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Making Sense of Growth Hacker Marketing

by

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May 2016

Master's Program in Management

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Abstract

After the Dotcom bust, high-technology startups are faced with the challenge in funding, particularly in Silicon Valley. Most of the entrepreneurs have technical skills but lack of marketing experiences. In order to survive, they turn to an alternative approach that highly relies on scientific experimentation to pursue rapid growth in number of users at next to zero cost within short time. It is then termed as Growth Hacker Marketing in 2010 and receives wide popularity among startups in the world. Yet, in the academic world, there is limited discussion on the topic while the similar concepts can be shown in the fields of product development and marketing. Thus, the purpose of the thesis is to develop a framework of Growth Hacker Marketing from the two perspectives. The author will study the eight representative startups and provide an integrative view on i) What differentiates Growth Hacker Marketing from other marketing approaches? ii) How do they implement Growth Hacker Marketing? To that end, a framework illustrating the basis of product development and marketing, the close interaction between them and the continuous optimization and retention will be suggested.

Keywords: Growth Hacker Marketing, Marketing, Product Development, Data-driven decision making, Startups

Acknowledgements

First, I would like to express my sincere gratitude to each person inspiring and helping me on the research. Special gratitude and thanks to Markus Lahtinen for inspiring me on the alternative approach to the topic. Your constructive feedback and critical questions have encouraged my interests and explore the world in a new perspective. Also, thanks Julienne Stewart for patiently answering my questions and teaching me from the starting point.

Moreover, I would like to thank MiM's supervisors and classmates for supporting me during the whole period. Thanks Carl-Henric Nilsson for giving me the freedom to pursue what I am interested in and Stein Kleppestø for supporting my research. Special gratitude to Christina Lindeberg and Jack Docherty for giving constructive feedback and being so supportive while I was struggling.

Last, thanks for all my friends from Taiwan, Austria, Spain and Sweden for inspiring and motivating me to go through the most difficult time. Special thanks to Peter Hsu for providing insight on Growth Hacker Marketing. Thanks Magdalena Hules for helping me with proof reading and selflessly sharing all your valuable experiences in conducting research. Moreover, special thanks to Charlene Jung and Lluís Bardet Álvarez for inspiring me from a professional marketing perspective and discussing the whole piece of paper in detail with me. Your insights on marketing is invaluable. Thanks to Mattias Andersson for supporting me in the whole journey and making sense in the complexity together. This journey has been challenging and without each of you it would not be complete.

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1 Introduction

1.1 Background

“in the harsh reality of the dotcom bust. As investment dollars dried up, surviving companies had to get creative about growth, and turned to the best opportunities they had: the advantages inherent in the structure of the web and the growth that came from users spreading the word about their product.” (Vasquez, 2014, para. 2)

As Vasquez (2014) points out, the challenging environment renders the alternative approach to grow the business for startups. Growth Hacker, integrated itself in Silicon Valley’s culture, was existed in the past decade but firstly termed by Sean Ellis in 2010 (Chen, 2012). It refers to a person whose true north is growth by answering the traditional marketing question, how to get customers for the product, with technical orientation solutions (Chen, 2012; Deeb, 2014). While Chen (2012) claims “growth hacker is the new VP of marketing,” the topic starts gaining its popularity and is widely employed by high-technology startups worldwide. Bussgang and Benbarak (2016) further suggest the trend may migrate to larger organizations.

Specifically, there is no universal definition of growth hacker whereas its commonly agreed function intersects at product development and marketing, and is focused on customer and user acquisition, activation, retention, and upsell (Bussgang & Benbarak, 2016; Deeb, 2014). As Holiday (2013) states, without respect of traditional marketing rules, a growth hacker uses emails, pay-per-click ads, platforms and platform APIs to build testable, trackable, and scalable strategies. Keen on users and growth (Patel & Taylor, 2013), the ultimate goal is to create a self-perpetuating marketing machine that reaches millions by itself (Holiday, 2013; Patel & Taylor, 2013).

Meanwhile, the Growth Hacker’s approach to marketing, known as Growth Hacker Marketing (Growth Hacking), is essential to startups as they are usually lacking budget for marketing and traditional marketing experiences (Holiday, 2012). Growth Hacker Marketing aims for rapid business growth at next to zero budgets, by utilizing the advantage of the network of Internet and data-rich properties “combined with rapid experimentation to continuously improve the performance of key growth levers... Companies such as [Airbnb and Dropbox] can now attract hundreds of millions of users and multibillion-dollar valuations with virtually zero dollars spent on traditional marketing ” (Vasquez, 2014, para. 3).

Yet, although the phenomenon of Growth Hacker Marketing receives wide discussion by bloggers and several authorial magazines worldwide, this discussion is apparently lacking within academic research. This is evidenced by a search, for ‘Growth Hacker Marketing’ particularly its alternative keywords (e.g. Growth Hack*) literature yielding no results on

Google Scholar. Therefore, there is a necessity to fill in the gap by systemizing the empirical data discussing the well-known cases of Growth Hacker Marketing.

Whilst researching this new phenomenon, it is important to step back and attribute it to other similar or related concepts before drawing the conclusion. The starting point could be the general logic of marketing. Moreover, there are theoretical concepts and intersects in the field of marketing and product development with a data-driven decision-making approach showing certain similarities to Growth Hacker Marketing. Thus, in the thesis, the literature starts with the discussion on the most important shifts in marketing theories during the last decade, followed by the specific sense making in terms of product development and marketing.

Moreover, the thesis will rationalize Growth Hacker Marketing by conducting cross-case study on the chosen eight entities. In the session of results, the author will present the three benchmarking cases such as Airbnb, Dropbox and Paypal and another five interviewees' experiences in how to reach rapid growth through employing Growth Hacker Marketing. Last, the literature will serve as foundation to analyze the empirical data and develop the framework of Growth Hacker Marketing.

1.2 Research Purpose

The purpose of the thesis is to develop a framework of Growth Hacker Marketing that receives wide implementation by high-technology startups to achieve rapid growth within a short time. To develop the framework, the author will select several crucial and similar concepts shown in the existing literature and structure them as a basis to demonstrate the empirical data and discussion. Moreover, through cross-case study in comparison with the literature, the framework may be applicable for other entities aiming to grow the users of their Internet-based products rapidly.

1.3 Research Questions

To achieve the purpose, it is paramount to understand what makes Growth Hacker Marketing unique as well as how high-technology startups implement it in reality. Thus, two research questions are suggested:

- 1) What differentiates Growth Hacker Marketing from other marketing approaches?
- 2) How do the high-technology startups implement Growth Hacker Marketing?

1.4 Research Limitations

The theoretical contribution is to enrich the existing marketing field by adding the rarely discussed but prevailing phenomenon of Growth Hacker Marketing in the entrepreneurial environment. Yet, the literature review only focuses on discussing the topic from a marketing perspective and offers limited consideration of the engineering view (e.g. coding). As coding is also recognized as an important skill to achieve Growth Hacker Marketing, the framework suggested to the end may find its shortage to describe the technical skills required in product development and marketing. Next, a methodological limitation is the qualitative study mainly includes secondary data and analysis from the online bloggers due to the time restriction. Nonetheless, most of the secondary data are the interview transcripts with the (co)founders of the startups while some of them are written by the startups' employees' to share their working experiences. Thus, it could provide valid insights to understand Growth Hacker Marketing. Last, the variety of the chosen cases is not given, as they are all high-technology startups developing Internet-based products and headquartered in the US while the established firms' perspectives on growing the business are missing. Thus, the author may draw less comprehensive comparison while discussing the differentiation of Growth Hacker Marketing.

1.5 Outline of the Thesis

The thesis is divided into six chapters. To begin with, the introduction provides a general view of the entrepreneurial background and shows the academic gap which the author would like to fill.

The second part is a literature review, analyzing what Growth Hacker Marketing is according to the existing literature and few latest perspectives. It is inclusive of four sessions: i) Understand Growth Hacker Marketing by discussing the mainstream paradigm shift from transaction to relationship marketing and the emergence of Growth Hacker Marketing. The general concept of Growth Hacker Marketing and its intersections of product development and marketing will be presented here. Also, a comparison on the three marketing approaches will be provided in order to demonstrate a clear understanding of Growth Hacker Marketing. ii) Intersects with product development will be discussed with historical literature. iii) Intersects with marketing will be discussed with historical literature. iv) A combination with the two intersections and the four steps of implementing Growth Hacker Marketing from a landmark study will found the framework.

Methodology serves as the third part, where the reason to choose qualitative study and how to collect the chosen cases will be addressed. The fourth part will be the results, presenting an integrative view on the eight cases. Next, discussion will be the fifth part. Last, the thesis ends with conclusion, where the answer to the research questions and future research will be mentioned.

2 Literature Review: What is Growth Hacker Marketing

Marketing is generally defined as value creation, communication and exchange to customer and a process of managing customer relationship in ways that benefits the organization and its stakeholders. It essentially deals with identifying human and social needs that can be met profitably (Kotler, Keller, Ang, Leong & Tan, 2012).

Specifically, the logic and implementation of marketing has evolved according to the complexity of technology and knowledge in 21st century. The significant evolution is the paradigm shift from transaction marketing to relationship marketing while Growth Hacker Marketing is gaining popularity by startups. Thus, this chapter starts from discussing the shift and the emergence of Growth Hacker Marketing.

Next, as the current literature offers next to zero explanation on Growth Hacker Marketing, the author puts emphasis on the concepts that may be similar and related to Growth Hacker Marketing. Further, it is suggested that Growth Hacker Marketing is overlapped by product development and marketing. Therefore, the concepts will be addressed under the two subjects in order to gain a clear view on Growth Hacker Marketing. Last, an integrative view on the framework of Growth Hacker Marketing will be provided.

2.1 Understanding Growth Hacker Marketing

2.1.1 From Transaction Marketing to Relationship Marketing

Gummesson (1987) contends the necessary marketing paradigm shift according to the limited applications of transaction marketing approaches to the global marketing. With respect to the model of service quality (Parasuraman, Zeithaml & Berry, 1985), a new perspective on marketing has challenged transaction marketing (Gummesson, 1987). Based on relationship management, an interactive and long-term concept, relationship marketing is believed to create a win-win value. The identification of 30 tangible relationships has further amplified the change in business (Gummesson, 1997). Also, Vargo and Lusch (2004) describe the shift moving from the operand resources to the operant ones.

Transaction marketing follows production logic, treating the consumer as someone to whom something is done (Grönroos, 1994). It assumes that economic activity is to make and distribute tangible things; only through production and distribution processes can create the

goods' utility and value better than its competitors; firms should pursue maximum profits generating from sales, standardized goods; and goods can be inventoried until demanded (Vargo & Lusch, 2004). This leads to the short-term focused marketing strategy (marketing mix/segmentation). Price sensitivity, quality of outputs, and market share become the most important indicators for designing marketing campaigns (Grönroos, 1994).

However, organizational marketing suggests communication program will be broader used for all organizations (Kotler & Levy, 1969). Moreover, transactional approach fails to discuss the service and can only be used in mass market. Without consideration of international market, it might not fit most other countries with little domestic markets (Gummesson, 1987). Next, relationship marketing is considered as a better solution (Gummesson, 1987) as more people recognize the importance of skills and knowledge as resources in the late 20th century (Vargo & Lusch, 2004).

