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Attaining Success through Growth Hacking

Case: MyChat – Social Chat App from MySQUAR

LAHTI UNIVERSITY OF APPLIED SCIENCES
Faculty of Business Studies
Degree Programme in International Business
Bachelor's Thesis
Autumn 2016
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ABSTRACT

Over the past years, app industry has many times witnessed the incredible: app startups achieving unprecedented growth rate with little to no resources. The one held accountable for such success was growth hacking - a new practice that embraces both marketing and product development.

The case company, MySQUAR PTE LTD, is an international app startup dedicated for Myanmar. The company has developed and released many apps in the market, among which stands MyChat, its flagship social chat app. At the end of 2016, MYSQUAR is going to release a new version of MyChat, which is referred to as MyChat 2.0. The company therefore needs a plan that can secure the success of the launch while laying foundation for future growth.

The main objective of this thesis is to assist the case company in formulating a launch strategy for MyChat 2.0 by providing (1) insights into the theory of growth hacking, (2) examples of its practices, and (3) an implementation plan constructed based on the findings. For that, this thesis adopts a deductive research approach, employs a qualitative research method, and collects both primary and secondary data.

This thesis is divided into three main parts: theory, practice and implementation. First, the authors study theoretical basics of growth hacking as well as analysis tool. Second, the authors look into the practices that the historical cases have utilized to growth hack, and that are viable for the case company. Third, the authors analyze the app MyChat, and then incorporate earlier findings into the results to formulate an implementation plan which the company can undertake to launch MyChat 2.0.

Key words: app, future growth, growth hacking, launch strategy, launch success, Myanmar, MySQUAR, MyChat.

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GLOSSARY

Android: A mobile operating system developed by Google Inc.

APK: Android Application Package

CPA: Cost Per Acquisition

DAU: Daily Active Users

iOS: A mobile operating system developed by Apple Inc.

MAU: Monthly Active Users

MVP: Minimum Viable Product

OS: Operating System

PMF: Product Market Fit

ROI: Return On Investment

SDK: Software Development Kit

UI: User Interface

UX: User Experience

Windows Mobile: A mobile operating system developed by Microsoft Corp.

1 INTRODUCTION

To give a thorough first look at the thesis, the following six fundamentals are covered respectively in this chapter: research background, objectives and research questions, scope and limitations, research methodology and data collection, theoretical framework, and thesis structure. By the end of this chapter, the readers can learn about not only the principles and motivations behind this thesis, but also an outline map of where it is heading.

1.1 Research background

In 1962, J.C.R. Licklider envisioned a “Galactic Network”, which he described as a universally interconnected network of computers (History.com 2010; Leiner, Cerf, Clark, Kahn, Kleinrock, Lynch, Postel, Roberts & Wolff 2016). His concept at the time was one of the very first bases of the Internet we have today. More than fifty years has passed, the Internet is now considered a basic human right (United Nations Human Rights Council 2016, 1-4), and is the backbone of countless technological breakthroughs, provoking immense changes to our lives and our society (Vîrjan 2013, 117-124; Pont 2013, 2). One major change the Internet brought us is a brand new concept of product: intangible, untouchable, “invisible bits and bytes”, and yet profitable. App, that is. (Patel & Taylor 2016, 7.)

App is an abbreviation for application. It is “a computer program or piece of software designed for a particular purpose” (Cambridge Dictionary 2016). Depending on the usage, an app can be built to run on a computer or a mobile phone, or on any electronic devices; however, in modern use, the word app is most associated with software applications that run particularly on mobile phones or other mobile devices. (Karch 2016.)

Similar to the Internet, app too has gone a long way in a short time. Apple launched its first App Store in July 2008 (Apple 2008), followed by Google with its Android Market’s release for users in October 2008 (Chu 2008).

Android Market was the predecessor for today Google Play Store, which was launched in March 2012 (Google 2016a). Ever since their releases, these app markets have witnessed dramatic changes in the app industry. In the case of App Store, Figure 1 portrays its rapid development.

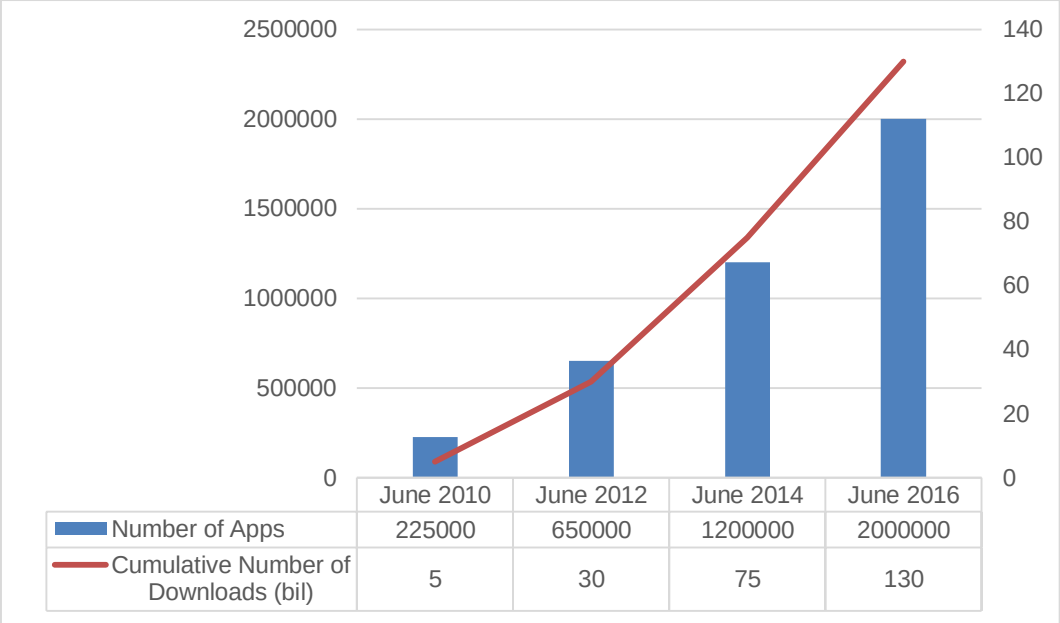

FIGURE 1. App Store's number of available apps and cumulative number of downloads (in billions), 2010-2016 (Statista 2016a; Statista 2016b).

From 2010 to 2016, App Store has enjoyed tremendous increases in the total number of available apps as well as the total number of downloads. In June 2010, there were 225,000 apps available for download on App Store. In June 2016, the number was 2,000,000. The amount of apps increased tenfold in just six years. Additionally, 130 billion apps had been downloaded from App Store in June 2016, whereas the number was merely 5 billion in June 2010. App Store's figures were indeed remarkable; however, Google Play Store's were no less eye-popping. The upcoming Figure 2 and Figure 3 illustrate how Google Play Store has witnessed its numbers skyrocketing from 2010 to 2016.

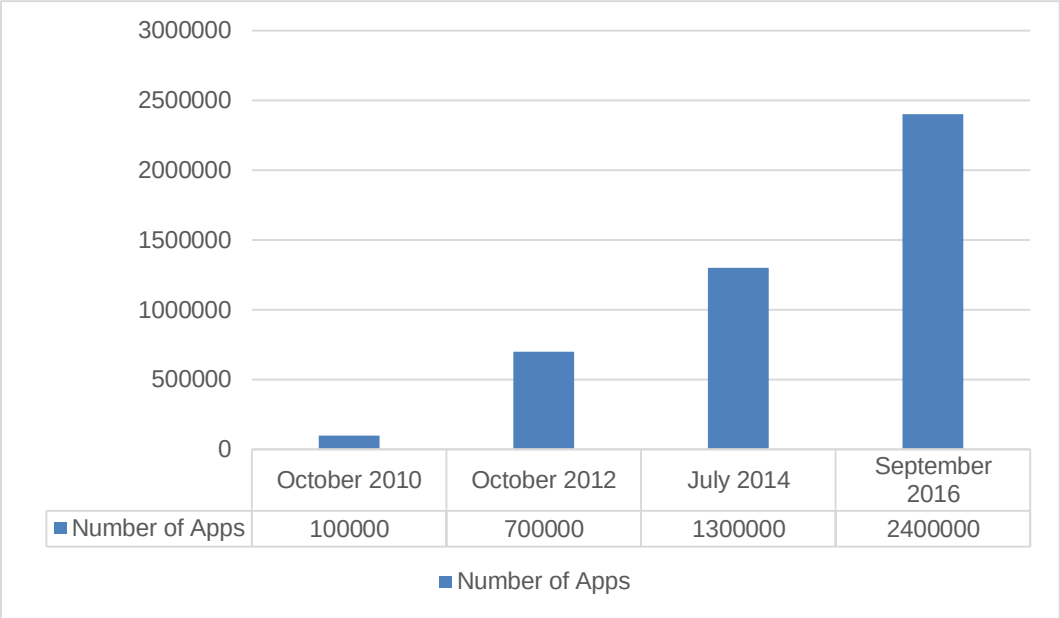

FIGURE 2. Google Play Store's number of available apps, 2010 - 2016 (Statista 2016c).

