a link on social media and app website. Social media was found to be used to build “buzz” and anticipation prior to launching an app. There was no mention of activities that lure consumers to spread a message (Notarantonio and Charles, 2009) and therefore this type of buzz does not refer to buzz marketing specifically. However, the suggested release of small bits of information about the development of the app to followers can create anticipation in a similar manner, and offering promotional codes and discounts to early followers could have a similar effect as rewarding early users in increasing the chances of the app being shared. Media was also found to have a key role in the “virality” of an app. The findings highlight using press releases and press kits to get journalists interested in writing about the app by including elements such as quotes and story of the app to make it easy to write about the app. These findings extend the notion of Guerilla PR beyond creating grabbing marketing campaigns that appeal to the media (Hutter and Hoffmann, 2011) by trying to appeal to media directly.

In the literature review Kraus, Harms and Fink (2009) argued that new ventures are often faced with a lack of trust due to the product or service being unknown to the customers. This is highlighted in the app stores where thousands of developers publish and therefore it is very likely that a developer is unknown to a potential user. Several ways to overcome this lack of trust by increasing credibility were found, mainly concentrating on increasing the quality of presentation of the app and going after external sources of approval. In addition, Kraus, Harms and Fink (2009) proposed that a lack of trust is the reason why new ventures often seek to use their personal networks to obtain initial customers. The findings indicated that while personal networks are seen as useful for attracting the first users, app developers seem to use them to overcome lack of visibility instead of lack of trust.

Building relationships with customers through interactive marketing was proposed by Stokes (2000) as a way that entrepreneurs maintain close relationships with customers. The findings indicate that very few companies in the app industry have meaningful relationships with customers, which is why the Apptentive blog highlighted relationship building as an effective way to differentiate from the competition. The intent of such relationships is to improve the app based on better understanding of the users and to make users feel like they have a say in the app development process. Follow-up with users that have given feedback was found to generate a sense of ownership over the direction of the app's development and seems to address the same kind of customer need that Schindehutte, Morris and Pitt's (2009) co-creation attempts to fulfill. In addition, social media was found to be used by one entrepreneur to engage users in contests, trivia and discussions thus also potentially satisfying the customer's desire to communicate within communities as proposed by Schindehutte, Morris and Pitt (2009).

Although networking with customers was seen as critical for feedback, no evidence was found for Stokes' (2000) proposition that entrepreneurs use industry contacts to monitor performance and react to competitive threats. Judging by the amount of blog posts and videos concentrating on changes in the app stores, the blogs appear to act as places where entrepreneurs can get information on general technology and app store related threats. However, the findings indicate that monitoring of performance and reacting to competitive threats happens through app store analytics rather than networking.

All in all, this study extends EM literature in high velocity context and in two-sided markets under the mobile application distribution model. According to this study the two main ways that EM can be used to create and maintain competitive advantage are through creating apps that users have an incentive to share to leverage a small marketing budget for customer acquisition and establishing relationships with users as a customer loyalty strategy. Figure 5 proposed that entrepreneurial marketing in the mobile app

context happens outside the app store, but the findings indicate that entrepreneurial marketing has a role in marketing actions both inside and outside the app stores.

6.2. Managerial Implications

This study provides valuable practical implications to anyone interested in entrepreneurial marketing in the mobile app context through examples and highlighting the mobile app marketing process. Several examples of using entrepreneurial marketing theory in practice have been explored. While an app entrepreneur can, for example, read about theory relating to partnership strategies, this study provides two examples on how to put that theory into practice in the app context. The findings chapter is full of these examples and discoveries that app developers can start using in their marketing. In addition, Figure 8 visualizes the mobile app marketing process so that it can be easily and quickly understood. Of the four blogs researched, none of them provided such an overview making it much more time consuming and difficult to relate the blog posts to a bigger picture.

6.3. Limitations and further research

The purpose of this study was to find how entrepreneurial marketing can be used to affect mobile application adoption and retention. Although the results are in line with the research aims of the study, it is important to keep in mind the limitations of the research.

First, the study concentrates on experts in the mobile app context. While the results provide insight into mobile app marketing, they are not necessarily representative of the average, successful, or unsuccessful app entrepreneur. Second, the blogs also acted as marketing tools for the companies. This was most apparent in the focus of the blog following the focus of the company, for example, the Apptentive blog mainly focused on building relationships with users and getting feedback since the company makes an

in-app feedback tool. Third, the blogs researched presented a North American view into mobile app marketing. This was apparent from the concentration of marketing advice towards the two largest marketplaces in Western countries: Apple's App Store and Google's Play Store.