Contrary to transaction marketing, relationship marketing focuses on consumers and regards them as co-producers. Specifically, customers are treated as individuals rather than a mass collective phenomenon, and they should be targeted through customized solutions and one-to-one marketing (Gummesson, 1997) The hypotheses underlines that skills and knowledge are the fundamental units of exchange, and the fundamental source of competitive advantage; indirect exchange is included; goods are distribution mechanisms for service provision; all economies are service economies; the enterprise can only make value proposition; a service-centered view is inherently customer oriented and relational (Vargo & Lusch, 2004, p3). Thus, the long-term and interactive perspective is embedded in marketing. On the one hand, relationship marketing sees quality differently. Quality is variable and will increase according to the interaction with consumers. On the other hand, the approach widens the function of the marketing department by adding concepts of internal marketing, part-time marketeers, and the moment of truth, in order to create long-lasting relationships (Gummesson, 1987 & 1991; Grönroos, 1994). Accordingly, both transaction costs for customers and quality costs for companies will reduce (Grönroos, 1994).

To that end, Gummesson (1997) argues that this is a paradigm shift rather than supplementary to transaction marketing due to commonality of the core variables discovered: business history, diverse collaboration across broad entities, and the necessary interaction in the society.

2.1.2 Defining Growth Hacker Marketing

With the basis of relationship marketing, similar concepts such as creating interaction and life-long users can be found in Growth Hacker Marketing. Yet, as Bussgang and Benbarak (2016) defines the function of Growth Hacker intersects at product development and marketing (See Figure 1), Growth Hacker Marketing suggests a distinct approach than relationship marketing. It fulfills the exact targeting by continuously involving the customers in the product development process. Further, prioritizing return on investment over branding, Growth Hacker Marketing studies who and where the customers are in a more cost-conscious, scientific and measurable way (Holiday, 2013). As Bussgang and Benbarak (2016, para 15)

stated, “ *if data is the fuel of growth, then analytics is its engine.*” The key approach to product development allows marketing to reach high growth in revenue and profits in a very short time. It is therefore favored by high technology startups in particular. The following paragraphs will discuss the topic from product development and marketing points of view.

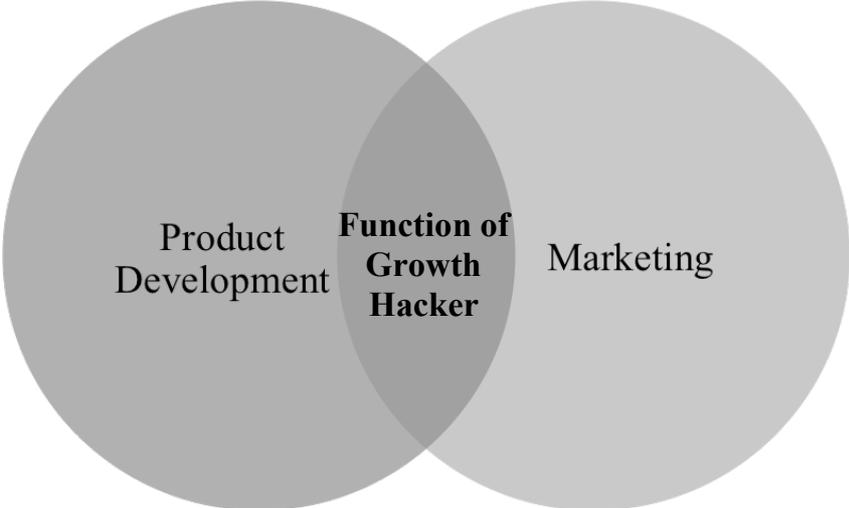


Figure 1: Function of Growth Hacker (Bussgang & Benbarak, 2016)

A Comparative View of Growth Hacker Marketing and Traditional Marketing Approaches

Based on the previously discussed paradigm shifts from transaction to relationship marketing and the emergence of Growth Hacker Marketing, this paragraph compares Growth Hacker Marketing to the others in terms of product development and promotional logic (See Table 1).

To begin with, it is obvious that Growth Hacker Marketing sees developing a single product as progressive journey with endless improvements. This is unique point that neither transaction nor relationship marketing mentions. Although relationship marketing puts emphasis on customer engagement to co-produce the products, the improvements are on the beforehand market research approach or after sale services. In other words, relationship marketing does not consider the product as unfixed while Growth Hacker Marketing never sees the product as static. Needless to say transaction marketing develops product without much consideration on customers perspective, which makes it incompatible with Growth Hacker Marketing.

Next, as for the promotional logic, the priority for Growth Hacker Marketing is to grow the number of users within short time over branding. As Vasquez (2014) states, “Growth hacking and marketing both are critical for accelerating customer growth.” But growth hacking is exclusively focused on activities that can be directly attributable to their impact on growth.

Marketing, on the other hand, includes a lot of activities such as brand perception and awareness that have a softer connection to growth.” Also, Growth Hacker Marketing tends to pursue growth via integrating sharing, engagement and retention functions into the product itself whereas transaction and relationship marketing see product and promotion are separated. Thus, the function enables Growth Hacker Marketing to acquire the users virally and organically without putting much resource on advertising. That is to say, it makes users grow the users naturally. However, though relationship marketing may mention the similar concepts such as word of mouth and part-time marketers, it offers no explanation on how to leverage the resources and grow the users virally.

Further, as Growth Hacker Marketing is mostly implemented out of the vital needs such as short of funding, it addresses the return on investment (ROI) by carefully assessing the results and costs of the promotions. Meanwhile, in order to maximize the ROI, it is important to make decision based on the data (Holiday, 2013), where the transaction and relationship marketing falls short of mentioning. Last, it is worth mentioning that integrating product development into marketing underlines the fundamental promotional logic of Growth Hacker Marketing, differentiating from the other promotional logics.

To sum up, Growth Hacker Marketing can be seen distinct from either transaction or relationship marketing in terms of product development and promotional logic. Although several similar concepts can be identified in other marketing approaches, the startups tailoring them in a unique ways in order to survive makes Growth Hacker Marketing incompatible.

Table 1: Comparative View on Transaction, Relationship and Growth Hacker Marketing (Prepared by the author)

	Product Development	Promotion Logic
Transaction Marketing	Producing tangible goods; Utilizing its quality through improving production and distribution processes (Vargo & Lusch, 2004)	Short-term focus; Assessing marketing campaigns based on rice sensitivity, quality of outputs and market share (Grönroos, 1993)
Relationship Marketing	Customer-oriented; Customer as co-producer; Quality improved via interaction with customers (Gummesson, 1997; Vargo & Lusch, 2004)	Build long-term relationship with customers; Interactive communication; Moment of truth; Part-time marketers (Gummesson, 1987 & 1991; Grönroos, 1994)
Growth Hacker Marketing	Unfixed product; Involving customer to continuously develop the product (Holiday, 2013; Ellis, 2014)	Grow the user bases virally; Focus on ROI, data-driven decision; Insert sharing, engagement, and retention function into product; Integrating product development into marketing (Holiday, 2013; Ellis, 2014)

2.2 Intersection with Product Development

In a landmark study, Holiday (2013) argues that product market fit (PMF) underlines the core of growth hacker marketing. To develop PMF, Ries (2011) suggests the best way is to create a minimum viable product (MVP) and continuously improve it, based on the feedback from lead users, while Werner Vogels, CTO of Amazon recommends writing frequently asked questions and user manuals. On the one hand, the marketers should position themselves as a collaborator of product development rather than sales for static products. On the other hand, scientific approach is necessary for each decision making process (Holiday, 2013).

Moreover, it is worth mentioning that the Internet and its associated technology can create significant value to product development as it allows efficient integration of opinions from customers and cross-functional teammates (Howe, Mathieu & Parker, 2000). More importantly, product market fit should consider cultural difference in consumers' preferences (Diamantopoulos, Schlegelmilch & Preez, 1995). Further, Zott and Amit (2007) indicate the product market strategies with emphasis on differentiation, cost leadership, or early entry correlates to the company' performance positively. Last, launch timing and quality of marketing can affect the product performance (Calantone & Benedetto, 2011).

2.2.1 Product Market Fit with Customer Insight

The similar concept of PMF can be found in Hippel's (1986) article. He addresses the importance of prototyping the novel product and asking a sample of typical users to use the product. There are constraints to developing high technology products based on an accurate marketing research, as most potential users will not have the real-world experience needed to solve problems. Yet, identification and incorporation of "lead users"—people who present strong needs that will become general in a marketplace months or years in the future—of a product or process serve as a solution. Lead users can provide new product concepts and design data due to their attempt to fill the need they experience. Further, this data can thus serve as a valuable basis to project the general market of tomorrow's interest, indicating that involving the right customers into product development is an efficient way for an internet-based firm.

Moreover, Kim & Mauborgne (1997) state value innovation as an alternative to develop product. With a focus on building the powerful commonalities in the features valued by customers, instead of the differences among customers during product development, value innovators will be able to initiate leap in value for customers. This way will thus allow business to redefine the parameters of the industry and reap strategic growth.

Similar to discontinuous leap on value proposition, Kumar, Scheer & Kotler (2000, p 136) further draw an attention on unique business system, which encourages experimentation and tolerates mistakes during product development process. The system embraces the idea that “in the early stages of the development of a radical new concept, it is not readily apparent which technology or format will succeed and which market will materialize.”

However, Hippel, Kim & Mauborgne (1986; 1997) offer no explanation on the application of product development in today’s return on investment-driven environment. Florin, Callen, Pratzel, & Kropp (2007) supplement the point by widening the product development process to a thorough set. They remark the importance of retailers to sales context, not self-aware consumers, emotional and rational consideration sets, the usage not just purchase as a better way to gain true customer insights.

2.2.2 Data-driven Decision Making

Albright, Winston and Zappe (2010) provide a general view on how data analysis affects business decision-making. In the age of technology, it is accessible to collect a huge amount of customers’ data rapidly, which amplifies people’s power and responsibility to analyze data and make decisions on the basis of quantitative analysis. The firms are able to gain competitive advantages by using quantitative methods to realize the information in the data and acting upon it (Albright et al, 2010). Similarly, LaValle, Lesser, Shockley, Hopkins and Kruschwitz (2011) support the argument by contending the top performing organizations are twice prone to apply analytics to activities. Further, it is obvious that the business world is undergoing a revolution driven by the use of data and analytics to guide decision-making due to their successful application on strategy, process optimization and competitive advantage (Gopalkrishnan, Steier, Lewis & Guszcza, 2012).

Moreover, Dumbill (2013) addresses the role of data has transitioned from within supporting system to within business interface such as the storefront, the marketing, and the customer service. It is thus worth noting that business intelligence and analytics containing web intelligence, web analytics, web 2.0, and the ability to mine unstructured user-generated contents can systematically gain consumers’ opinion and needs (Chen, Chiang & Storey, 2012). Meanwhile, customer experiences can be effectively improved by descriptive and predictive analytics of data from each customer’s behavior, issues, and desires (Spiess, T’Joens, Dragnea, Spencer, and Philippart, 2014).

Yet, the previous scholars overlook the challenges derived from the vast flood of data science before analysis. Provost and Fawcett (2013) strengthen the argument by advocating thinking beyond the algorithms, techniques, and tools commonly used to flourish data science in business concepts. It is important to interpret data analytically through (i) understanding its relationships to other important related concepts, and (ii) identifying the fundamental principles underlying data science. As Power (2014) states, capturing and storing data only creates real value to organizations when it has a meaningful purpose.

Further, other scholars extend the argument to an organizational level. On the one hand, LaValle, Lesser, Shockley, Hopkins and Kruschwitz (2010) mention organizations tend to be overwhelmed by gathering all available data and leave little time, energy or resources to understand its potential uses. Starting to implement analytics in the middle of the process through i) defining the insights and questions needed to meet the big business objective; ii) identifying essential data needed for answers is considered as a better way. On the other hand, Davenport, Barth and Bean (2012) found that organizations who are able to capitalize on big data see the importance of its interaction with product development and move analytics to core business, operational and production functions.