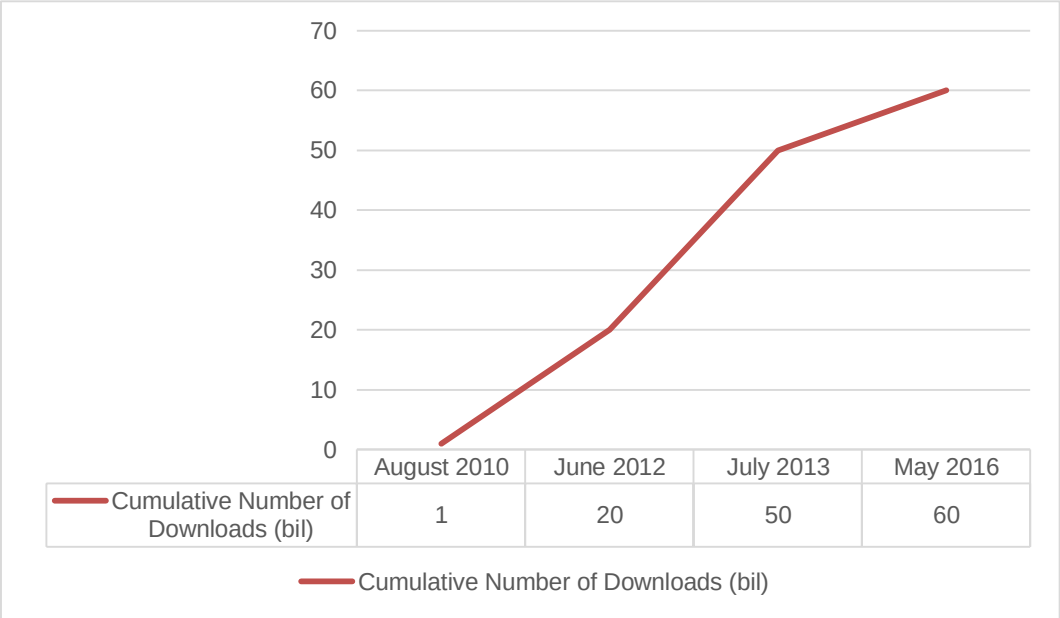

FIGURE 3. Google Play Store's cumulative number of downloads (in billions), 2010-2016 (Statista 2016d).

Similar to its counterpart App Store, Google Play Store has too enjoyed ongoing rapid growth since 2010. The total number of available apps went from 100,000 in October 2010 to 2,400,000 in September 2016. Correspondingly, the number of downloads went from 1 billion in August

2010 to 60 billion in May 2016. These numbers, both from App Store and Google Play Store, have shown an upward trend in (1) the popularity of apps, and particularly (2) the amount of apps being built. “There’s an app for that”, Apple stated so in its iPhone 3G commercial; and this Apple’s trademark phrase (Gross 2010) applies to the present all too well. More and more apps are being released every day to meet all kinds of needs; in fact, 55,405 new apps were added to Google Play Store in September 2016 (AppBrain 2016). Hence, the real question is, how can an app achieve growth amongst such fierce competition? This is where growth hacking enters the stage.

Growth hacking is, in a sense, albeit arguably, a spin-off of Marketing. An abundance of popular apps such as Airbnb and Dropbox have implemented growth hacking techniques to attain incredible growth in their initial stages. Growth hacking can be applied to any companies, but at the moment is most sought after by startups, especially app startups. As app is different from traditional products in many ways that it requires new thinking, and startups typically lack the resources and relationships needed for traditional marketing tactics, app startups are somewhat coerced into hacking their growth. (Patel & Taylor 2016, 5-13.) And MySQUAR, the case company, is not an exception.

MySQUAR PTE LTD, is an international tech startup specializing in app development. Their target market is Myanmar, and have thus far dedicated many apps to the country. Among those apps stands MyChat – the company’s flagship app. MyChat is a social chat app built to facilitate the connection between Myanmar people. At the end of 2016, MYSQUAR are going to release a new version of MyChat which they refer to as MyChat 2.0. However, this version is so different from all of its predecessors that its launch remains a wild card. While working under MySQUAR, the authors have witnessed the company’s efforts in designing a viable launch strategy that can ensure success while laying the basis for future growth of MyChat 2.0. Therefore, the authors decide to focus this thesis on growth hacking, and seeks to apply the findings to reinforce MyChat 2.0’s launch campaign.

1.2 Thesis objectives and research questions

The objective of this thesis is to assist the case company in formulating a launch strategy for the new MyChat by providing (1) insights into the theory of growth hacking, (2) examples of its practices, and (3) an implementation plan constructed based on the findings. In addition to a detailed examination of growth hacking literature, this thesis studies the practices that the historical cases have implemented to growth hack, and that are suitable for the case company. Then, based on the findings, this thesis puts forward a sequence of actions aiming at securing the success of MyChat 2.0's launch, and at the same time laying the foundation for its future growth. In order to fulfill this goal, a set of research questions is thereby laid out.

Question is at the core of all knowledge development, and research question is the starting point that provides basic direction and path for the development of the research (Alvesson & Sandberg 2013, 10-11). Hence, the role of formulating clear research questions at the start of the research process is crucial and can never be overemphasized (Saunders, Lewis & Thornhill 2012, 40). The authors devise the main research question of this thesis as below:

How can MySQUAR incorporate growth hacking into its launch strategy for MyChat 2.0 to secure success while laying the basis for its future growth?

Defining the main research question is, in a sense, "the identification of a destination" before embarking on a journey (Kumar 2010, 44). The journey is long, and thus subsidiary questions (or sub-questions) are formulated to, by answering each of them back-to-back, help the authors arrive at the answer to the main research question (Andrews 2003, 43). Here are the sub-questions of this thesis:

- Why is growth hacking decisive to app startups?
- What factors are necessary for a successful implementation of growth hacking?

- Which stage of growth hacking is the most influential to attaining growth?
- Which user acquisition tactics did the historical cases employ to attain growth?
- Which user retention tactics did the historical cases employ to attain growth?

1.3 Scope and limitations

The essence of this thesis is its focus on getting to a viable launch strategy for MyChat 2.0. MyChat is a mobile app; therefore, the authors study the theories, practices, and examples of growth hacking which befit, and relate to mobile app, despite its vast influence in services and tangible products. Additionally, the implementation plan the authors put forward in this thesis concerns both the marketing and product departments of the case company.

Next, before going through the in-depth study, the readers shall keep in mind that there are limitations to this thesis. First and foremost, growth hacking is a young field, and hence a serious shortage of academic sources. Therefore, in addition to published books, this thesis also (and mainly) gathers information from the field's pioneers' blog posts, podcasts, e-articles, presentations, infographics, etc. These sources are neither traditional nor academic, but they are just as credible. Second, as mentioned previously, this thesis views growth hacking from the perspective of mobile apps; hence, the data collected might not be applicable to services and tangible products. Third, while reading, the readers may notice that some arguments require numeric data to back them up; however, such data are not presented due to their being classified or the authors' inability to retrieve them. Fourth, in the literature review, the authors intentionally skim through many concepts and practices in an attempt to keep this thesis concentrated. Fifth, even though there exists an abundance of growth hacking tactics, the authors select only a handful of tactics which they deem viable for the case company to

present in chapter 6. Sixth, MyChat 2.0 is the focal product of this thesis; however, it is still in its development stage at the time of this thesis, and hence the authors' unavoidably limited knowledge of this version. Finally, yet importantly, the implementation plan drawn from this thesis is meant for the launch of MyChat 2.0, and thereby might be inapplicable to other mobile apps.

1.4 Research methodology

This thesis' research methodology and data collection is constructed on the basis of research onion diagram introduced by Saunders et al. (2012). Figure 4 is a modification of their original diagram to illustrate this thesis' research methodology.

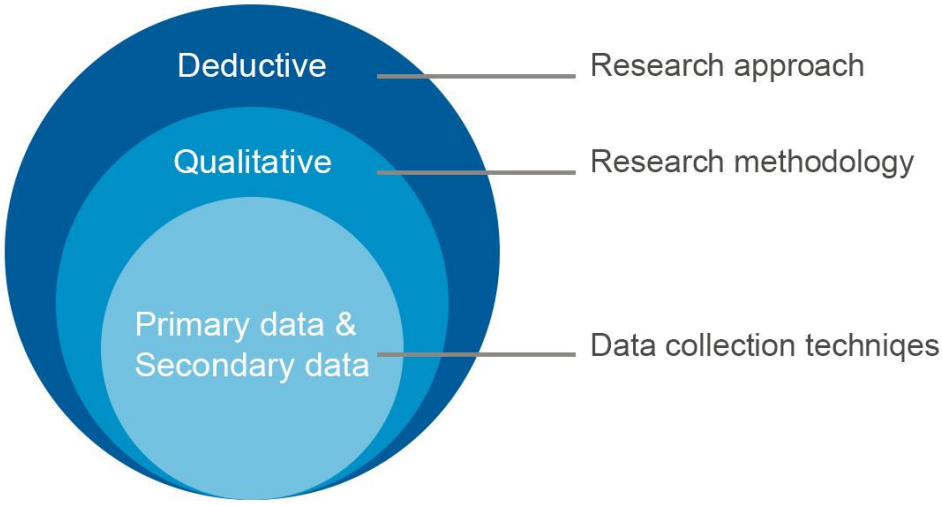

FIGURE 4. Research onion of this thesis (adapted from Saunders et al. (2012, 128).