Being one of the first studies, more research in general for app marketing and the use of entrepreneurial marketing in the app context is called for. This study provides multiple findings that can be tested in further studies. Especially useful would be studies on the use of success prerequisites such as fundamental virality and cross-promotion in relation to app success. Also studies on the building of credibility and visibility, building relationships with users, feedback gathering, analytics usage, and detailed study on the concept stage would provide depth to the findings of this study. The growing app markets of China, Brazil, India, Turkey and Russia provide an opportunity to research mobile app marketing in a very different environment. Cuadrado and Duenas (2012) note that the mobile application store distribution model has been replicated in several other domains and markets. Therefore, the applicability of the findings of this study to such markets is suggested as another direction of further research.

7. REFERENCES

- ABI RESEARCH, 2012. *M-Commerce Growing to 24% of Total E-Commerce Market Value on Back of Smartphone Adoption* [Online]. Available: <https://www.abiresearch.com/press/m-commerce-growing-to-24-of-total-e-commerce-marke> [Accessed 9 October 2013].
- BALASUBRAMANIAN, S., PETERSON, R.A. and JARVENPAA, S.L., 2002. Exploring the Implications of M-Commerce for Markets and Marketing. *Journal of the Academy of Marketing Science*, **30**(4), pp. 348-361.
- BAMBA, F. and Barnes, S., 2006. Evaluating Consumer Permission in SMS Advertising , *Proceedings of Helsinki Mobility Roundtable*, 2006, Sprouts, pp. 6.
- BARGER, V.A. and LABRECQUE, L.I., 2013. An Integrated Marketing Communications Perspective on Social Media Metrics. *International Journal of Integrated Marketing Communications*, **5**(1), pp. 64-76.
- BELLMAN, S., POTTER, R.F., TRELEAVEN-HASSARD, S., ROBINSON, J.A. and VARAN, D., 2011. The Effectiveness of Branded Mobile Phone Apps. *Journal of Interactive Marketing*, **25**(4), pp. 191-200.
- BJERKE, B. and HULTMAN, C.M., 2002. *Entrepreneurial marketing: the growth of small firms in the new economic era*. Cheltenham: Edwar Elgar.
- CHUNG-SHING, L. and HO, J.C., 2010. A Framework for Analyzing Business Model Innovation in Mobile Commerce. *Journal of International Technology & Information Management*, **19**(4), pp. 37-60.
- CLARKE III, I., 2008. Emerging Value Propositions for M-commerce. *Journal of Business Strategies*, **25**(2), pp. 41-57.
- CUADRADO, F. and DUEÑAS, J.C., 2012. Mobile application stores: success factors, existing approaches, and future developments. *Communications Magazine, IEEE*, **50**(11), pp. 160-167.
- DEIGHTON, J. and KORNFELD, L., 2009. Interactivity's Unanticipated Consequences for Marketers and Marketing. *Journal of Interactive Marketing*, **23**(1), pp. 4-10.
- DROSSOS, D., GIAGLIS, G.M., LEKAKOS, G., KOKKINAKI, F. and STAVRAKI, M.G., 2007. Determinants of Effective SMS Advertising: An Experimental Study. *Journal of Interactive Advertising*, **7**(2), pp. 1.