2.3 Intersection with Marketing

As Holiday (2013) suggests, once getting product market fit, the fluid process can move on to finding the specific growth hacker marketing strategy by experimentations, followed by creating viral growth within a number of users. Last, close the communication loop by focusing on retention and optimization of the current users' experiences, aiming to make lifelong users. Specifically, in each step, the ability of managing digital tools plays an essential role to reach the marketing goal while the instant assessment on its effectiveness are its momentum. Thus, to understand growth hacker marketing, the following paragraphs will discuss marketing in terms of digital platform and its interaction with the return on investment.

2.3.1 Marketing with Digital Platform

Digital marketing is defined as achieving marketing goals via employing digital technologies and media. It focuses on branding via digital media, underlying the relationship-based customer engagement (Chaffey, 2009; Tiago & Veríssimo, 2014). With the increasing prevalence of digital media and social media, empowered customers will be more influenced by other customers than by advertising (Leeflang, Verhoef, Dahlström & Freundt, 2013). Technological convergence and the multiplication of devices have driven the boundaries digital marketing towards user-centered, more measurable, ubiquitous and interactive, amplifying particular potentialities in visual communication, relevant advertising, community connections and virality (Piñeiro-Otero & Martínez-Rolán, 2016).

Yet, in the digital world, the particularities and appropriation for marketing have fostered the development of channels, formats and languages in combination with tools and strategies unthinkable offline (Piñeiro-Otero & Martínez-Rolán, 2016). This leads to challenges in the ability to leverage customer insights and assess its effectiveness (Leeflang et al, 2013). Thus, there is a necessity to change the manner to interact with and/or serve customers and the ability to reach new customer segments (Leeflang et al, 2013). Also, Scott (2013) contends

the new rule of digital marketing is about delivering useful content at the precise moment that a buyer needs it, underlying the personalization and direct reach. Although diverse digital tools allow personalized marketing content at low costs of production and distribution, it requires innovation in order to reach millions of users online (Scott, 2013).

Digital Marketing Plan System: SOSTAC

The digital marketing plan enables an organization to define the specific objectives and develop strategies that ensure resources are properly allocated. It is expected to not only seize opportunities but counter threats in the digital environment in combination with the three main operational processes: customer acquisition, conversion, and retention and growth (Chaffey, 2009). Further, it helps control and evaluate the output, and tackle any potential deviation from the organization's expected outcomes, allowing the strategy to be revised in the short term and iterative process between action and control (Piñeiro-Otero & Martínez-Rolán, 2016).

As Chaffey states (2009), SOSTAC model is widely applied to digital marketing plans due to its simplicity and clearness for any action's strategy. Six stages involved from strategy development to implementation can be summarized as: Situation analysis, Objectives, Strategy, Tactics, Action, and Control.

- **Situation analysis**

The aim of situation analysis is to understand the current and future environment that organizations operate within. SWOT matrix serves as the basis to analyze internally and externally. Yet, as the digital world has noted the existence of immediate (micro-) environment of customers, competitors, suppliers and intermediaries as well as a broader (macro-)environment of social, legal, political, economic and technological characteristics (SLEPT), Chaffey (2009) suggested an alternative approach. By combining external analysis of demand, competitor, intermediary, opportunities, threats and constraints of SLEPT with internal analysis of resources, the situation analysis builds the basis of defining objectives, strategies and tactics (Chaffey, 2009).

- **Objectives**

Clearly defined objectives not only underline the effective digital plan but amplify the communication between workforce and investors. Thus, it is necessary that objectives reach the following criteria: specific, measurable, assignable, realistic, and time-related. Other metrics such as balanced scorecard can also be applied. Specifically, while Chaffey (2009) suggests it is important to define online revenue contribution to improve performance in the digital world, other scholars consider scope, activities, conversion and loyalty are usually the most used goals (Piñeiro-Otero & Martínez-Rolán, 2016). Meanwhile, the objectives should allow the flexibility to adapt to the changes with the evolution of Web (Chaffey, 2009).

- **Strategy**

Digital Marketing strategy can be defined as the implemented scheme to achieve digital marketing objectives (Piñeiro-Otero & Martínez-Rolán, 2016) and it has to be tightly integrated into the whole planning process. Other scholar provides another perspective by

explaining that the output from the digital strategy will often be a series of strategic e-commerce initiatives in the key areas of customer acquisition, conversion or retention (Chaffey, 2009).

Chaffey (2009) concludes a strategy to target markets in four stages: segmentation, targeting position and planning. First, segmentation involves understanding the groupings of customers in the target market so that the organizations can maximize revenue by satisfying their needs. Segmentation is the key of robust marketing strategy development as it differentiates the fundamental advantages over rivals. Second, the targeting approaches used for online acquisition and retention campaigns will naturally depend on established segmentation. Digital technology allows more cost-effective targeted messages compared to traditional media. It can be further applied with several variables such as relationship with the company, demographic segmentation, psychographic or attitudinal segmentation, value, lifecycle stage and behavior. Third, positioning indicates consumers' perception of a product in terms of the elements of value and influences, the initiation on first selection and retention. Thus, the organizations need to encapsulate a clear and powerful online value positioning statement that can highlight the benefits differing from their offline offerings and those of competitors in the digital world. Fourth, planning describes resource deployment with consideration of the new communication characteristics: interactivity, intelligence, individualization and integration in the digital era.

- **Tactics**

Marketing tactics to implement strategies and objectives are traditionally based around the elements of the marketing mix—the 4Ps (product, price, place, and promotion) (Van Waterschoot & Van den Bulte, 1992). Yet, the marketing mix is symptomatic of a push approach to marketing and does not recognize the needs of customers. It is thus important to back up the mix by detailed knowledge of consumer behavior collected through market research. Further, the mix should be customized according to different target markets to ensure its effectiveness. Meanwhile, to increase the customer orientation, Lautenborn (1990) suggests 4Cs as an alternative to 4Ps. In the digital world, 4Cs can be interpreted as i) customer: the digital platform is a mechanism for explaining how the product proposition meets customers' needs and wants; ii) cost: the online customer is prone to compare prices to other web sites and traditional purchasing sources; iii) convenience: the quality of customer experience in terms of the ordering process and fulfillment online; iv) communication: the web site itself coupled with the methods of driving traffic to the site, such as search-engine marketing (Chaffey, 2009).

In light with the channel, on one hand, Piñeiro-Otero and Martínez-Rolán (2016) argue most marketing initiatives overlook owned and earned media while focusing on paid media. Seeing the loss in efficiency in advertising and the appearance of the social web, the convergence of three types of media is taking root in digital channels. They thus suggest the organizations must know and combine the three types of media in order to ensure greater effectiveness in the building process. On the other hand, other scholars emphasize the significance of social media. Word of mouth (WoM) reflects part of this social influence. Social media provide an unparalleled platform for consumers to publicize their personal evaluations of purchased products and thus facilitate word-of-mouth communication (Chen, Fay, & Wang, 2011).

- **Action**

The actions refer to activities conducted by managers to execute the plan, with the essential scheduling and timing tasks to definite entities. Several items included in different phrases such as tasks, resources, partnering and outsourcing, budget include technical and operational costs, timescale, and staff should be specified. Further, although most of the digital marketing tools are free on social media platforms, the fee of the professional developing, monitoring, specific management tools and staff training must be considered (Chaffey, 2009; Piñeiro-Otero & Martínez-Rolán, 2016).

- **Control**

The control element of the digital marketing plan can be reached through a combination of traditional techniques such as marketing research and novel ones such as analysis of web-server log files (Chaffey, 2009). As LeeFlang et al (2013) states, efficient tracking the customer's journey is a key requirement to optimize advertising campaigns and budgets. Constant correction on actions depending on periodically assessment on the outputs is also needed. Yet, although social media play the key role of controlling the brand reputation of companies, their real impact is difficult to measure (LeeFlang et al, 2013).

2.3.2 Marketing with Networks

However, the previously discussed digital marketing strategies offer no explanation on how to reach rapid growth and customer retention but focus on branding. Thus, it is important to enrich the theory by mentioning network science behind digital marketing platform as well as retention marketing. (Hanson & Kalyanam, 2007)

Hanson and Kalyanam (2007, p 85) provide insight on 'Growth of A New Science' with the basis of the Internet. As they state, "The past ten years of Internet growth and usage created a wealth of new measurements. Detailed web logs, search engines results, email logs, and other digital data revealed surprising patterns and complexity in network growth and usage." Further, five crucial features illustrating the network effect are suggested: i) Network connections among participants grow much faster than the number of members; ii) Real networks normally have high local clustering, indicating members tend to join in the online community where their close friends, colleagues or families are. iii) Any two people can be connected on a network via few links. iv) There are several critical hubs and authorities, "network members with far more connections than average that dominate the network." v) The network becomes vulnerable when losing the critical hubs but may stay robust when missing other members randomly. Therefore, the digital marketing can be very efficient to grow the number of users by identifying the critical hubs and utilizing them to build trust and referrals. They will facilitate to spread the information flow and word-of-mouth around their networks such as inviting their friends via an opt-in approach.

Moreover, in the field of digital marketing, there are several vital impacts of network are suggested. First, it facilitates the speed of shortening product cycles, enabling a cheaper way to collect data and "the ability to introduce beta versions and more rapid improvements in

many offerings (Hanson & Kalyanam, 2007, p 95).” Next, the celebrity endorsements or public exposure become more influential on customers’ decision as the higher expectations show on the Internet. People are prone to choose winners’ products that are also popular in the online community. Third, virtual value creation plays an important role. The digital marketing should therefore focus on transforming information in an extinguished manner (Hanson & Kalyanam, 2007).

Last, Hanson and Kalyanam (2007) consider retention on the existing customers as another key aspect in digital marketing. The objective is to bolster customers’ commitment and loyalty. Building online community and keeping effective dialogue are the two necessities while customer profiling, personalized communication, relationship aware, and time sensitive are their foundations.

2.3.3 Marketing with a Focus on Return on Investment (ROI)

Ringer and Sexton (2012) indicate the significantly increasing adoption of new digital tools to support data-driven marketing decisions and measurement of marketing ROI, deriving from today’s dynamic and challenging environment for marketing. Moreover, the Salvador and Ikeda (2014) illustrate the shortened life cycle of products nowadays will demand more assertive marketing decisions in shorter time. The big data usage in marketing information system serves the benefits on both quality of information for strategic planning and prediction on its action effect. In turn, “the development of recovery systems and the analyses of great volumes of non-structured information could lead to the understanding of consumer behaviors.”

Most importantly, AARRR model, representing Acquisition, Activation, Retention, Revenue, and Refer, serves as “a framework of customer life-cycle and operations objectives” to evaluate the effectiveness of marketing from customer management perspective (Chen & Du, 2016, p 60). The model encourages marketers to focus on retaining the existing customers rather than acquiring new ones as “the cost of retaining an existing customer is far less than acquiring a new customer.” In turn, they will be able to maximize ROI through precisely improving the marketing performance based on detailed analyses on why, where, and how many customers remain. In specific, AARRR represents Acquisition, Activation, Retention, Revenue, and Refer respectively, suggesting five stages: i) Acquire new customers as much as possible via inbound and outbound marketing while the assessment of different distribution channels’ performance is required; ii) Activate the acquired customers to real users via encouraging them to take action such as download a mobile app or register the service in order to sustain the marketing activities; iii) Retain the activated users to be committed/stuck to the product by optimization their user experiences. It is believed; iv) Revenue means obtaining income from retained customers via creating specific value such as sending personalized promotion; v) Refer means virus transmission through using customers digital social networks to attain a large amount of new customers automatically. Overall, the AARRR model enables the marketers to identify unmet customers’ needs via monitoring customer management performance in every stage (Chen & Du, 2016; Donckers, 2013).