The first layer - Research approach

There are three forms of reasoning: deductive, inductive and abductive (Saunders et al. 2012, 144-145). On one hand, deduction starts "top-down". It begins with developing a theory and ends with collecting empirical data to verify that theory. Induction, on the contrary, flows in the opposite direction: it starts "bottom-up" with collecting empirical data, and ends with formulating a new theory based on the analysis of such data.

(Myers 2013, 23.) Last but not least, according to Suddaby (2006) abduction moves back and forth between theory and data. Abduction begins with the observation of an abnormality; it then proceeds to work out some plausible explanations of how such abnormality could have occurred. (Saunders et al. 2012, 147.)

When it comes to selecting the right approach for a business research, a myriad of factors should be taken into consideration: the emphasis of the research, the nature of the research, time frame, risk assessment, and the audience (Saunders et al. 2012, 148). For the case of this thesis, with all those factors taken into account, deductive approach is adopted.

The second layer - Research methodology

Moving onto the next layer of the "research onion", there are two most prevalent basic research methodologies: quantitative and qualitative. These two methods are distinctive from each other in many aspects, particularly in the type of data they generate/use. To put it simply, quantitative research is an empirical research that involves numeric data – data in the form of numbers (or measurement) (Punch 2013, 3). On the other hand, qualitative research is an empirical research that involves non-numeric data (Punch 2013, 3) – data in the form of words, images, video clips, etc. (Saunders et al. 2012, 161). Certainly there are more to these two methodologies, and to differentiate them simply by the type of data they use would be narrow (Saunders et al. 2012, 161) and unwise. Nonetheless, such simplified differentiation befits the intent of the authors.

A research can implement either quantitative method or qualitative method alone, or a combination of the both of them (Thomas 2003, 6-7). For the case of this thesis, qualitative research methodology alone is adopted.

The third layer - Data collection

At the last layer of the "research onion" is data collection. Generally speaking, there is an abundance of ways to categorize data (Allen & Cervo 2015, 154); however, this thesis is specifically concerned with the

alternative that classifies data as either primary data or secondary data. The terms “primary” and “secondary”, in this case, indicate the origins of the data collected, and not their relative importance. (Stevens, Loudon, Ruddick, Wrenn & Sherwood 2012, 90.)

Primary data are generated (Blaikie 2003, 18) or collected first-hand by the researchers themselves for the particular research at hand (Stevens et al. 2012, 90), while secondary data have already been gathered by other researchers for other purposes (Blaikie 2003, 18; Sarstedt & Mooi 2014, 48). For the case of this thesis, in order to fulfill the research objectives, both primary and secondary data are assembled through an employment of different data collection techniques. For the former, primary data are collected from two sources: the authors’ unstructured interviews with the case company’s product director and digital marketing manager, and first-hand personal observations while working under the case company. For the latter, secondary data are derived from books, articles, journals, blogs and other credible electronic sources.

1.5 Theoretical framework

The purpose of this thesis is to assist the case company in devising a launch strategy for the new version of MyChat. For that, the authors need to perform a SWOT analysis of the app MyChat to assess its potential and risk. As a result, this thesis starts with a brief introduction to the tool before digging into the concept of growth hacking.

In order to implement growth hacking, the authors need to fully grasp what this concept is about. Hence, this thesis dedicates chapter 3, 4, and 5 to studying the theoretical basics of growth hacking. Throughout these chapters, concepts such as Product Market Fit, Sean Ellis test, mobile analytics, metrics and measurements, Neil Patel and Bronson Taylor’s Growth Hacker Funnel, etc. will make their appearance.

Then, the authors move onto studying the tactics of growth hacking. These tactics comprise display ads and social ads, referral program, cross

promotion, push notification and in-app message, loyalty program, contest, and A/B testing, and are introduced in chapter 6.

At the end of this thesis is an implementation plan the authors suggest the company undertake for the launch of the new version of MyChat. The plan is drafted based on the above findings together with the results of MyChat's SWOT analysis.

1.6 Thesis structure

This thesis has a total of 9 chapters, and each chapter is dedicated to a specific purpose. Figure 5 summarizes the structure of this thesis.

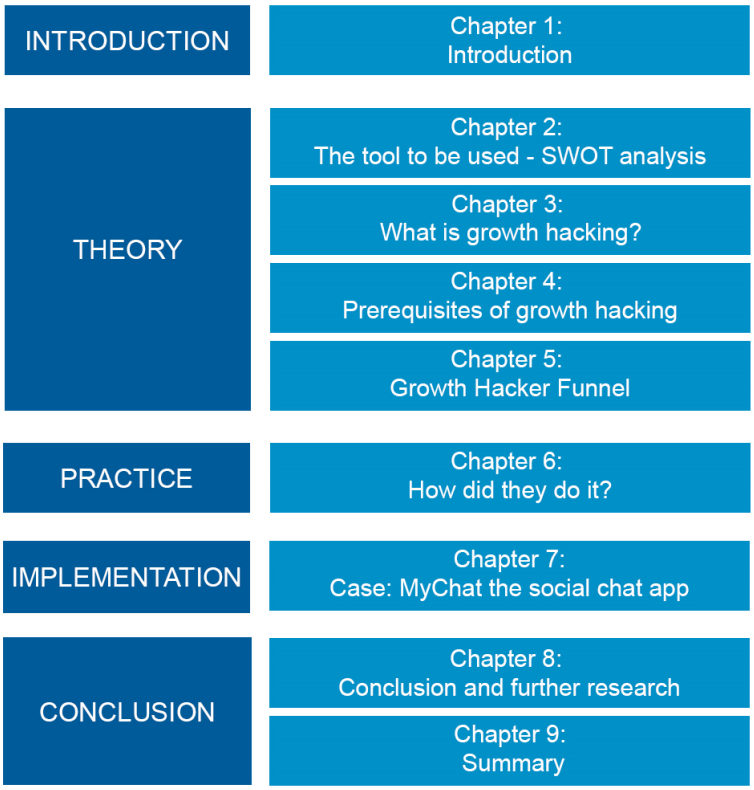

FIGURE 5. The structure of this thesis.

Chapter 1 presents this thesis' research background, research objectives and questions, scope and limitations, research methodology and data collection, theoretical framework, and structure respectively.

Chapter 2 introduces SWOT analysis – the tool the authors utilize to analyze the case product MyChat app.

Chapter 3, **Chapter 4**, and **Chapter 5** cover the theoretical fundamentals of growth hacking. Explanation of the term is provided in Chapter 3; a checklist of prerequisites is compiled in Chapter 4; and finally, Growth Hacker Funnel is presented in Chapter 5.

Chapter 6 studies growth hacking tactics that are via for the case company while giving examples to illustrate (if applicable).

Chapter 7 entails introduction to the case company MySQUAR and the app MyChat, a SWOT analysis of the app, and an implementation plan the authors construct based on the accumulated findings.

Chapter 8 draws conclusion of this thesis, and puts forward suggestions for further study.

Chapter 9 encapsulates the main findings of this thesis.

2 THE TOOL TO BE USED – SWOT ANALYSIS

As listed before, chapter 7 provides a comprehensive SWOT analysis of the case product - MyChat app. Therefore, this chapter is dedicated to equip the readers with the essentials of SWOT analysis.

2.1 Introduction to SWOT analysis

The S, W, O, T in SWOT analysis stands for Strengths, Weaknesses, Opportunities and Threats respectively (Ferrell & Hartline 2010, 120; Fleisher & Bensoussan 2015, 105). A SWOT analysis provides insights into a company's both internal and external environments, by assessing that company's:

- **Strengths** – Strengths are positive internal factors that add to a company's competitiveness. Strengths are what the company is good at doing. They are the resources and/or capabilities that the company holds that are superior to competitors'. They are the entities which the company can utilize effectively to reach its performance goals. (Fleisher & Bensoussan 2015, 113.)
- **Weaknesses** – Weaknesses are the polar opposite of Strengths; they are the negative internal factors that diminish a company's competitiveness. Weaknesses are what the company is bad at doing. They are the resources and/or capabilities that the company holds that are inferior to competitors'. They are the limitations which restrict the company from realizing its goals. (Fleisher & Bensoussan 2015, 113.)
- **Opportunities** – Opportunities are positive external factors that favor a company's growth. They are the changes in legislations which support the company, or the trend which boosts the demand for the company's products, etc. Opportunities come from the company's outside environment; they give the company the chance to reinforce its competitive position. (Fleisher & Bensoussan 2015, 114.)