- DUBOIS, A. and GADDE, L., 2002. Systematic combining: an abductive approach to case research. *Journal of Business Research*, **55**(7), pp. 553-560.
- EASTON, G., 2002. Marketing: a critical realist approach. *Journal of Business Research*, **55**(2), pp. 103-109.
- EMARKETER, 2013a. *Smartphone Adoption Tips Past 50% in Major Markets Worldwide*. [Online] Available: <http://www.emarketer.com/Article/Smartphone-Adoption-Tips-Past-50-Major-Markets-Worldwide/1009923> [Accessed 14 February 2014].
- EMARKETER, 2013b. *Facebook to See Three in 10 Mobile Display Dollars This Year*. [Online] Available: <http://www.emarketer.com/Article/Facebook-See-Three-10-Mobile-Display-Dollars-This-Year/1009782#77PFcueXdjdfKjJO.99> [Accessed 6 May 2013].
- FARAGO, P., 2012. *App Engagement: The Matrix Reloaded*. [Online] Available: <http://blog.flurry.com/bid/90743/App-Engagement-The-Matrix-Reloaded> [Accessed 30 January 2014].
- FEIJOO, C., GÓMEZ-BARROSO, J., AGUADO, J. and RAMOS, S., 2012. Mobile gaming: Industry challenges and policy implications. *Telecommunications Policy*, **36**(3), pp. 212-221.
- FIEGERMAN, S., 2012. *Why Are Mobile Ads So Cheap?*. [Online] Available: <http://mashable.com/2012/10/23/mobile-ad-prices/> [Accessed 30 May 2013].
- GANS, J.S., 2012. Mobile application pricing. *Information Economics & Policy*, **24**(1), pp. 52-59.
- GARTNER, 2013. *Gartner Says Mobile App Stores Will See Annual Downloads Reach 102 Billion in 2013*. [Online] Available: <http://www.gartner.com/newsroom/id/2592315> [Accessed 30 January 2014].
- GILMORE, A., 2011. Entrepreneurial and SME marketing. *Journal of Research in Marketing and Entrepreneurship*, **13**(2), pp. 137-145.
- GLENN, J.C., 2010. Research Methods of Qualitative and Quantitative. *Handbook of Research Methods*. 2010 edition. Oxford Book Company, pp. 104-105-117.
- HEALY, M. and PERRY, C., 2000. Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research: An International Journal*, **3**(3), pp. 118-126.

- HILLS, G.E., HULTMAN, C.M. and MILES, M.P., 2008. The Evolution and Development of Entrepreneurial Marketing. *Journal of Small Business Management*, **46**(1), pp. 99-112.
- HOLZER, A. and ONDRUS, J., 2011. Mobile application market: A developer's perspective. *Telematics and Informatics*, **28**(1), pp. 22-31.
- HSIU-YU, W., LIAO, C. and LING-HUI, Y., 2013. What Affects Mobile Application Use? The Roles of Consumption Values. *International Journal of Marketing Studies*, **5**(2), pp. 11-22.
- HUANG, R.Y., 2011. Value, Interest and Power: a Three Dimensional Model for Mobile Marketing Stakeholder Analysis. *International Journal of Mobile Marketing*, **6**(1), pp. 109-119.
- HUANG, R.Y., 2012. The Identification, Ranking and Categorization of Mobile Marketing Success Factors. *International Journal of Mobile Marketing*, **7**(2), pp. 86-97.
- HUTTER, K. and HOFFMANN, S., 2011. Guerrilla Marketing: The Nature of the Concept and Propositions for Further Research. *Asian Journal of Marketing*, **5**(2), pp. 39-54.
- IONITĂ, D., 2012. ENTREPRENEURIAL MARKETING: A NEW APPROACH FOR CHALLENGING TIMES. *Management & Marketing*, **7**(1), pp. 131-150.
- ITU, 2013. *The World in 2013 ICT Facts and Figures*. Geneva: International Telecommunication Union.
- JOHNSON, D., 2011. *Mobile Messaging Tops Mobile Ad Spending*. [Online] Available: <http://www.tatango.com/blog/mobile-messaging-tops-mobile-ad-spending/> [Accessed 06 May 2013].
- KAPLAN, A.M., 2012. If you love something, let it go mobile: Mobile marketing and mobile social media 4x4. *Business horizons*, **55**(2), pp. 129-139.
- KARLA, J. and BRÖKER, H., 2011. Emergence of the App-Economy: what Drives the Mobile Business Industry in Germany? *International Journal of Business Research*, **11**(5), pp. 67-75.
- KAVASSALIS, P., SPYROPOULOU, N., DROSSOS, D., MITROKOSTAS, E., GIKAS, G. and HATZISTAMATIOU, A., 2003. Mobile Permission Marketing: Framing the Market Inquiry. *International Journal of Electronic Commerce*, **8**(1), pp. 55.