2.4 Framework of Growth Hacker Marketing

Holiday (2013) contends the four fluid steps to execute Growth Hacker Marketing. First, “Make Sure Product Market Fit” so that the product would evolve into something that hundreds of millions of people want to pursue. Thinking outside of the box and thinking as customers in line with the scientific method to continuous improvement is the key. Second, “Finding your Growth Hack” underlies the importance of pulling customers in rather than pushing imprecise advertisements to them. Growth Hacker Marketing tends to only attract early adopters, as not everyone is the right person. Further, the marketing goal is to create a certain amount of loyal and passionate users while branding or awareness does not pay off at the early stage. Third, “Going Viral” means organic growth generated by the existing users’ social networks. Berger (2013) suggests publicity is the key to reach it by saying “We need to design products and initiatives that advertise themselves and create behavioral residue that stick around ever after people have bought the products or espoused the idea.” Integrating existing user bases to the large platforms is a good example. Fourth, “Close the loop: Retention and Optimization.” The last step brings the marketing down to earth by focusing on conversion rate. It is paramount to scrutinize metrics that generate output such as more revenue or user addiction. Proactively improving the product based on the acquired insights from interaction with the existing customers is believed to initiate higher ROI than acquiring new users.

To sum up, the fluid process shows the close interaction between product development and marketing based on measurable experimentation and scientific test, suggesting a different marketing approach from transactional and relationship one. Thus, the framework of Growth Hacker Marketing could be summarized as shown in Figure 2 by integrating the four steps to the previously discussed function of Growth Hacker.

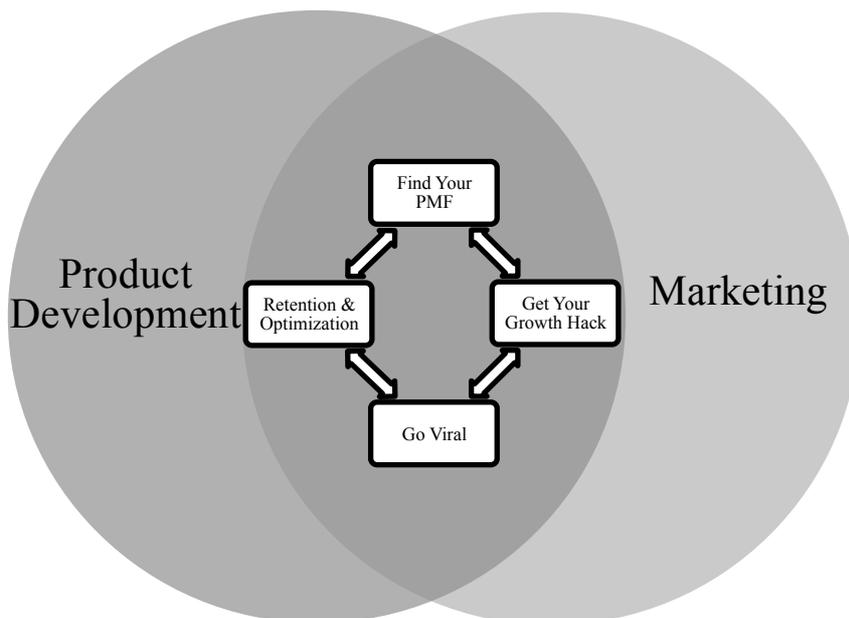


Figure 2: Framework of Growth Hacker. Inspired by Holiday (2013)

3 Methodology

3.1 Research Approach

The current academic study yields little to no research to the specific case of Growth Hacker Marketing. However, the lack of literature should not prevent the author from conducting the research (Pratt, 2009). To the author's initial understanding of the phenomenon of Growth Hacker Marketing, it could enrich the marketing management research field by adding the rarely discussed but seemed popular phenomenon in the entrepreneurial environment and startup culture. In order to bridge the gap between academy and real business world, an explorative research approach is selected as it improves clarification on ambiguous situations (Patton & Appelbaum, 2003).

Further, a qualitative approach is chosen. On the one hand, as qualitative studies are often applied to explore new areas and to build a theory about it, it suggests an appropriate way for the thesis. Meanwhile, induction is used for developing the theory based on empirical observations, indicating the assumption in line with the qualitative study. On the other hand, quantitative studies tend to exhibit the relationship between theory and research based on numerical data, in favor of a deductive approach (Bryman and Bell, 2007). The thesis will thus develop a framework of Growth Hacker Marketing based on qualitative study on the eight chosen cases.

3.2 Research Design

Bryman and Bell (2007) propose five types of research designs, including the cross-sectional design, case-study design, experimental design, longitudinal design and comparative design. In the thesis, a cross-sectional design is chosen as the emphasis of the research is on developing the framework of Growth Hacker Marketing through collecting general findings from several cases to answer the research questions. With a focus on the sample of cases rather than the unique contexts of individual cases, the case-study or comparative design is less applicable (Bryman & Bell, 2007).

To conduct the research, the author starts with evaluating general research questions, followed by thematizing the research through roughly reading the existing empirical sources (e.g. blog posts). With the selection of most relevant sites and subjects, the author found there are three cases receiving most popularity from diverse blogs as they gain exponential number of users within few years. Thus, Airbnb, Dropbox and Paypal are chosen as the representatives from

the secondary sources. Meanwhile, to enrich the idea presented in the cases, another five interviewees' experiences in five different startups executing Growth Hacker Marketing are added. Last, the author interprets the whole secondary data and categorizes them into three themes before an overall analysis in comparison with literature (Bryman & Bell, 2007).

3.3 Data Collection Method

In the thesis, the empirical data is inclusive of secondary data and analysis. There are two means to collect them. One is collected through the blog posts discussing Airbnb, Dropbox, and Paypal in the form of case studies. The author has selected at least five different sources after reviewing approximately hundred ones for each case. The other resource is the interviews conducted by Ryan Holiday (2013) with five different high-technology startups that have successfully reached rapid growth in their early stages. The interviewees comprised of several (co-)founders, and one Head of Growth. The author of the thesis has collected the raw material through requesting the original transcripts from Holiday (2013) and then summarized them in line with the previously identified three themes. Meanwhile, one may leave concerns on the variety scope of geography is not given in the chosen cases. To the point, the author would draw attention to the fact that Growth Hacker Marketing is derived from Silicon Valley with close relationship with its entrepreneurial environment. Thus, the startups coming from the area are considered as the more representative ones. Yet, the author failing short to collect the primary material is mainly due to the time restriction.

3.4 Data Analysis

Generally, analytic induction is applied as the author is interested in discovering an universal explanation of Growth Hacker Marketing rather than developing a grounded theory on it (Bryman & Bell, 2007). In specific, to interpret the secondary the transcripts in particular, a narrative analysis is conducted. As Bryman and Bell (2007) suggest, studying organizational narratives enables to identify issues relating strategy, referring to the constructivist view over positivist one while understanding Growth Hacker Marketing. Further, the secondary analysis of qualitative data is employed, as there is no obvious reason against using it though some concerns on the role of analyst as merely collector. Yet, in the thesis, the secondary analysis is interpreted and analyzed independently in line with the research questions. Further, the overall analysis presented in the session of discussion is conducted through the comparison with the concepts shown in the literature review. Particularly, the answer to the first research question is based on the comparative view; whereas the answer the second research question is based on the intersection with product development and marketing and framework of Growth Hacker Marketing.

3.5 Validity and Reliability

Some scholars argue the criteria (validity and reliability) for the quantitative research serves limited application to qualitative research, while others contend qualitative one could be evaluated with quite different criteria. Trustworthiness and Authenticity are therefore suggested while the later is not yet influential (Bryman & Bell, 2007).

Trustworthiness is composed of credibility, transferability, dependability, and confirmability. In specific, credibility parallels internal validity. To increase the validation, the author focuses on collecting and analyzing the secondary material with raw transcripts with the (co)-founders or Growth Hackers for each case. Next, transferability parallels external validity. As the eight cases are all high-technology startups situated in diverse industries such as hospitality, cloud storage, finance, music, shopping, and design, the results should be applicable to other Internet-based products developed by high-technology startups for. Yet, the other types of products might find the limitation to apply the Growth Hacker Marketing's framework, as the thesis offers no consideration on the wider scope of products in empirical part. Further, dependability and confirmability parallel reliability and objectivity respectively. Although the thesis is written by a single author, the author was cautious to discuss findings, ideas, concepts with several other auditors during the selection of the cases and interpretation of the concepts. Also, the author spares no effort to be neutral and open to the findings/interpretation through continuously considering feedback from at least ten peers from diverse backgrounds (Guba & Lincoln, 1985; 1994).

4 Results

This chapter shows the results of the three benchmarking case studies such as Airbnb, Dropbox and Paypal and another five interviewees' (Noah Kagan, Founder of AppSumo; Jesse Farmer: Co-founder of Dev Bootcamp, Co-founder of Everlane; Aaron Ginn: Head of Growth, StumbleUpon; Micah Baldwin: Founder of Graphicly; Founders of Sound Gecko) experiences in implementing Growth Hacker Marketing (Holiday, 2013). As the research questions focusing on understanding the unique characteristics of Growth Hacker Marketing and how high-technology startups implement it, product development and the promotional logic are considered as the key elements in literature review. Thus, three themes are identified: how startups conduct product development, how startups grow the number of users within short time and the framework of Growth Hacker Marketing.

4.1 Theme 1: How Startups Conduct Product Development

4.1.1 Product Market Fit

When looking closely in the interview transcript and other secondary material, most of the founders of startups point out that developing product market fit is the very first step to grow the business. The following paragraphs will provide a closer view on their original idea.

In the case of Airbnb, two of the co-founders, Brian Chesky and Joe Gebbia, started testing their business idea by offering air mattresses and homemade breakfast in their apartment to the lodgers at cheaper prices than the cost to live in hotel. Meanwhile, they built a simple website to target those lodgers attending Industrial Design Society of America conference in 2008. The first three offers were purchased at USD 80 per person and soon attracted several other inquiries for providing identical services in other international cities (Aeona, 2015; Brown, 2016). Therefore, Gebbia knows the business idea is feasible according to the feedback on the minimum viable product. He illustrates how he decided to pursue the business at that moment:

“ 3 people stayed with us, and we cooked them breakfast each morning. We became friends by the end, and they were grateful to have saved hundreds of dollars on their trip, and connect with actual people. We netted close to \$1000! After that first weekend when we hosted people on our airbeds, we received emails from all around the world asking when we would make the site available in place like Buenos Aires, London, and Japan... That was

basically our market research. People told us what they wanted, so we set off to create it for them. Ultimately while solving our own problem, we were solving someone else's problem too. We were at a point professionally where we were very ready to pursue our own idea.” (Interview Transcripts Collected from Allentrepreneur, 2009)

Moreover, Airbnb kept working on gaining customer insights to improve its service. For example, seeing the low growth rate in New York, Chesky and Gebbia personally flew there and stayed with Airbnb's 24 hosts to understand the key issue. They then found the low-quality images of the properties were the main hindrance preventing customers from booking a stay through Airbnb. Therefore, they fixed it by taking professional pictures for the hosts, which doubled the revenue in a month. The Photography Program was launched for hosts to schedule photographers to take professional pictures before posting (Brown, 2016). In the meantime, to conquer the trust issues between the hosts and guests on Airbnb, they initiated the Airbnb Social Connections, a function enabled showing among other's relationship on Facebook. Chesky says:

“This has been one of our most requested features, particularly for people that want to have something in common with the people they are staying with. Social Connections helps you find places to stay with mutual friends, people from your school or university, or hosts that your friends stayed with and recommend.” (Siegler, 2011)

As the previously mentioned enhancements drove Airbnb member's connection to over 16 million, Airbnb decided to optimize the product by engaging the community. The first thing they did was to add an extra feature, Wish Lists, to the current product. The function enabled users to search, collect and share the ideal properties while they were bored of the daily lives. Within four months, 45% users were engaged while another one million users were acquired.