- **Threats** – Threats are negative external factors that obstruct a company's growth. They are the new barriers, or the trend against the company's products, etc. Similar to Opportunities, Threats also come from the company's outside environment; however, Threats damage, or have the potential to damage, the company's ability to compete. (Fleisher & Bensoussan 2015, 114.)

Figure 6 illustrates layout of a SWOT analysis – how the above elements come together.

FIGURE 6. A SWOT analysis' layout.

SWOT analysis is allegedly one of the most effective analysis tools of marketing (Ferrell & Hartline 2010, 120) and the upcoming section will present the benefits of this tool.

2.2 Reasons to perform SWOT analysis

According to Ferrell & Hartline (2010, 122), principal benefits of SWOT analysis lie in the tool's simplicity, lower costs, flexibility, integration and synthesis, and lastly collaboration. First, the tool is simple to use. It does not compel any specialized training or technical competences. In fact,

analysts are only required to have comprehensive understanding of the company and its industry. Second, as SWOT analysis involves neither training nor specific skills, it helps to reduce strategic planning costs. Third, to SWOT, extensive marketing information systems are more a good-to-have than an utmost necessity. SWOT analysis can reinforce a company's strategic planning even in the absence of extensive marketing information systems. Nonetheless, in the presence of such systems, repeated SWOT analyses can be performed more efficiently and smoothly. Fourth, the tool enables analysts to integrate and synthesize information from diverse sources, regardless of its quantitative or qualitative nature. SWOT analysis helps to organize both widely known information and recently discovered information; it also works with a variety of information sources. To put it simply, SWOT perceives information diversity as a strength rather than a weakness. Finally, SWOT encourages cooperation and open information exchange between different departments. Marketing analysts needs to take into consideration what their counterparts do, what they know, etc. to ensure the completeness of the analysis. By doing so, not only can they solve problem, but they also prevent future disagreements between the departments.

In short, as SWOT analysis assesses a company's internal and external factors simultaneously, it allows the analyst an overall look at the company. This chapter has served its purpose of introducing SWOT analysis to the reader; the next chapter will take the readers to growth hacking - the core of this thesis.

3 WHAT IS GROWTH HACKING?

The purpose of this chapter is to answer the question what growth hacking is. However, as mentioned previously, the concept of growth hacking is relatively young. There exists a lack of official documents, and at the same time an excess of arguments and contradictions between the pioneers of the field. Consequently, the topic question cannot be approached directly, but rather in a more roundabout manner. Instead of providing a full-fledged definition (which is absent at the time of this thesis) straight away, this chapter starts with a brief introduction to growth hacking, and then takes the readers back to the past – what prompted the practice – and moves on to reveal 2 momentous cases of growth hacking. After that, the readers will again venture to the presence, where they will be provided with analyses of definitions and traits of growth hacking. Finally, one last thing to take note of is that, the information in this chapter is collected and later on scrutinized from the perspective of app industry, and not any other types of product.

3.1 The term

In 2010, Sean Ellis conceived the term “growth hacker” (Holiday 2013; Patel & Taylor 2016, 5), which soon took off and became a new buzzword among startups (Patel 2016) and marketers (Farr 2013). The term spread like wildfire, leading to an upward trend in people’s googling “growth hacking”. This is can be seen in Figure 7 on the next page.

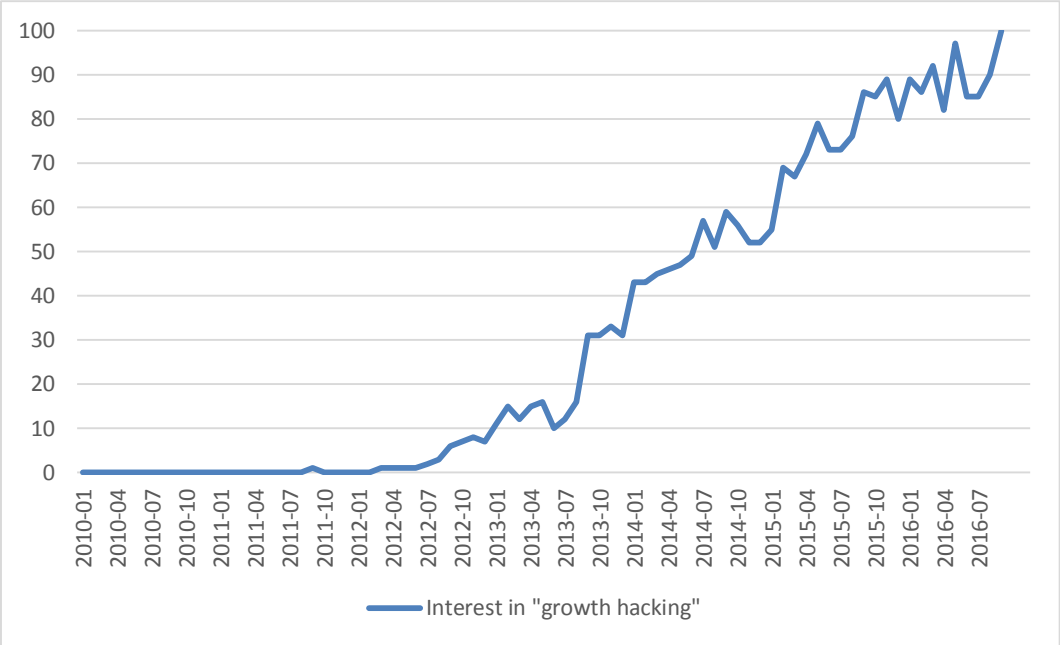

FIGURE 7. Interest over time in “growth hacking” as a search term, 2010-2016 (Google Trends 2016).

The numbers in this case represent search interest in relation to the highest point on the chart, and not the amount of searches made. That is to say, between 2010 and 2016, September 2016 scored 100 and thus became (1) the peak popularity period for “growth hacking” as a search term, and (2) the standard against which other periods were compared. For example, September 2014 scored 50. This means the search term “growth hacking” in September 2014 was half as popular as it was in September 2016. With that being said, it can be deduced from the figure above that interest in growth hacking has been rising steadily over the years. What has made it famous?

Startups come and go, but some startups manage to shake up the world with their unprecedented growth rate. Among them stand Facebook and WhatsApp. In 2004, Facebook was founded. In 2012, it hit 1 billion users. (Facebook 2016.) Likewise, in 2009, WhatsApp was founded (DePamphilis 2015, 167). In 2016, it hit 1 billion users (Statista 2016e). It took Facebook 8 years and WhatsApp 7 years to reach that awestruck statistic; and the mastermind behind such “absolutely ridiculous growth rate” is none other than growth hacking (Patel 2016). Hence, the question

is, what is this growth hacking? Let's start from the history – how the term came into existence.

3.2 The origin

Growth is vital to business. Growth yields bigger returns, and forecasts long-term success. Growth is more important than margin or cost structure; an increase in revenue growth rates drives greater market-capitalization gain than an improvement in margin does. In short, "growth trumps all". (Kutcher, Nottebohm & Sprague 2014.) Companies desire growth, and this aspiration for growth is even more intense for the case of startup. Growth decides the life and death for startup (Ginn 2012a). As Graham (2012) put it, "[a] startup is a company designed to grow fast (…) The only essential thing is growth. Everything else we associate with startups follows from growth." The pursuit of growth is what makes a startup startup (Weinberg & Mares 2015). However, when entering the game, startup is at a disadvantage. They are David surrounded by a forest of Goliaths.

Well-established companies have been in the playground for a long time. They have copious advantages which startups do not (Epstein, Widener & Verbeeten 2016, 14). Their brand equity is well-entrenched (Wight 2016), and they can afford to dominate the traditional channels (Ellis 2014). Startups, on the other hand, lack resources (Christensen 2001, 31). They are too disadvantaged to play by the rules of the old (Ellis 2014). They do not have the budget (Akdeniz 2015), nor human (Panici 2016), nor relationships needed for traditional marketing tactics to be effective (Patel & Taylor 2016, 13). As a result, to break through the noise and make it to their audience, startups need to do a lot more with a lot less; they need to "hack". Such conditions triggered the very first growth hacking occurrences.

3.3 The timeline

The term “growth hacking” itself is only 6 years old, but the practice has a history much longer than that. People had been growth hacking way before it became growth hacking.

Flashback to 1996, Hotmail was allegedly one of the first companies to growth hack (and succeeded). The founders, Sabeer Bhatia and Jack Smith, and venture capitalist, Tim Draper, sat down to discuss how they could spread the words about their web-based email product. To no surprise, they first went over a list of industrial marketing options, including billboard and radio advertising. However, such alternatives were instantly rejected for they were too expensive to promote a free product. Then, Draper came up with an idea: put “P.S: I love you. Get your free email at Hotmail” at the bottom of every email. The founders initially resisted this suggestion due to various reasons. However, after a few months, they agreed to adopt it, but dropped the “P.S: I love you” part. A tagline “Get your free email at Hotmail” was then inserted at the end of every outbound email, turning every message sent by users into promotional pitch for the company. The impact was compounding; growth was exponential. Hotmail hit 1 million users after six months into the adoption. (Penenberg 2010.) The solution appeared simple, and yet yielded astonishing result. It then became one exemplary example of early-stage growth hacking.