- KOZINETS, R.V., 1998. On Netnography: Initial Reflections on Consumer Research Investigations of Cyberculture. *Advances in Consumer Research*, **25**(1), pp. 366-371.
- KOZINETS, R.V., 2002. The Field Behind the Screen: Using Netnography for Marketing Research in Online Communities. *Journal of Marketing Research (JMR)*, **39**(1), pp. 61-72.
- KRAUS, S., HARMS, R. and FINK, M., 2009. Entrepreneurial marketing: moving beyond marketing in new ventures. *International Journal of Entrepreneurship and Innovation Management*, **11**(1), pp. 19-34.
- KUAN-YU CHEN, YU-LUN HSU and CHIA-CHUN WU, 2012. Mobile Phone Applications as Innovative Marketing Tools for Hotels. *International Journal of Organizational Innovation*, **5**(2), pp. 116-140.
- LAROCHE, M., HABIBI, M.R., RICHARD, M. and SANKARANARAYANAN, R., 2012. The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Computers in Human Behavior*, **28**(5), pp. 1755-1767.
- LEEM, C.S., SUH, H.S. and KIM, D.S., 2004. A classification of mobile business models and its applications. *Industrial Management & Data Systems*, **104**(1), pp. 78-87.
- LICA, L., 2010. Mobile and Social: Ten Best Practices for Designing Mobile Applications. *Informatica Economica*, **14**(3), pp. 60-74.
- LIN, C.T.S. and SMYRNIOS, K.X., 2007. Customer-Value Based Marketing Activities in Fast-Growth Firms. *Journal of Research in Marketing and Entrepreneurship*, **9**(1), pp. 67-88.
- LIU, C., ZHU, Q., HOLROYD, K.A. and SENG, E.K., 2011. Status and trends of mobile-health applications for iOS devices: A developer's perspective. *Journal of Systems and Software*, **84**(11), pp. 2022-2033.
- MAHATANANKOON, P., WEN, H.J. and LIM, B., 2005. Consumer-based m-commerce: exploring consumer perception of mobile applications. *Computer Standards & Interfaces*, **27**(4), pp. 347-357.
- MARITZ, A., FREDERICK, H. and VALOS, M., 2010. A discursive approach to entrepreneurial marketing: Integrating academic and practice theory. *Small Enterprise Research*, **17**(1), pp. 74-86.

- MARTÍN, S.S., LÓPEZ-CATALÁN, B. and RAMÓN-JERÓNIMO, M.A., 2012. Factors determining firms' perceived performance of mobile commerce. *Industrial Management & Data Systems*, **112**(6), pp. 946-963.
- MARTIN, D.M., 2009. The entrepreneurial marketing mix. *Qualitative Market Research: An International Journal*, **12**(4), pp. 391-403.
- MEYER, D., 2012. *App Store infested with zombie software, claims analytics startup Adeven* [Homepage of Gigaom], [Online]. Available: <http://gigaom.com/2012/07/31/app-store-infested-with-zombie-software-claims-analytics-startup-adeven/> [Accessed 30 January 2014].
- MIR, R. and WATSON, A., 2001. Critical Realism and Constructivism in Strategy Research: Toward a Synthesis. *Strategic Management Journal*, **22**(12), pp. 1169-1173.
- MIRBAGHERI, S. and HEJAZINIA, M., 2010. Mobile Marketing Communication: Learning from 45 Popular Cases for Campaign Designing. *International Journal of Mobile Marketing*, **5**(1), pp. 175-192.
- MOORE, G.A., 2006. *Crossing the chasm: marketing and selling high-tech products to mainstream consumers*. First Collins Business Essentials Edition. New York: HarperCollins Publishers.
- MORRIS, M.H., SCHINDEHUTTE, M. and LAFORGE, R.W., 2002. Entrepreneurial Marketing: a Construct for Integrating Emerging Entrepreneurship and Marketing Perspectives. *Journal of Marketing Theory & Practice*, **10**(4), pp. 1.
- MORRISH, S.C., MILES, M.P. and DEACON, J.H., 2010. Entrepreneurial marketing: acknowledging the entrepreneur and customer-centric interrelationship. *Journal of Strategic Marketing*, **18**(4), pp. 303-316.
- NGAI, E.W.T. and GUNASEKARAN, A., 2007. A review for mobile commerce research and applications. *Decision Support Systems*, **43**(1), pp. 3-15.
- NOTARANTONIO, E.M. and QUIGLEY, C.J., 2009. The Effectiveness of a Buzz Marketing Approach Compared to Traditional Advertising: An Exploration. *Journal of Promotion Management*, **15**(4), pp. 455-464.
- PALINKAS, L.A., HORWITZ, S.M., GREEN, C.A., WISDOM, J.P., DUAN, N. and HOAGWOOD, K., 2013. Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and Policy in Mental Health and Mental Health Services Research*, , pp. 1-12.