Further, Airbnb developed the leap value for customers by distinguishing their service with the hotels,' offering the authentic experience with local connection. With the emphasis on hospitality, Airbnb Neighborhoods was launched for users to conduct interest-based search. Mapping more than 2000 neighborhoods with distinct contents featured with local experiences, the users could select where to stay according to their own interests. As shown in Airbnb's post, it illustrates how they deliver the leap in value to the customers.

“Our users have told us that location is the single most important criterion when choosing a place to stay. And with such overwhelming choice, travelers often have trouble planning their accommodations. ... But imagine if someone created a tool that matched you with the neighborhood that's right for your trip.”

Most importantly, apart from improving the product to pursue rapid growth, Airbnb also optimized the product according to customers' negative feedback. They had been working on the safety measures to deal with the increasing concerns, where the smoke detectors were required in the US market and more strict contracts with the hosts.

Similarly, Drew Houston, the co-founder of Dropbox, demonstrates the similar approach to find product market fit. At first, he detects that “file synchronization was a problem that most people didn't know they had” and wants to create Dropbox, serving as a solution that people cannot live without it. However, although the business idea seems attractive, it is hard for

most of the customers to imagine how the product works in reality. Thus, he fails short to gain answer for “if we can provide a superior customer experience, will people give our product a try?”

Meanwhile, it is challenging to develop a regular form of prototype for customers due to the high technical barrier and costs of online service component. In order to decrease the risks, Houston still wants to prove the market exists before fueling on the product development. Therefore, he comes up with an alternative to demonstrate the minimum viable product at lowest costs: a three-minute video displaying how he manipulates Dropbox on computer with his narrative and humorous references. This video then gives Houston confidence to work on developing the product by acquiring reliable market reaction from the early adopters. As he recites, “It drove hundreds of thousands of people to the website. Our beta waiting list went from 5,000 people to 75,000 people literally overnight. It totally blew us away.” (Ries, 2011)

In other cases, the similar patterns in product development are also identified. On the one hand, quality and characteristic of product itself is of importance. As Ginn (2013) suggests, *“A growth hacker can not grow forever on a broken product... More often than not most products are broken in some form or another.... your product is never really done.”* Also, Kagan (2013) indicates the right characteristic of products should be that of *“... people wanted to buy and share with friends / colleagues”* while Farmer (2013) describes the successful one as *“... Every feature in Everlane, from the first contact to the package being delivered, is designed to address and relieve these anxieties.”*

On the other hand, the logic of designing the product is to think as customers and keep improving the features according to their feedback. Baldwin (2013) suggests, *“... the psychology of why people love your product or brand is more important than the percentage that click on a link.”* Similarly, Ginn (2013) states, *“we mimic the user experience to test behaviors without a fully functioning backend.”* Founders of Sound Gecko illustrate the idea further by contending:

“We see ourselves in beta mode as SoundGecko was created to test the market and provide learning’s for the main personalised radio product our startup is developing. We often see people get so excited about SoundGecko and then look puzzled when we tell them its cool but just a way to get the big one right. So in terms of stepping it up we see our new product as a game changer that can cause a lot of disruption if done correctly.”

Ginn (2013) provides with a good example by describing a typical day for growth teamwork as sprint.

“At the end of every sprint, we launch at least one AB test. By AB test, I do not mean copy changes, I mean large change in flows or new growth features. Our sprints are very short and anything that cannot fit in that sprint is tossed or broken out. This is a forcing mechanism to keep the growth team focused on velocity not productizing features. ... Most of my team's iterations are "hacks" and quick experiments to tests assumptions (Ginn, 2013).”

4.2 Theme 2: How Startups Grow the Number of Users within Short Time

4.2.1 Network Effect on Digital Platform

In the case of Airbnb, they spared no efforts to distinguish the quickest way to acquire the users. After recognizing the large user base of its target market on Craigslist, they started to integrate the service to the platform. In other words, Airbnb planned to transfer the existing users on Craigslist to their website by proactively pulling them in and offering a better alternative to rent a house. They smartly manipulated the two-way connections from Airbnb to Craigslist as well as from Craigslist to Airbnb. Here are two examples. On the one hand, Airbnb added an additional but simple feature allowing its own users to quick post on Craigslist spontaneously (See Figure 3). Meanwhile, there was an automatic link back to Airbnb inserted in the post. Thus, while the other users were browsing Craigslist, they would easily visit back Airbnb's own website. On the other hand, Airbnb technically invited those users just posting their properties to re-post on Airbnb's website. Yet, to decrease the commercial feeling, Airbnb disguised itself with another customized name (See Figure 4) (Gooden, 2011). Although these strategies were not perfect, they promoted Airbnb by increasing its listings at next to zero cost within short time (Brown, 2016).

Quick Links

- [View/Edit Listings](#)
- [Reservations](#)
- [Post to Craigslist](#)
- [Standbys](#)
- [Reviews & Recommendations](#)
- [★ Starred Items \(7\)](#)

Post to Craigslist

Reach thousands of people, instantly by re-posting your Airbnb listing (photos, reviews, description) to Craigslist. Travelers will be redirected back to Airbnb to contact & book with you. [For help, click here.](#)

1. Select Listing

Queen Airbed in Central, Modern Apt

2. Customize title for Craigslist

Stay at 'Queen Airbed in Central, Modern Apt' by th

3. E-mail (will be hidden)

lukeemily@googlegroups.com

4. Craigslist Category

Vacation Rentals

5. Craigslist Market

SF bay area - sfc

Remind me when it is time to re-post

[Post to Craigslist](#)

Figure 3: Airbnb encourages their customers to connect to Craigslist (Chen, 2013)

Re: \$700 / 1br - Lake Tahoe - Lakefront Condo - Sleeps 4 (Tahoe City, CA) AirBNB | X

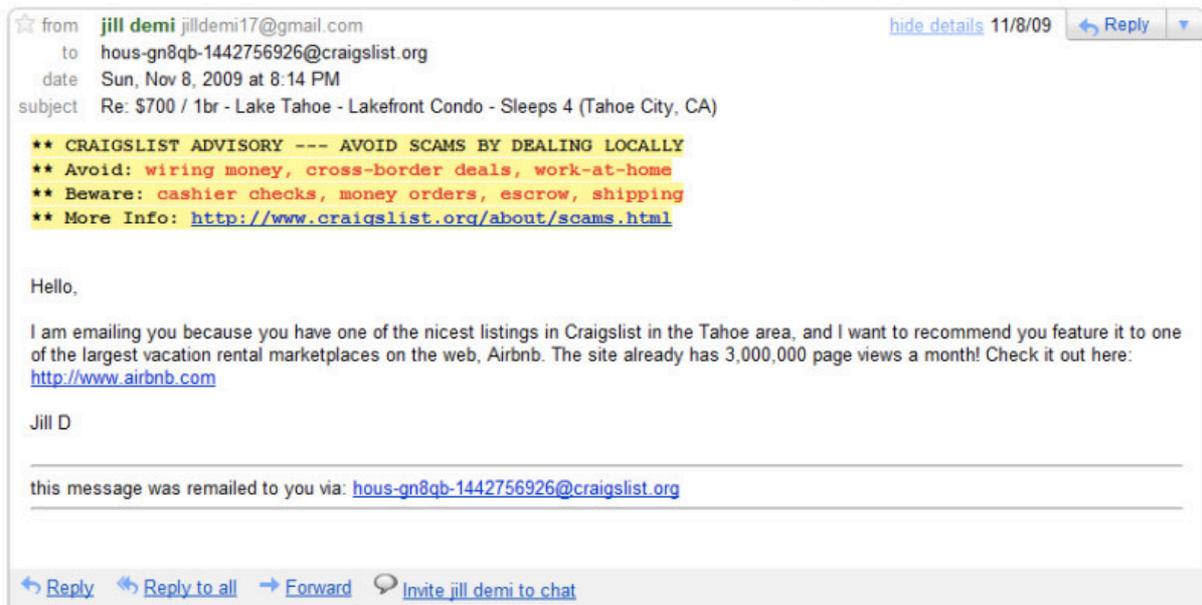


Figure 4: Anonymous email from Airbnb to encourage Craigslist’s users to re-post to Airbnb (Gooden, 2011)

In the other cases, similar concepts behind marketing decision can be recognized. Leveraging the existing resources to reach maximum users underlines most of the marketing strategies in startups, requiring innovation or the ambition to disrupt the market. This is the mainstream digital marketing approach fails to consider. Three examples are shown below.

“It boils down to being able to understand and empathize with the minds of others and having a model for how particular actions, copy, dynamics, features, etc. impact their thoughts.” (Farmer, 2013)

“... taking advantage of something for your own gain, aka you are finding tactical arbitrage before someone else does. From this foundation, tactics and your day- to- day may change based upon finding the best strategy to grow. Growth hackers are relatively agnostic on the method but religious on moving the metric.” (Ginn, 2013)

“... take advantage of the internet’s ability to let people be anonymous or someone else.” (Sound Gecko, 2013)

Furthermore, several means to generate users virally but organically in practice are suggested. First, create and engage the community for the product’s existing users, similar concept to retention marketing (Hanson & Kalyanam, 2007). Farmer (2013) summarizes how Everlane manipulates the viral flow: *“... by curating content, engaging the community, and building up a large audience on Tumblr over a 6 month period. Our potential customers became anxious and excited. What’s this new store? It seems interesting. What’s behind the door? I want to know I want to know! We then offered a means to relieve that anxiety by inviting 5 friends to get in on launch day.”* Also, similar strategies are also identified in Dropbox. It firstly pulls

new users to waiting lists, GetdropBox.com, and creates demo video to excite them before actually inviting them to use the service, followed by the referral system (Holiday, 2013). In Dropbox’s referral system, Dropbox incentivizes people to invite their friends by giving both sides 500MB free storages, increasing signups by 60% (Aoaeh, 2014; Bulygo, 2016; Wight, 2015). Meanwhile, Dropbox sustains the engagement by inserting sharing function into the product, allowing users to share the document with simple link to any others. Another example is send prompt emails to notify the left space the user has, which would not only remind users to use Dropbox but make invitation to their friends as solution to increase storage (Egan, 2012).

Second, connect product to the prestigious platform. Sound Gecko attracts almost “100,000 visits and a doubling of the user base in a month” after its submission to Hacker News. Moreover, the startup strategically partners with Microsoft by integrating its product to Sky Drive. The founders explains “... I crossed paths with the product manager of Microsoft Sky Drive at an event, I quickly pitched him our application and explained how we could do a great integrations with his platform. Then I asked him what he was interested in... This conversation resulted in SoundGecko becoming a launch partner for the next Sky Drive release. A few weeks later we were featured on their apps page and in a mail out that went to over a million Sky Drive users from around the world.” Similarly, in the case of Dropbox, they provide each connection to the social media platform with 125MB storage (See Figure 5) (Bulygo, 2016). Also, Paypal demonstrates the same idea by partnered with eBay, where they recognized the widest popularity for its payment among users. Thus, the logo of Paypal was automatically displayed as an alternative for transaction on eBay. In each transaction, the customers of eBay will see Paypal’s logo right next to other notable payment systems such as Visa and MasterCard (See Figure 4), which provides the endorsement of Paypal naturally. This partnership then led Paypal to account for over 70% transactions on eBay (Papineni, 2014).