Moving up the timeline, Airbnb is a more recent case. Airbnb is an online community marketplace that allows people to list their spare rooms for rent, and to book accommodations around the world. In its early stage, Airbnb recognized that much of its growth came through craigslist (craigslist is a website for people to post classified advertisements, including housing rentals). Upon this realization, the engineers at Airbnb built a “Post to craigslist” feature which enabled Airbnb users to easily cross-post their listings to craigslist. (Weinberg & Mares 2015.) However, the thing was, craigslist did not technically allow other sites, including Airbnb, to post to theirs. Without access to craigslist’s codebase, it turned out that the team at Airbnb reverse engineered craigslist to make the

cross-posting possible. (Patel & Taylor 2016, 10-12; Chen 2016a.) This featured was soon shut down as craigslist fixed the “holes” (Patel & Taylor 2016, 12), but it managed to drive tens of thousands of craigslist users to Airbnb website (Weinberg & Mares 2015). This tactic allegedly became one of the best marketing move of the company (Holiday 2013).

Together with the origin, the above two examples provided an elementary overall look at growth hacking. Now, it is time to move onto the details to answer what growth hacking really is.

3.4 The definition

The thing is, there is no official definition of growth hacking (Dev 2016; Zylka, Fuehres, Colladon & Gloor 2016, 151). A search for the term “growth hacking” across technical dictionaries including *Business Dictionary*, *Investopedia*, and *Oxford Dictionary of Marketing* returned no result (as of 11th June 2016). Plenty of growth hackers and experts in the field have attempted to define the term; however, as they share differences in background and experience, their interpretation varies, and even clashes. As Holiday (2013) put it, “[t]he term “growth hacker” has many different meanings for different people”. Take a growth hacker’s need for coding skill as an example. From Patel & Taylor’s viewpoint, a growth hacker is not necessarily a programmer (2016, 14-15); however, Chen (2016a) proposed otherwise. By describing growth hacker as “a hybrid of marketer and coder”, and stressing that “coding and technical chops are now an essential part of being a great marketer”, he inherently set coding as an essential of growth hackers. And the list of discrepancies goes on.

Nonetheless, after scrutinizing the variant definitions of growth hacking with an eye toward app industry, Holiday’s interpretation (2013) emerges as the most befitting ones. Albeit arguable, his variant provides a good look at what growth hacker is to the app industry. Here it comes:

> *Growth hacker is someone who has thrown out the playbook of traditional marketing, and replaced it with only*

> *what is testable, trackable, and scalable. Their tools are emails, pay-per-click ads, blogs, and platform APIs instead of commercials, publicity and money. While their marketing brethren chase vague notions like "branding" and "mind share", growth hackers relentlessly pursue users and growth - and when they do it right, those users beget more users, who beget more users. They are the inventors, operators, and mechanics of their own self-sustaining and self-propagating growth machine that can take a start-up from nothing to something.*

It is unavoidable that there shall be "holes" in, and disagreements with Holiday's interpretation, particularly with the growth hackers' tools part. However, when putting his variant next to the above examples of growth hacking, a mindset starts to materialize. At this point, it appears that digging deeper into defining growth hacking would lead to even more contradictions and subsequently greater confusion. As a result, it would be better to delve into the growth hacking mindset – what makes growth hacking growth hacking. Hence the following part.

3.5 The mindset

Growth strategies cannot be simply duplicated from product to product (Ginn 2016). The tools differ, but the mindset stays (Holiday 2013). Rather than a set of tools, growth hacking is more a mindset (Holiday 2013; Ginn 2012b) which:

- **Revolves around growth** – Growth hackers are abnormally fixated on growth. They are obsessed (THE PLAID AGENCY 2016). Every decision they make, every action they take is instructed by growth and is endeavored with an eye toward growth (Patel & Taylor 2016, 7). Growth hacker is, in the end, "a person whose true north is growth" (Ellis 2010).
- **Blends marketing with product development** – Growth hackers stand at the "intersection of marketing and product development" (Bussgang & Benbarak 2016). For a long time, the circumstances have been that coder builds, and marketer pushes; now, the systems are colliding (Patel & Taylor 2016, 12), as marketing

features can be baked into the application experience (Smart 2016, 130-134; Cecchi 2016). For instance, in the case of Hotmail, a promotional pitch was embedded into every email composed by users. For another instance, if a phone contact is not on Viber, it is possible to send that person an invitation to join Viber. That is to say, product features can now be directly accountable for growth (Patel & Taylor 2016, 13). To leverage this attribute, a mindset that is both marketing- and product-driven at the same time is required. The above example of Airbnb reflects this requirement. The Airbnb integration with craigslist simply involved too many technical details for a traditional marketer to conceive, much less to execute (Patel & Taylor 2016, 10-12). Only an engineer assigned with acquiring customers from craigslist could have done it (Chen 2016a).

- **Favors data** – Growth hackers have a passion for (Out 2016), and a reliance on data (Patel & Taylor 2016, 17). As growth hackers associate themselves with only what is “testable, trackable, and scalable” (Holiday 2013), or in other words, “measurable (...) and calculable” (Out 2016), they need data. Data keep growth hackers honest and away from assumption and vanity. Data assist them in placing and shifting their focus, as well as enable repeating past successes and predicting future trends. (Patel & Taylor 2016, 17-18.) Certainly, there are more to how data benefit growth hackers. Data are important to the extent that, without data and metrics, growth hackers feel “naked” (Ginn 2012b; Patel & Taylor 2016, 17).
- **Embraces creativity** – Creativity is a must-have for growth hackers (Ellis 2010). First, business tends to flock to channels with which they are familiar, or which they think they should use due to their product or company (Weinberg & Mares 2015). However, more than often, it is the uncommon (Ginn 2012c) and underutilized (Weinberg & Mares 2015) channels that are the most likely to deliver results. Hence, to drive growth, growth hackers need to go beyond the predetermined tactics to unearth the right methods. They need to think out of the box. Second, the right channels will work wonders at first, but all channels have their own lifespan. Their

efficacy is bound to decay over time as the market becomes saturated. (Weinberg & Mares 2015; Chen 2016b.) As a result, growth hackers assiduously seek new channels and "reimagine the existing channels" (Ginn 2012c). For that, they need to be ingenious. "Paths to grow are not usually obvious and it takes extreme creativity to find them", as Patel & Taylor (2016, 9) put it.

- **Endorses curiosity** – Curiosity kills the cat, but benefits the growth hacker (Patel & Taylor 2016, 20-21). Growth hackers have an urge to go beyond the surface. They have a long list of what-if and why questions. They want to know why certain things work while others do not. They continually run and tweak experiments to discover new ways to push their metrics up. This constant curiosity and insatiable hunger for knowledge enable them to have deep understanding of product, user experience and user behavior. (Ginn 2012b.) Such understanding is decisive for growth hackers, for they work closely with both marketing and product development.
- **Lives on experiments** – Growth hacking is not easy, it "only looks simple once you've found out the things that work for your product" (Patel & Taylor 2016, 22-23). There is not a set in stone process for growth hacking and different situations and businesses require different strategies. Sean Ellis (2016a) called growth hacking "Experiment Driven Marketing". Thus, failure is not avoidable and most certainly inevitable. Not succeeding the first time but a hundredth time is the characteristic of growth hacking; and it is a process that requires running experiments, tracking and analyzing the results and iterating the strategy. (Patel & Taylor 2016, 22-23.)

To sum up, "[g]rowth hacking was born out of startups", just as Ellis (2014) stated, and is all about growth. The tools vary, but a growth hacker needs to be fixated on growth and growth alone, and is able to think from the perspective of both marketing and product development at the same time. Additionally, a growth hacker needs to be analytical, creative, curious, as well as experiment-driven. Now that the basis of growth hacking has been laid out, it is time to cover the prerequisites of growth hacking. What

factors are needed for growth hacking to take place? The following chapter answers this question.

4 PREREQUISITES OF GROWTH HACKING

This chapter goes into details the conditions for growth hacking to succeed. These prerequisites include Product Market Fit (PMF) and analytics. While they do not absolutely guarantee success, they are powerful and simple tools recommended by many entrepreneurs and experts such as Eric Ries, Sean Ellis, and Steve Blank to help increase the odds for startup.

4.1 Product Market Fit

PMF is simple as creating a product that the customers would want to buy (Holiday 2013). Yet, it is a vital prerequisite of growth hacking, to the point that Holiday (2013) stressed, “marketing as we know it is a waste of time without PMF”. Ginn (2013) was of the same mind by stating that it was impossible to “grow a broken product” in his email to Holiday (2013). Having PMF is the foundation for successful business development at all stages, especially for startup and small to medium enterprises (Holiday 2013). By achieving PMF, a business is making a product the market needs, in turn boosting the number of returning users (Maurya 2010).