- PURI, A., 2007. The web of insights. *International Journal of Market Research*, **49**(3), pp. 387-408.
- READ, S., DEW, N., SARASVATHY, S.D., SONG, M. and WILTBANK, R., 2009. Marketing Under Uncertainty: The Logic of an Effectual Approach. *Journal of Marketing*, **73**(3), pp. 1-18.
- SCHINDEHUTTE, M., MORRIS, M.H. and PITT, L.F., 2009. *Rethinking marketing : the entrepreneurial imperative*. Upper Saddle River, NJ: Pearson.
- SCHLINKE, J. and CRAIN, S., 2013. Social Media from an Integrated Marketing and Compliance Perspective. *Journal of Financial Service Professionals*, **67**(2), pp. 85-92.
- SHANKAR, V. and BALASUBRAMANIAN, S., 2009. Mobile Marketing: A Synthesis and Prognosis. *Journal of Interactive Marketing*, **23**(2), pp. 118-129.
- SKYHOOK WIRELESS, 2009. *Developer's Guide to In-Application Advertising* [Online]. Available: <http://www.skyhookwireless.com/developers/developersguide.pdf> [Accessed 31 October 2013].
- SMITH, J., 2009. Leveraging Mobile Technologies to Increase Revenue for the Nba and its Properties. *International Journal of Mobile Marketing*, **4**(2), pp. 68-74.
- SMURA, T., KIVI, A. and TOYLI, J., 2011. Mobile data services in Finland: usage of networks, devices, applications and content. *International Journal of Electronic Business*, **9**(1), pp. 138-157.
- SMUTKUPT, P., KRAIRIT, D. and KHANG, D.B., 2011. The Impact of Permission-Based Mobile Advertising on Consumer Brand Knowledge. *International Journal of Mobile Marketing*, **6**(1), pp. 94-108.
- STOKES, D., 2000. Putting Entrepreneurship into Marketing: The Processes of Entrepreneurial Marketing. *Journal of Research in Marketing and Entrepreneurship*, **2**(1), pp. 1-16.
- TAKAHASHI, D., 2013. *The mobile app economy is exploding (so, what else is new?)* . [Online] Available: <http://venturebeat.com/2013/01/18/the-mobile-app-economy-is-exploding-so-what-else-is-new/> [Accessed 31 October 2013]
- TAYLOR, D.G., VOELKER, T.A. and PENTINA, I., 2011. Mobile Application Adoption by Young Adults: a Social Network Perspective. *International Journal of Mobile Marketing*, **6**(2), pp. 60-70.

TRISTAN, L., 2013, 2013. *How Much Do Average Apps Make?* [Homepage of Forbes], [Online]. Available: <http://www.forbes.com/sites/tristanlouis/2013/08/10/how-much-do-average-apps-make/> [Accessed January 30 2014].

VARNALI, K. and TOKER, A., 2010. Mobile marketing research: The-state-of-the-art. *International Journal of Information Management*, **30**(2), pp. 144-151.

VINEREAN, S., CETINA, I., DUMITRESCU, L. and TICHINDELEAN, M., 2013. The Effects of Social Media Marketing on Online Consumer Behavior. *International Journal of Business & Management*, **8**(14), pp. 66-79.

WAGNER, J., 2011. Anytime/anywhere -- Playing Catch Up with the Mind of the Smartphone Consumer. *International Journal of Mobile Marketing*, **6**(1), pp. 28-53.

WIND, Y. and MAHAJAN, V., 2002. Convergence marketing. *Journal of Interactive Marketing*, **16**(2), pp. 64-79.

WOLFGANG, P., KEY, P. and WIEDEMANN, D.G., 2009. Mobile word-of-mouth – A grounded theory of mobile viral marketing. *Journal of Information Technology (Palgrave Macmillan)*, **24**(2), pp. 172-185.

XU, H. and YANG, J., 2012. Do M-Commerce User's Expectations Reflect Reality? *International Journal of Electronic Business Management*, **10**(4), pp. 322-331.

XUN, J. and REYNOLDS, J., 2010. Applying netnography to market research: The case of the online forum. *Journal of Targeting, Measurement & Analysis for Marketing*, **18**(1), pp. 17-31.

ZONTANOS, G. and ANDERSON, A.R., 2004. Relationships, marketing and small business: an exploration of links in theory and practice. *Qualitative Market Research: An International Journal*, **7**(3), pp. 228-236.