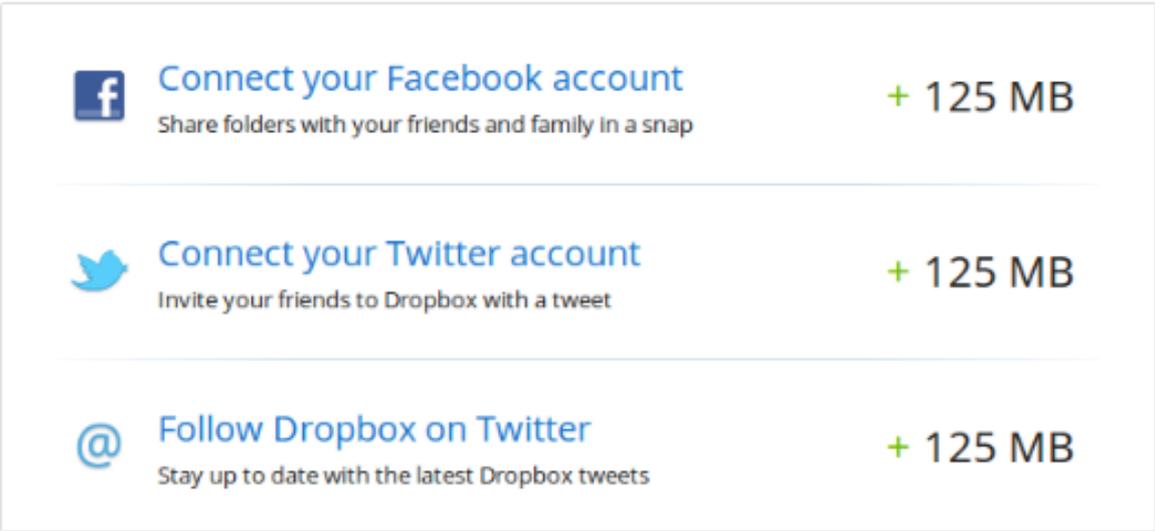


Figure 5: Dropbox provides free space for those who connect to the mainstream social media platform (Bulygo, 2016)



Figure 6: Paypal shown as an alternative payment next to well-known brands on eBay (copied from www.ebay.com)

Third, optimize key users' experience and use those users as a long-term marketing tool. Sound Gecko believes *"Target users who will love your product and more will follow"* after recognizing a large amount of people spare no effort to attract others. These key users provide good insight for improving product performance. Thus, the startup decides to focus on satisfying and attracting so-called key users through continuous experimentation. Lillrud (2016) also agrees on the strategy by addressing *"... our goal is to reach out users in one to many. If we're able to make one user happy in return she can spread us out to many,"* pointing out the importance of the sustainable growth.

4.2.2 Measure the Effect with a Focus on ROI

It is obvious that Airbnb tend to conduct A/B tests with careful track on ROI. For example, in France, Airbnb took approaches to experiment marketing spontaneously. The offline marketing campaigns were implemented in half of the randomly chosen cities while the online ads targeted the other half cities. In comparison, they found the former approach resulted in the cost per acquisition five times more efficient than the later. The human presence was therefore recognized as a more effective way to enter new markets. Based on this finding, Airbnb t achieved rapid growth quickly in the international expansion (Brown, 2016).

Also, implementing A/B testing to maximize ROI before scaling the marketing decision could be identified while Airbnb was developing the referral program. Airbnb had sent out two kinds of promotional emails to the potential referrers spontaneously. One (Figure 7: left) was written in self-interested languages while the other one was in altruistic style (Figure 7: right). Soon they found the later resulted in better conversion rate. Thus, they widely applied the altruistic approach in referral system, which increased bookings by approximately 25% in 2014. Further, with a focus on ROI, Airbnb also recognized the users who were acquired through referral system tended to be more loyal than the average one and created more revenue afterwards (Brown, 2016). Yet, when reaping the positive outcomes through referral system, Airbnb claimed their main goal was to improve user experiences over growth (Brown, 2016).

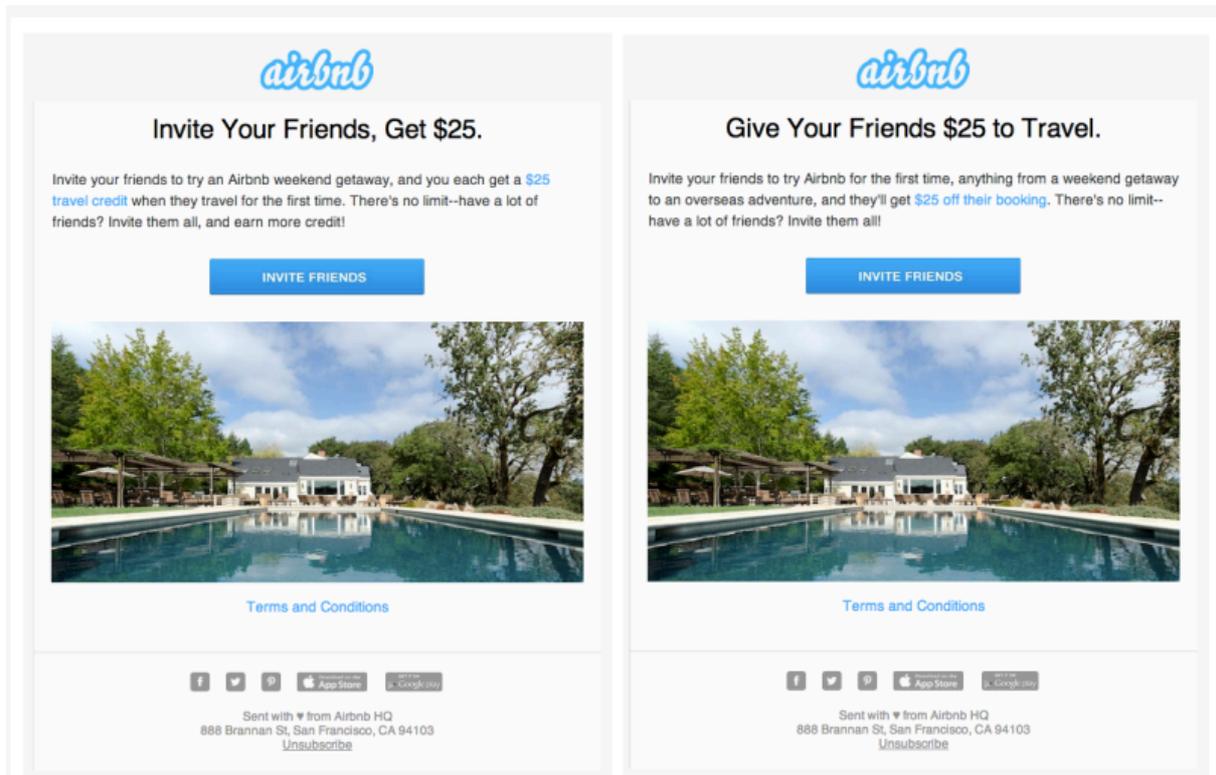


Figure 7: Two types of invitation letter tested by Airbnb (Brown, 2016)

In the case of Dropbox, although the referral system helped them acquire users rapidly, they carefully measure the effects by defining the activation as the client dropped one file after installment. Further, with the clear definition of the metric, Dropbox continued to track active users' tendency. Several vital questions they would like know were "How many of them visited the referrals page? How many of those visitors tweeted? How many of those tweets got clicks, or how many clicks did they get? How many people signed up as a result of those clicks?" This approach will then provide insight such as which channels are more effective, who/where the crucial users are and how they are attracted, enabling the measurement on the cost benefits as. To that end, it is because Dropbox tracked and analyzed most of the marketing tasks in this way that they could improve decisions based on rational comparisons on diverse tasks, which in turn achieve predicable and desirable results (Kirigin, 2014).

Also, Paypal demonstrates another good example of marketing decision with a focus on ROI. Although they design the referral program, which created 7-10% daily growth in the user base and reached five million within five months, they customize the amount of bonuses for each referral according to the ROI. As the founder of Paypal, Elon Musk illustrates, *"we started off first by offering people \$20 if they opened an account. And \$20 if they referred anyone. And then we dropped it to \$10. And we dropped it to \$5. As the network got bigger and bigger, the value of the network itself exceeded any sort of carrot that we could offer."* To be specific, it is the customer acquisition cost (CAC) that supports the amount of bonuses. First, Paypal found \$20 to acquire a single number of new customers is the lowest CAC while the traditional advertising did not facilitate the desirable results. Yet, they detected the returns

from each customer was diminishing as the number of users massively scaled up. Also, according to their calculation, the large number of users itself would ultimately become incentive enough to attract new users to sign in, making the original bonuses redundant. Next, Paypal found CAC started to exceed customer lifetime value. In other words, the \$20 bonuses became costly for the business. Thus, the lowering bonuses were suggested while the critical number of users grew. To that end, there were no bonuses offered for the referral (Veerasamy, 2014).

4.2.3 Awareness before Branding

Last, regarding the branding, it is clear that Airbnb did not emphasize on it until they already reached rapid business growth. Before that, what they all focused on was to generate awareness among customers. Gebbia illustrates, *"Those brand identities were created in a matter of hours, for a short deadline, and only for temporary use,"* followed by Chesky saying *"We were growing so fast, it became one of those things where you say you'll figure it out later, but then you never end up doing it because you're too busy."* Yet, as Airbnb moved their focus on international expansion and increasing impression of inclusive hospitality brand, there was a need to rebrand. Thus, in July 2014, Airbnb redesigned its logo addressing the belongings, in line with experiences, sharing, and community (Brown, 2016).

4.3 Theme 3: Framework of Growth Hacker Marketing

To sum up, the startups tend to reach rapid growth through experimentation in combination with a data-driven decision. Specifically, in the product development process, they start with testing minimum viable product and looking for product market fit. Gaining customer insights through being close to them underlines the whole process while continuous improvement to meet their needs is of paramount importance. This process serves as the foundation of the following marketing strategies. As for marketing, the startups baldly execute any approaches at low costs to grow number of users virally while discovering where the large targeted user bases are. Most importantly, behind each action, it is the scientific experimentations with careful control that support it. Moreover, once they reach rapid growth, they never satisfy with the results. Instead, they understand that sustaining the user retention and experience optimization is the key to surviving in the competitive environment nowadays. Therefore, most of them work on customer engagement and build the community to strengthen the networks among existing customers. Further, they connect marketing back to product development by immediately utilizing the product features according to the firsthand feedback from the community. Meanwhile, it is noticeable that the whole process of Growth Hacker Marketing is relied on the tight interaction between product development and marketing. To that end, although each of the startups may pursue different strategies in terms of Growth Hacker Marketing, their general and common goal is starting with the acquisition of a large amount of users at little to no cost within a short time. Most of them do not put emphasis on branding before reaching rapid growth in the user base.

5 Discussion

5.1 RQ1: What Differentiates Growth Hacker Marketing from Other Marketing Approaches?

According to the previous discussion in the literature review, Growth Hacker Marketing differentiates from either transaction or relationship marketing in terms of product development and promotional logic. This argument is supported by the findings shown in the session of results. Although the empirical data falls short to demonstrate how other firms/startups traditionally implement transaction or relationship marketing, the chosen cases provide insights on how Growth Hacker Marketing does not follow the traditional logics. Thus, the comparison between the literature and results is reasonable to answer the first research question.