4.1.1 Definition of Product Market Fit

Andreessen (2007), co-founder of Netscape, in his series of blog post titled “PMarca's Guide to Startups”, addressed the definition of PMF as "being in a good market with a product that can satisfy that market". Calling this the Rachleff’s Corollary of Startup (in honor of entrepreneur Andy Rachleff), Andreessen went on further to emphasize the importance of PMF in the context of a startup product: "The only thing that matters is getting to product/market fit."

PMF assesses both the ability of the product to satisfy the market's need and the ability of the market to sustain the business (Jorgenson 2015). On one hand, achieving PMF requires the product to be evolved to be stable, appealing and able to satisfy the customers. On the other hand, the

market has to be capable of providing enough room for the business to grow scalably (Espinal 2013). Cooper & Vlaskovits (2010) based on this definition to outline three criteria for PMF:

- *The customer is willing to pay for the product.*
- *The cost of acquiring the customer is less than what they pay for the product.*
- *There's sufficient evidence indicating the market is large enough to support the business.*

Additionally, Porter (2016) gave another angle at defining PMF as "when people sell for you". He argues that when customers understand the product's value, they continue relaying their positive experience to other potential customers, thus become the business's proxy salesperson; and that is when PMF has been achieved. Even though Porter's concept of PMF is not strictly a definition of the term, a cause-consequence relationship can be deducted: once PMF is achieved, the business benefits as the product becomes self-marketed via its customers.

4.1.2 Measuring Product Market Fit

There have been a number of different approaches to defining whether a business has achieved PMF. In his article, Andreessen (2007) wrote, "you can always feel product/market fit when it's happening" and associated success in achieving PMF with the growth in customer product usage and production capability, as well as the increase in press coverage, revenue and investment. Conversely, failure to achieve PMF can also be "felt" with every metrics mentioned being stagnant or negative (Andreesseen 2007). While other entrepreneurs or writers agree with this notion, it is purely unreliable anecdote, and thereby should serve as no more than an inspiration in achieving PMF (Chen 2016c).

Cummings (2013), American entrepreneur and Pardot's founder, provides another angle with his five ways to identify PMF:

1. 10+ customers have signed on in a modest period of

> *time (e.g. 3 – 9 months) and they haven't been friendlies (people you already knew, favors you called in, etc.)*
>
> *2. At least five customers actively using the product with little / no product customization (e.g. the product is valuable and mature enough that heavy development work isn't required for each new customer)*
>
> *3. At least five customers have actively used the product for over a month without finding a bug (no matter how great the product is people always find issues with it, which is natural for this beginning stage)*
>
> *4. At least five customers use the product in a similar way and achieve similar results (early on you find that customers use the product in ways you didn't imagine, which is great, but the goal is to find consistent, repeatable patterns)*
>
> *5. At least five customers exhibited a similar customer acquisition and onboarding process whereby they bought and went live with the product in a timeframe that was consistent with each other (e.g. had a two month sales cycle and took a week to get the product running)*

The key difference between Cummings' definition and Andreessen's is his focus on consistency in product performance and customer product usage rather than growth. While Cummings provides specific numbers in all five of his rules, he does not provide any further information regarding empirical backing evidence or the scope and context of his study in which these rules are applicable.

During his time at the startup consulting company 12in6, Sean Ellis attempted at creating a different measurement method which would later be known as the Sean Ellis Test. As part of the consulting process, he conducted qualitative surveys between the client companies and their customers, which reached the sample size of over one hundred client companies. (Maurya 2010.) In order to deter data skew, Ellis (2016b) recommended that the participating customers satisfy the following three criteria:

- *They have experienced the core of [the business]'s product or service;*

- *They have experienced [the business]'s product or service at least twice;*
- *They have experienced [the business]'s product or service within the last two weeks.*

Instead of complex metrics, Ellis' survey (2016b) consists of only one customer-based question "How would you feel if you could no longer use [product]?" with four possible answers. These answers represent the importance and appeal of the client companies' products or services to their customers which gradually decreases from top to bottom:

1. *Very disappointed.*
2. *Somewhat disappointed.*
3. *Not disappointed (it really isn't that useful).*
4. *N/A - I no longer use [product].*

For the purpose of defining the achievement of PMF, Ellis focused on the percentage of "Very disappointed" answer (Law 2016). By choosing this answer, the customers indicated that the client companies' products or services were of high importance and appeal to them, which meant the products or services satisfied the market's need and fulfill the definition of PMF (Martin 2016). After compiling and comparing over one hundred results, Ellis (2016b) found out that those client companies with over 40% of their responses as "Very disappointed" without their products had a great chance of building sustainable, scalable customer acquisition growth, and sustaining their business. Conversely, those with under 40% of their responses as "Very disappointed" struggled. He concluded that having a benchmark score above 40% in this (Sean Ellis Test) test was the indicator that the business was on course for creating a "must have" product and achieving PMF.

However, the Sean Ellis Test is not without a number of drawbacks. The 40% benchmark score itself is a result of observation based on answers that are subjected to honesty and customer’s change of mind. (Maurya 2010.) Furthermore, the test does not take into consideration numerous variables of the nature of the product/service and the market in which the

business operates. Simply put, different businesses may require a benchmark score of higher or lower than 40% to be able to achieve PMF. Finally, the test itself is merely a verification tool of whether the business has achieved PMF, rather than a means of helping the business to achieve it (Maurya 2010). Thus, the Sean Ellis Test should be treated as an indicator and not a definitive methodology.

After reviewing all three presented methods, the authors have come to the conclusion that there has yet to be a quantifiable method to measure a business's success in achieving PMF. This does not equate criticisms toward any method and their creator, but merely an observation on the difficulty in researching on the topic of growth hacking and PMF due to being relatively new and qualitative fields (Law 2016). However, the authors are still able to deduct from the mentioned opinions the major signs of a business achieving PMF:

- Visible growth (in customer product usage, production capacity, investments and revenue);
- Consistency (in customer acquisition, product usage and product performance);
- High product appeal to the market, indicated by a benchmark score of over 40% on the Sean Ellis Test.

4.1.3 To achieve Product Market Fit

Achieving PMF is not always a discrete, big bang event. While there exist businesses that hit it from the start, it is generally a lengthy and incremental process. (Horowitz 2010.) Not only is it slow, but the process is also iterative and requires continual effort. There may be various processes and ways to achieve PMF for businesses depending on their conditions, markets and products; however, many entrepreneurs and consultants agree on the base idea of developing a Minimum Viable Product (MVP) through cycles of building, testing and analyzing the results (Blank 2010; Ries 2011; Holiday 2013).

MVP is originally defined by Ries (2011) as “version of a new product which allows a team to collect the maximum amount of validated learning about customers with the least effort”. In layman’s terms, MVP is a product with the fewest number of features that the customers are willing to pay for. These features depend much on the type of product and the business’ core customer segment. An example would be a messaging app that only allows its users to add their acquaintances to a contact list and communicate with them via text messages, lacking any features such as emoticons, files sharing, video messaging, etc. Creating a MVP as a starting point provides a wide array of benefits for startup comparing to creating a final product that fits only the business’ vision (Holiday 2013). By keeping the number of features as low as possible, a MVP requires minimal amount of time and money to develop and maintain by ruling out features that may be bloated, unnecessary, or potentially removed in the future due to customer feedback. MVP does not equate a buggy or rushed half-finished product. It is a product which fulfills only the most important identified needs of the customers, and which is enough to justify charging a cost. (Maurya 2010.)

Nonetheless, MVP is not only a product; it is a process that goes hand in hand with product development and is done by incorporating testing and learning to improve the original MVP (Olsen 2015). While the Sean Ellis Test emerges as a simple tool to measure if PMF has been achieved, its shortcomings are also apparent and should be noted. Thus, the introduction of customer feedback into the Sean Ellis Test, including question such as “how can [business] improve the product to better suit your need?” or “how will you weigh the importance of this feature in compare to [another feature]?” is necessary. While these questions may fall into the confirmation bias fallacy or simply lack the insight into the true performance of the product, they provide a direction to which MVP can progress to improve itself and customer satisfaction, rather than only a PMF verification that the Sean Ellis Test is. (Maurya 2010.) In addition to qualitative measurements, quantitative methods such as analytics are recommended in conjunction use to have an unbiased look at customer

behaviors. These analytics include user acquisition, retention, screen flow and so on, and are further explained in details in the next section.

Based on the information gained by customer feedback and analytics, the product can be improved further than the MVP prototype (Olsen 2015). As stated, this is an iterative process and the MVP evolves into the final product rather than it happening immediately. From one iteration to the next, the feedback and analytics should provide positive data if the business is heading the right way to achieve PMF.