In terms of product development, both Airbnb and Dropbox show the importance of minimum viable products (MVP) in order to test its targeted markets. This approach aims to use prototype as a basis of the following product development. Even though they have reached the rapid growth, the optimization on the same product is in progress. It is the strong belief in the product market fit comes first that makes Growth Hacker Marketing different. Meanwhile, in most of the cases, it is hard to find any moments that the startups see their products “finished,” indicating the distinct approach than transaction marketing.

As for the promotional logic, it is clear to see that most of the startups focus on growing the number of users and seldom mention how they build brands. Further, several Growth Hacker Marketing strategies all implemented to create users virally at the low costs. Although some may argue that it follows the same logic for relationship marketing, the ambition to insert virality features into product makes Growth Hacker Marketing non-traditional. For example, Dropbox makes sharing the files as easy as just copying the link. Thus, the other customers without Dropbox accounts will be simply attracted to activate the product once they receive the link from friends. This naturally creates interaction among customers and builds the strong community to make users stick to it. Relationship marketing, however, barely mentions the concepts.

Next, another crucial uniqueness of Growth Hacker Marketing is the data-driven decision making with a focus on ROI. According to Paypal, they send out a large amount of real money just to attract customers to register and share their product. Yet, they carefully measure the margins on each customer at the same time. They therefore keep decreasing the bonuses as the number users grow. Not until the CAC exceeds customers’ lifetime value do they stop the implementation. Neither do transaction nor relationship marketing consider the point in the promotional logic.

Moreover, the blurring line between product development and marketing is found in most of the cases. The close interrelationship between product development and marketing outlines most of the Growth Hacker Marketing strategies but receives limited discussion in transaction and relationship marketing. As shown in the session of results, it is common that startups see modification on product function/features as a more effective marketing strategy than plainly launching online/offline-marketing campaigns. Most importantly, Growth Hacker Marketing approach is highly relied on experimentation, scientific testing, and tracking. The promotional logic is extremely dynamic instead of straightforwardly selling a product from thorough planning to execution.

To sum up, the empirical data supports the comparative view mentioned in literature review on the three marketing approaches. Yet, it is not clear to draw conclusion on whether Growth Hacker Marketing is a new marketing shift or if it is a complement to transaction and relationship marketing.

5.2 RQ2: How Do High-technology Startups Implement Growth Hacker Marketing?

5.2.1 Product Development

In the case of Airbnb and Dropbox, it is clear to see they create minimum viable products to test if they are product market fit in the beginning. The former sells their service with three airbeds and homemade breakfast to whom attended the conference on a self-built website while the latter makes a simple demonstration video to explain how Dropbox works on the computer. Although the minimum viable products are not perfect, they help the founders understand the firsthand reaction from the customers and which products are wanted. As their products are novel and most potential users do not have real-world experiences, this approach could correspond to Hippel's (1986) theory on prototyping for a sample of users to try. Yet, in the case studies, although it is not clearly shown whether the founders identified and chose the "lead users" to test the minimum viable products (Hippel, 1986), both startups promote their MVP in a way to attract their targeting users.

Further, in most of the cases, the startups address they want to build products that satisfy the unmet needs by focusing on the commonalities in the features that most people value (Kim & Mauborgne, 1997). According to Kim and Mauborgne (1997), this approach may enable the discontinuous leap on value proposition in product and lead to strategic growth. Airbnb supports the idea by creating an entire trip from a place to stay to the authentic experience and therefore launches Airbnb Neighborhoods, which later on disrupts the hotel markets. Moreover, drawing attention to the business system, it is obvious that the entrepreneurial environment naturally encourages the process of trial and error during developing products in order to deal with the high uncertainty, confirming Kumar's et al (2000) assumption.

Also, the patterns of solving problems for the customers within the whole set of using or not using the products are identified in most of the cases. For example, founders of Airbnb did not know the real reason preventing customers from booking until they personally stayed with the hosts in New York. Similarly, Everlane focuses on releasing customer's anxiety in the whole purchasing sets including contacting to delivering. These findings support Florin's et al (2007) theory.

Yet, in the cases, no startup clearly shows it relies on data to decide if the function of features of the product. Instead, they start building the products as long as they see a large amount of targeted groups interested in it. This finding therefore cannot confirm the data-driven decision making discussed in the literature review. However, the approach is found more evident in marketing decision.

5.2.2 Marketing

In most of the cases, they mainly develop and execute their Growth Hacker Marketing approaches via an internet-based digital platform. Specifically, it is obvious that the approaches such as the referral system highly relies on customers' social networks to grow rapidly, supporting Leeftland's et al (2013) theory that the empowered customers tend to make decision according to other customers' feedback. Meanwhile, although the startups pursuing growth in user bases over branding while implementing Growth Hacker Marketing differentiates from digital marketing (Chaffey, 2009; Tiago & Verissimo, 2014), they all agree on the increasing importance of community connections and virality amplified by the technological convergence and the multiplication of devices (Piñeiro-Otero & Martínez-Rolán, 2016). Also, the startups widely applied innovative ways to reach customers confirms Scott's (2013) theory on the successful way to reach millions of users online in the low-cost digital world. Airbnb shows the good example of firstly executing the two-way approach to drive customers between Craigslist and its own platform.

Also, it is not evident that the startups develop Growth Hacker Marketing plan by following the sequential stages suggested in SOSTAC system. Yet, if looking closer to each element of SOSTAC, there are several concepts could be supported by the cases. For example, when the startups are building the customer engagement system, they focus on designing interactive function, intelligently collecting customers behavior with URL track, sending customized messages (e.g. Airbnb email to the potential customer with regard to the content he/she posts), and integrating cross-platform, confirming the 4Is underlying new communication characteristics under the strategy phase (Chaffey, 2009). Another example is Dropbox's landing page and reminder email's interface, featured by a simple but clear user experiences. This corresponds to the 4Cs under the tactics phase (Chaffey, 2009).

Furthermore, the most widely employed Growth Hacker Marketing strategies are in line with network science mentioned in the literature. The referral system applied by Airbnb, Dropbox and Everlane confirms the local clustering phenomenon and opt-in approach for creating trust in social networks. Also, in theory, the network connections grow faster than the number of

users which can explain why most of the startups tend to engage their customers by building online communities. Meanwhile, most of the startups tend to introduce minimum viable products very early, followed by the continuous improvements, supporting the argument of speed of shortening product life cycle amplifying the creation of beta version and its rapid improvements. Also, in the case of Airbnb, when it was officially connected to Facebook and allowing users to see the wider connection among each other, the user base grew rapidly again. Similarly, in the case of Dropbox and Sound Gecko, they also experienced the viral growth after connecting to the prestigious platforms. The expectation of publicity and celebrity in the networking world can illustrate this phenomenon. As suggested in the literature review, customer expectations become powerful when networks are involved. Thus, customers are prone to choose the winner-feeling products/services that with celebrity and publicity on the Internet (Hanson & Kalyanam, 2007).

5.2.3 Data-driven Decision Making

In the case of Airbnb, they employ several A/B testing in order to decide which approach could yield better results. The logic was dominated by ROI as they mainly assess the results according to “cost per acquisition,” supporting Roger & Sexton’s (2012) theory on the demand of measurement of ROI in today’s dynamic environment. Further, most cases indicate the startups conduct dozens of different Growth Hacker Marketing approaches within few years. Thus, it is more important for them to rely on what data shows consumer behavior in order to make an assertive decision within a short time (Salvador & Ikeda, 2014). Also, it is clear to see most of the startups are more interested in retaining the existing users than acquiring new one by themselves, confirming the AARRR model’s assumption (Chen & Du, 2016). Yet, they also need continuously growth in users. Faced with the limited resources, they create incentives for the “hub” to attract new ones instead (Hanson & Kalyanam, 2007). Next, they spare no effort on satisfying those hubs and improve the products based on their feedback.

5.2.4 Framework of Growth Hacker Marketing

Last, most of the cases seem to employ the framework of Growth Hacker Marketing suggested in the literature review. Particularly, the whole process of Growth Hacker Marketing shows the close interrelationship between product development and marketing. Moreover, they tend to build a marketing function such as sharing within the product itself. With the basis of the previous discussions on the literature review and its application on the empirical part, the author is therefore redesigning the framework of Growth Hacker Marketing (See Figure 2). This framework is considered as the marketing alternative applied by the high-technology startups. There are three steps: i) Develop the product to be market fit while testing minimum viable product. The key is to think like customers by staying close to

them. ii) Recognize and place the specific growth hack where there are large targeted user bases and connect to it. Usually it takes a numbers of experimentations to find the most suitable way to grow virally. In order to reach rapid growth within a short amount of time, it is important to try different ways with a focus on ROI at the same time. Meanwhile, keep the network effect in mind and try to grow a community over a single participant. Behind each marketing decision, there should be data to support it. iii) Continue to optimize the users experiences by improving the products or launching other engagement campaigns to retain the existing customers. In return, these existing customers can acquire new users for the startups, which may sustain the growth in the long run.

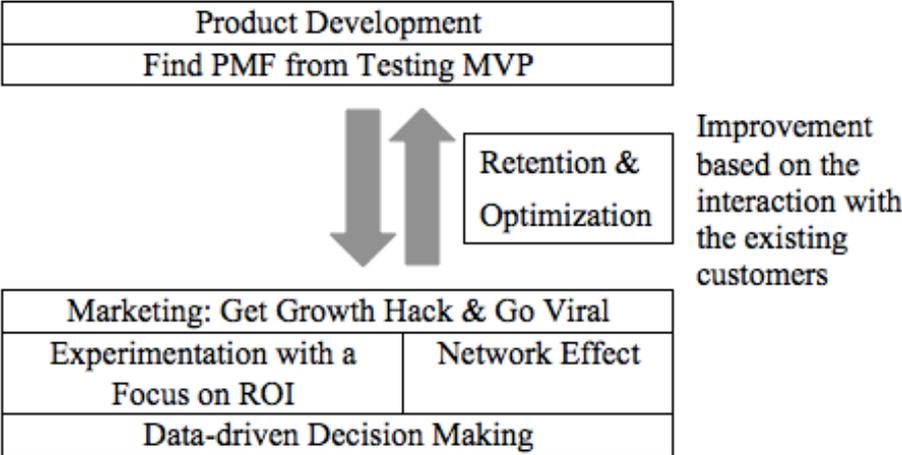


Figure 8: Framework of Growth Hacker Marketing (Prepared by the author)

6 Conclusion

6.1 Research Purpose

After the Dotcom burst, Growth Hacker Marketing has been gaining popularity mainly among startups. With its focus on ROI in marketing and data-driven decision-making process, it allows startups to scale its business at extremely low costs. While involving product development into marketing process points out the uniqueness of Growth Hacker Marketing, the continuous interaction between the two parts underlines the core of it. Meanwhile, according to the chosen eight cases and the previously discussed literature, the framework of Growth Hacker Marketing is mapped.

Specifically, the research purpose is to develop a framework of Growth Hacker Marketing that receives wide implementation by high-technology startups to achieve rapid growth within a short time, followed by the two research questions:

- 1) What differentiates Growth Hacker Marketing from other marketing approaches?
- 2) How do the high-technology startups implement Growth Hacker Marketing?

To answer the first question, the author has presented the comparative view on transaction marketing, relationship marketing and Growth Hacker Marketing in the literature review. Next, the comparison serves as a structure to discuss the eight cases and what is the differentiation between Growth Hacker Marketing and the others. Further, to answer the second question, the authors has illustrated several similar and related concepts in the fields of product development and marketing to provide a better understanding on Growth Hacker Marketing. It is then followed by the empirical data, which has been analyzed and summarized through cross-case study. In the session of discussion, the general findings on how the eight startups implement Growth Hacker Marketing are shown and summarized with a framework. Thus, from a marketing perspective, the overall purpose is achieved and accounted for in the thesis.

6.2 Practical Implications and Future Research

For the practical implications, the framework of Growth Hacker Marketing shown in the discussion is mainly applicable for the startups to development Internet-based products. Also, although the framework may find its limited application by other types of products, it is

considered as an efficient and effective way to grow the user base. Further, as the framework offers no implication on branding, it may not serve as the best marketing approach for any other organizations putting emphasis on both the images of the brands and growth.

As for the future research, there are two aspects. First, for the conceptualization of Growth Hacker Marketing, it would be valuable to add a project management perspective such as Scrum approach. The reason is that Growth Hacker Marketing shows dynamic process in both product development and marketing as the unique part than other marketing approaches. Also, the implementation highly relies on experimentation may render managerial skills to amplify the results. Thus, it is necessary to address the project management to understand Growth Hacker Marketing. Second, for the framework, the future study could test its application to other entities such as the established firms that want to grow business for their Internet-based products.

In conclusion, the framework of Growth Hacker Marketing not only demonstrates a clear view on how nowadays startups work in reality but also illustrates the basis of product development and marketing, the close interaction between them and the continuous optimization and retention. Yet, there are limitations in the research. Thus, the project management approach and wider application needs to be tested in the future study.

References

Aeona (2015) *Business & entrepreneur resource | empowering entrepreneurs*. Available at: <http://aeona.com.au/unicorn-case-study-airbnb/> (Accessed: 12 May 2016).

Allentrepreneur (2008) Available at: <https://allentrepreneur.wordpress.com/tag/airbnb/> (Accessed: 5 May 2016).

Berger, J. (2013) *Contagious: Why things catch on*. New York: Simon & Schuster.

Brown, M. (2016) *Airbnb: The growth story you didn't know*. Available at: <https://growthhackers.com/growth-studies/airbnb> (Accessed: 29 May 2016).

Bryman, A. & Bell, E. (2007). *Business Research Methods*. Oxford/New York: Oxford University Press. Second Edition.

Bussgang, J. and Benbarak, N. (2016) *Every company needs a growth manager*. Available at: <https://hbr.org/2016/02/every-company-needs-a-growth-manager> (Accessed: 29 April 2016).

Calantone, R.J. and Di Benedetto, C.A. (2011) 'The role of lean launch execution and launch timing on new product performance', *Journal of the Academy of Marketing Science*, 40(4), pp. 526–538.

Chaffey, D. (2009) *E-business and e-commerce management: Strategy, implementation and practice*. 4th edn. Harlow, England: Financial Times Prentice Hall.

Chen, A. (2012) *Growth hacker is the new VP marketing*. Available at: <http://andrewchen.co/how-to-be-a-growth-hacker-an-airbnb-craigslist-case-study/> (Accessed: 1 May 2016).

Chen, H., Chiang, R.H.L. and Storey, V.C. (2012) 'Business intelligence and Analytics: From big data to big impact', *MIS Quarterly*, 36(4), pp. 1165–1188.

CHEN, Q., China, S., Technology and DU, L. (2016) 'Managing mobile market users based on the AARRR model in the age of big data', *Management Science and Engineering*, 10(1), pp. 58–66.

Chen, Y., Fay, S. and Wang, Q. (2011) 'The role of marketing in social media: How online consumer reviews evolve', *Journal of Interactive Marketing*, 25(2), pp. 85–94.

Davenport, T.H., Barth P., & Bean R. (2012) How 'big data' is different. MIT Sloan Management Review, July.

Deeb, G. (2014) *Growth hacking: Marketing for startups*. Available at: <http://www.forbes.com/sites/georgedeeb/2014/07/03/growth-hacking-marketing-for-startups/#7cb41cc03cf1> (Accessed: 1 May 2016).

- Diamantopoulos, A., Schlegelmilch, B.B. and Du Preez, J.P. (1995) 'Lessons for pan-European marketing? The role of consumer preferences in fine-tuning the product-market fit', *International Marketing Review*, 12(2), pp. 38–52.
- Donckers, D. (2013) *Startup marketing: A guide to growth hacking*. Available at: <http://www.donckers.co/startup-marketing-a-guide-to-growth-hacking> (Accessed: 30 April 2016).
- Dumbill, E. (2013) 'Making sense of big data', *Big Data*, 1(1), pp. 1–2.
- Egan, J. (2014) *Case study: Dropbox invites*. Available at: <http://jwegan.com/growth-hacking/case-study-dropbox-invites/> (Accessed: 15 May 2016).
- Florin, B, Callen, B, Pratzel, M & Kropp, J (2007) Harnessing the power of consumer insight. *Journal of product and brand management* vol 16, 2.
- Gooden, D. (2011) *How AirBnB became a Billion dollar company*. Available at: <http://davegooden.com/2011/05/how-airbnb-became-a-billion-dollar-company/> (Accessed: 12 May 2016).
- Gopalkrishnan, V., Guszczka, J., Lewis, H., & Steier, D.M.. (2012). Big data, big business: bridging the gap. Proceedings of the ACM SIGKDD International Conference on Knowledge Discovery and Data Mining. KDD.
- Grönroos, C. (1994) From Marketing Mix to Relationship Marketing: A paradigm shift in marketing, *Management Decision* 32(2): 4-20.
- Guba, E. G., and Lincoln, Y.S. (1994). 'Competing Paradigms in Qualitative Research', in N. K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Gummesson, E. (1987) The New Marketing – Developing Long-Term Interactive Relationships, *Long Range Planning* 20(4): 10-20.
- Gummesson, E. (1997) Relationship Marketing as a Paradigm Shift: Some conclusions from the 30R approach, *Management Decision* 35(4): 267-272,
- Hanson, W.A. and Kalyanam, K. (2007) *Internet marketing and e-commerce*. United States: Thomson South-Western.
- Holiday, R. (2012) *Everything is marketing: How growth hackers redefine the game*. Available at: <http://www.fastcompany.com/3003888/everything-marketing-how-growth-hackers-redefine-game> (Accessed: 12 April 2016).
- Holiday, R. (2014) *Growth hacker marketing: A Primer on the future of PR, marketing and advertising*. United Kingdom: Profile Books.
- Howe, V., Mathieu, R.G. and Parker, J. (2000) 'Supporting new product development with the Internet', *Industrial Management & Data Systems*, 100(6), pp. 277–284.

Kim W C & Mauborgne, R (1997) Value Innovation. The Strategic Logic of High Growth. Harvard Business Review, January

Kirigin, I. (2014) *Growth hacking with Facebook and Dropbox*. Available at: <https://www.heavybit.com/library/video/growth-hacking-with-facebook-and-dropbox/> (Accessed: 18 May 2016).

Kotler, Keller, Ang, Leong and Tan. (2012) *Marketing Management: An Asian Perspective*. Fifth edition. Prentice Hall.

Kotler, P. and Levy, S. (1969) Broadening the Concept of Marketing, *Journal of Marketing* 33(1): 10-15.

Kumar, N, Scheer, I & Kotler, P (2000) From Market Driven to Market Driving. *European management journal*, Vol 18, Issue 2, 129-142.

LaValle, S., Lesser, E., Shockley, R., Hopkins M.S. and Kruschwitz, N. (2010) Big data, Analytics and the path from insights to value. MIT Sloan Management Review, December.

Leeflang, P.S.H., Verhoef, P.C., Dahlström, P. and Freundt, T. (2014) 'Challenges and solutions for marketing in a digital era', *European Management Journal*, 32(1), pp. 1–12.

Lincoln, Y.S., and Guba, E. (1985). *Naturalistic Inquiry*. Beverly Hills, CA: Sage.

Papineni, L. (2014) *Top 10 popular growth hacks of all time*. Available at: <http://www.appvirality.com/blog/top-10-popular-growth-hacks-of-all-time/> (Accessed: 12 May 2016).

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985) 'A conceptual model of service quality and its implications for future research', *Journal of Marketing*, 49(4), p. 41. doi: 10.2307/1251430.

Patel, N. and Taylor, B. (2013) Available at: <https://markstaton.files.wordpress.com/2013/11/the-definitive-guide-to-growth-hack.pdf> (Accessed: 29 May 2016).

Patton, E., & Appelbaum, S. H. (2003). The Case for Case Studies in Management Research. *Management Research News*, 25(5), 60–71.

Piñeiro-Otero, T. and Martínez-Rolán, X. (2016) 'Understanding digital Marketing—Basics and actions', in *Management and Industrial Engineering*. Springer Science + Business Media, pp. 37–74.

Power, D.J. (2014) 'Using "big data" for analytics and decision support', *Journal of Decision Systems*, 23(2), pp. 222–228.

Pratt, M. (2009). For the Lack of a Boilerplate: Tips n Writing up (and Reviewing) Qualitative Reserach. *Academy of Management Journal*, 52(5), 856–862.

Provost, F. and Fawcett, T. (2013) 'Data science and its relationship to big data and data-driven decision making', *Big Data*, 1(1), pp. 51–59.

Ries, E. (2011) *How DropBox started as A minimal viable product*. Available at: <http://techcrunch.com/2011/10/19/dropbox-minimal-viable-product/> (Accessed: 30 May 2016).

Ries, E. (2011) *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. New York: Books on Tape.

Salvador, A.B. and Ikeda, A.A. (2014) 'Big data usage in the marketing information system', *Journal of Data Analysis and Information Processing*, 02(03), pp. 77–85.

Scott, D.M. (2013) *The new rules of marketing & PR: How to use social media, online video, mobile applications, Blogs, news releases, and viral marketing to reach buyers directly*. United States: Wiley.

Sexton , D., Ringer R. (2012) Marketing ROI in the Era of Big Data. Columbia Business School. March.

Siegler, M. (2011) *Airbnb Cozies up to Facebook to help you feel more at home when away from home*. Available at: <http://techcrunch.com/2011/05/09/airbnb-social-connections/> (Accessed: 6 May 2016).

Spiess, J., T'Joens, Y., Dragnea, R., Spencer, P. and Philippart, L. (2014) 'Using big data to improve customer experience and business performance', *Bell Labs Technical Journal*, 18(4), pp. 3–17.

Tiago, M.T.P.M.B. and Veríssimo, J.M.C. (2014) 'Digital marketing and social media: Why bother?', *Business Horizons*, 57(6), pp. 703–708.

Van Waterschoot, W. and Van den Bulte, C. (1992) The 4P Classification of the Marketing Mix Re-visited, *Journal Marketing* 56 (4): 83-93.

Vargo. S.L. and Lusch, R.F. (2004) Evolving to a New Dominant Logic for Marketing, *Journal of Marketing* 68(1): 1-17.

Vasquez, M.G. (2014) *Sean Ellis: The rise of the growth hacker*. Available at: <http://blogs.wsj.com/accelerators/2014/05/29/sean-ellis-the-rise-of-the-growth-hacker/> (Accessed: 20 May 2016).

Veerasamy, V. (2014) *PayPal's referral program: A legendary growth hack*. Available at: <http://www.referralcandy.com/blog/paypal-referrals/> (Accessed: 29 May 2016).

von Hippel, E. (1986) 'Lead users: A source of novel product concepts', *Management Science*, 32(7), pp. 791–805.

Winston, W., Albright, S. and Zappe, C.J. (2010) *Data analysis and decision making - 4th edition*. 4th edn. United States: Cengage Learning.

Zach Bulygo, N. (2016) *The 7 ways Dropbox hacked growth to become a \$4 Billion company*. Available at: <https://blog.kissmetrics.com/dropbox-hacked-growth/> (Accessed: 29 May 2016).

Zott, C. and Amit, R. (2007) 'The fit between product market strategy and business model: Implications for firm performance', *Strategic Management Journal*, 29(1), pp. 1–26.