4.1.4 Example: The case of New Coke

On 23rd April 1985, The Coca-Cola Company unveiled its first-ever reformulation in the 99-year history of its most famous drink, Coca-Cola (or simply Coke). What followed went down in history as one of the most infamous marketing scheme, which spawned countless discussions, articles and books surrounding the failure of the previously-thought infallible company. (TIME 2016.)

Prior to the announcement, The Coca-Cola Company was in the midst of a fierce marketing campaign from its longest rival PepsiCo. During the mid-70s, PepsiCo's consumer research discovered that in blind taste tests, consumers preferred the taste of Pepsi over Coke. This led to a number of television ads dubbed "Pepsi Challenge" in which soft drinkers would expressed this preference for a cola which was later revealed to be Pepsi. By 1977, Coke lost its leading position in food store market share to Pepsi. (Schindler 1992, 22-27.)

This prompted a response from The Coca-Cola Company, which came in form of an overhaul of its flagship soft drink. The new formula, called "New Coke" is not only sweeter, but also came in a different can with red and silver color. (The Coca-Cola Company 2012.) In its extensive market research, the company spent over $4 million, interviewing over 200,000 consumers and the initial results were positive. During blind tests, New Coke beat Pepsi by 6-8% and old Coke by 10%, even for the loyal old

Coke drinkers segment, this figure was 6%. In identified taste test, New Coke beat old Coke by a landslide 61% to 39%. (Schindler 1992, 22-27.)

These results were reflected in the real market during the first phase of New Coke rollout when a 900-respondent survey turned out to be positive. However, gradually a public outcry broke out in the media as well as The Coca-Cola Company's customer support (The Coca-Cola Company 2012). By July of the same year, a conducted survey showed that only 30% of the interviewees preferred the taste of New Coke. This forced The Coca-Cola Company to re-release the old Coke formula under the name "Classic Coke", though New Coke was also renamed to Coke and remained the company's flagship cola. Despite the promotion of the new formula, New Coke's market share continued to dwindle. By September, New Coke made up only 30% in sales of both formulas and in 1986, Classic Coke outsold New Coke eight to one. (Schindler 1992, 22-27.)

There have been explanations proposed for the failure of New Coke, some went as far as claiming it was an ingenious marketing move to ignite consumers' loyalty with classic Coke, which has since been dismissed by the company (The Coca-Cola Company 2012). According to Schindler (1992, 22-27), explanations for this were the following:

- The introduction of New Coke was overly brash. Had the change been rolled out incrementally or quietly, the reaction could have been less aggressive. PepsiCo had been known to modify the formula of Pepsi without public knowledge during its history, and hence much less strong public reaction. This could also had been avoided by selling New Coke as an option; but
- New Coke was forced. By discontinuing classic Coke, The Coca-Cola Company effectively alienated part of their consumers. In fact, during a 982 focus group survey of 2000 respondents, 10-12% answered that they would be upset over this change. That means one out of eight Coke drinkers would react negatively, potentially causing a chain negative reaction;

- Classic Coke is not a simple physical product. Being the first major cola to achieve worldwide fame and had carried on for nearly a century, classic Coke carried sentimental value beyond that of a soft drink to its consumer. During the mentioned focus group survey, the reaction to a hypothetical change for Pepsi was sanguine while Coke's was largely negative, which further highlighted the attachment between Coke and its consumers;
- Fundamental problems occurred in The Coca-Cola Company's market research or its interpretation. Most notably, a poorly conducted questionnaire in the blind taste test might provide insufficient feedback, which led to incorrect market reaction forecast. Simply put, the question "which cola do you prefer out of those that you taste?" would fail to provide the reaction from the question "how would you feel if we are to replace the old flavor with this new flavor?".

The case of New Coke is a classic example of discord between product hypothesis, testing and implementation. The Coca-Cola Company failed to achieve PMF, creating a marketing debacle and hampering its consumer growth. While The Coca-Cola Company survived the ordeal, it may not be the same with every business, thus the importance of Product Market Fit must be stressed.

4.2 Mobile analytics

Joorabchi, Mesbah & Kruchten (2016) call mobile analytics "a visualization tool such as those hospital monitoring devices with heart rate, blood pressure, etc., would help to gain a better understanding of an app's health and performance", which highlights the importance of mobile analytics in developing an app for the mobile market. In the case of growth hacking, the data and metrics collected and provided by analytics are invaluable and vital in monitoring the product's performance as well as the market's reception to further plan the course of action to maximize growth.

4.2.1 Definition

The Digital Analytics Association (2016) defines digital analytics as the collection of information in interactive channels such as online, mobile, social, etc. to improve performance and predict the future. Digital analytics provides insights into the performance of a business' products/services as well as reception, usage and behaviors of its market. Digital analytics can be used as a tool to either improve the product to increase PMF, or assist in creating marketing content/strategy to boost growth. (Harty & Aymer 2015.)

There are three major types of analytics, based on the way it is applied:

- **Descriptive analytics,** which made up to 80% of business analytics, aims to summarize what happened. Descriptive analytics consists simple event counters and arithmetics based on aggregate function. Data provided by descriptive analytics range from simple page views, session length, number of likes or shares on Facebook to slightly more advanced arithmetics operations such as average comments, average unique visitors per day… (Wu 2013a.)
- **Predictive analytics** processes historical data to forecast the future. Predictive analytics uses the existing data to form a model and from this model predict the data that have not occurred yet. While it does not provide a definitive answer, predictive analytics provides the likely outcome and more than one alternatives could be forecasted as well. (Siegel 2013.)
- **Prescriptive analytics** is one step above predictive analytics. The information provided by prescriptive analytics does not only forecast the future but also is actionable. That means a system capable of prescriptive analytics is able to learn from the data and recommend a course of action with rational reasons behind it. However, as uncommon as predictive analytics is, prescriptive analytics is even rare. (Harty & Aymer 2015.)

Mobile analytics is subset of digital analytics with its function being collecting and reporting on in-app data regarding the operation of the app and the behavior of its users (Wong, Haight & Leow 2015). Mobile analytics vendors provide software development kits (SDK) for different mobile platforms such as iOS, Android and Windows Mobile. These SDKs contain software libraries that developers can incorporate into their apps to track different metrics for use in mobile analytics. (Dykes 2013.) The software libraries incorporated in the apps have the same level of privilege as the apps themselves. That means if an app has permission to its users' personal data, so does the library and analytics system. (Harty & Aymer 2015.) Lastly, mobile analytics is dependent on a reliable internet connection that the software libraries can access since the data are transferred via the internet connection. Depends on the method used, data that are not transferred during a period of no internet connection may be discarded or forwarded by the app, which leads to inaccuracy in analytics. (Harty & Aymer 2015.)

4.2.2 Metrics and measurements

The following section lays in details different metrics an analytic system may provide. It does not include every single metric possible but a notable few. The metrics are separated into four groups based on their nature, including user base, user profile, usage and behavior.

4.2.2.1 User base

These metrics provide insight visibility into the number of users interacting with an app, whether they use the app frequently, have ceased to use the app or have never used the app since downloading it.

Acquisition

Acquisition represents the number of users who download and install your app from a certain location, through organic search, word-of-mouth, paid campaigns or in-app referrals. This metric allows the business to see the number of user downloads for their apps and the channels through which

the app is downloaded. CPA (Cost per Acquisition) and ROI (Return on Investment) can be calculated using this metric and then used to assess the efficiency of advertising platforms (if applicable) like social media, email, in-app advertising, cross promotion... (Localytics 2016.) Acquisition is also the first step in the Growth Hacker Funnel, which further emphasizes the importance of obtaining accurate data.

Retention

The retention metric measures the number of users returning to use the app after downloading it (AppDynamics 2016). Retention rate is calculated by using the following formula:

$$\textit{Retention Rate} = ((E-N)/S)*100$$

This formula, E represents the number of customer at the end of the period, N the number of customers gained during the period and S the number of customers at the beginning of the period. (Carpenter 2014.) Conversely, churn rate is the percentage of users cease to use the app during the period and is calculated by subtracting the retention rate from 100%. Figure 8 illustrates the average user retention and churn rate after download.

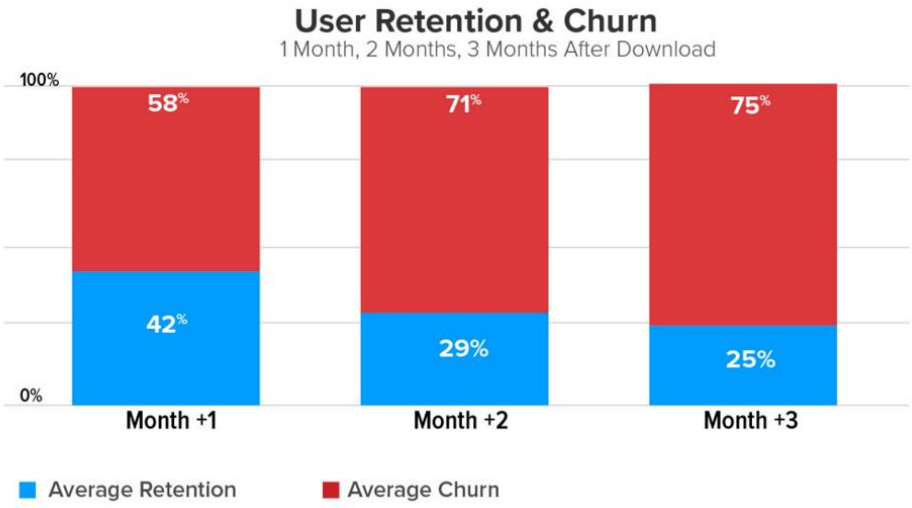

FIGURE 8. Average user retention and churn rate 1 month, 2 months and 3 months after download (Perro 2016).

The average across the board retention rate after 90 days is 25% as seen in Figure 8. Specific numbers vary between different types of apps, which is as high as 24% for Media & Entertainment and as low as 10% for Gaming. (Perro 2016.) Knowing the industry as well as sector's average retention rate is important as it becomes the benchmark for the performance of an app. In the following chapter focusing on the Growth Hacker Funnel, the authors would further study and discuss about retention as the second step in the funnel, its significance on growth hacking and the strategies to increase retention rate.

Daily Active User/ Monthly Active User (DAU/ MAU)

DAU and MAU are straightforward data regarding the number of recurring users of an app. DAU is calculated by the number of users open the app during 24 hours, MAU is calculated in the same way but during 30 days. By definition, DAU and MAU are only calculated by using the number of unique users, not sessions. That means if within 24 hours, an app is open 100 times by 27 users, its DAU is 27. (Appdynamics 2016.) By monitoring the trend of DAU/ MAU (increasing/ decreasing/ plateauing), businesses can gain knowledge into the performance of their apps.

4.2.2.2 User profile

Understanding the business's core customers and its app's user base is vital to succeed in growth hacking. Popular analytics platforms such as Google Analytics or Yahoo Flurry has been providing customer profile data for their analytics services since their inception (Yahoo 2016; Google 2016b). These metrics continue to make their presence in the mobile app analytics services that flourished during the smartphone boom.

Take Google Analytics as an example, a user profile is compiled from various metrics including their demographics (age, gender), geographical location, technological background (device, carrier, app, OS version) and interests/affinity (Google 2016b). The data can also be sorted into subset, visualized and compared to create a comprehensive overall as well as detailed look. According to Google, this information can be obtained from

users' internet footprint such as browser's cookies, browsing and purchasing habits, and advertising ID (Google 2016b). Figure 9 is an example of a custom Google Analytics Dashboard.

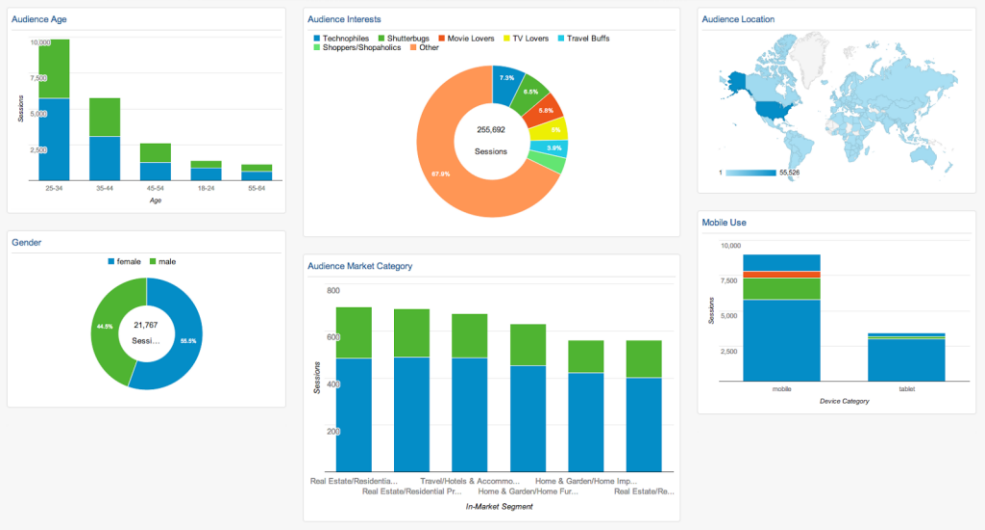

FIGURE 9. Custom Google Analytics Dashboard (Neidlinger 2014).

Not only do these data allow for understanding, they enable the ability to segment the user base, and thus help the business identify its most valuable customer segments and potential customers within the market space that have not been gained (Lewis 2014). The business would then be able to initiate marketing content tailored toward the focused customer segment to increase acquisition, or improve engagement with the most valuable customer segments to boost revenue and retention.

4.2.2.3 Usage and behavior

These are the data that highlight the level and frequency of which the users use their app. By monitoring these metrics, a business gains knowledge of the level of engagement between its app and users.

Session Length

Session length is defined as the period of time between the app is open and close/timeout (Cipolla 2014). In layman's terms, session length is the amount of time the user actively opens the app on the screen. A longer average session length may indicate better engagement between an app

and its users, but it is not always the case. Apps of certain nature such as finding public transportation or emergency services would ideally require its users a shorter amount of time to reach their goals (Cipolla 2014).

It is up to the business/developer to understand the goal of its app and decide if their app should engage with its users as long as possible, or finish its task within a reasonable amount of time. The session length metric provides insight into whether the business/developer would need to increase engagement or streamline the app experience (Localytics 2016).

Session Interval

Session interval is the period of time between a user's app sessions, showing the frequency with which users use the app (Localytics 2016). Much like session length, optimal session interval is dependent on the type of app.

Screenflow/App Funnel

Screenflow is metrics tracking user interaction with an app, typically at which screen users exit the app, how many times an app screen is visited, what flow users take to get to a particular screen (e.g. Main Menu > Options > Audio). Monitoring the screenflow metrics is an effective way to identify the funnel users take to reach desired screen and any irregularity within said funnel. (Localytics 2016.) This allows the developers to modify an optimal app funnel to maximize user retention and revenue especially in the case of in-app advertising, as well as streamline the screenflow to improve user experience.

4.2.3 In-house analytics

When analytics are concerned, there is always a prevalent question, “In-house analytics or third party analytics?” The authors believe having in-house analytics and tracking system is superior to using a third party service because of:

- **Specialized knowledge** – A third party analytics service serves more than one customer, possible within more than one industry,

thus is compelled to provide a broader array of tools to satisfy their customer needs. This often equates a lack in deep insight into metrics that a business may require. (Vawter 2014.) An in-house analytics system offsets this problem by being built and owned by the business itself, thus renders it customizable.

- **Agility** – Much like above, a first party analytics system and analysts do not have any priority than the business that they are owned by, therefore increase the rate at which they respond (Vawter 2014).
- **Accuracy** – An in-house analytics and tracking system uses primary data and without limitations imposed upon large data set like third party analytics. For example, Google Analytics uses the sampling method in reporting analytics by observing the trends of a subset of data as the representative of the data set. This sampling method is applied when a data set becomes too substantial or reaches above the premium amount, which means analytics of a large data set is not 100% accurate and is prone to errors. (Google 2016b.)
- **Cost** – Generally, on an hourly basis the cost of in-house analytics is lower than that of third party service (Vawter 2014). However, the initial cost of building an analytics and tracking system may be substantial, thus is more applicable in long term situations that allows the total cost of third party service to amount over that of in-house (Fogarty & Bell 2014).

5 GROWTH HACKER FUNNEL

This chapter contains the researched knowledge of the Growth Hacker Funnel. While the term itself has only been used within the latest five years, the definition dates back to 2007, created by Dave McClure under the name Pirate Metrics.The funnel is vital to any growth hacker due to it creating a streamlined process with distinct stages, their purposes and goals to be used as a roadmap in the growth hacking pipeline.

5.1 Definition

Growth Hacker Funnel is a relatively new term coined by Neil Patel and Bronson Taylor in their work “The Definitive Guide to Growth Hacking”. However, their definition is a modified version of what was called the Pirate Metrics, originally created by Dave McClure in 2007. (Patel & Taylor 2016, 31-32.) McClure’s original model includes five steps: Acquisition, Activation, Retention, Referral, Revenue (AARRR), which are five metrics representing five stages of customer behaviors from when they start signing up for the product (Acquisition) to creating income for the business (Revenue). The Pirate Metrics serves as a framework to help businesses gain knowledge into their customers’ behaviors using analytics in order to create and adjust their growth hacking strategies to maximize growth. (Gooding 2014.)

The five original metrics of the Pirate Metrics are defined by McClure (2007) as below:

- *Acquisition - where / what channels do users come from?*
- *Activation - what % have a "happy" initial experience?*
- *Retention - do they come back & re-visit over time?*
- *Referral - do they like it enough to tell their friends?*
- *Revenue - can you monetize any of this behavior?*

Patel & Taylor's (2016, 32-33) version of Growth Hacker Funnel is a simplified model of the Pirate Metrics in which only Acquisition, Activation and Retention are present. However, this does not mean that Referral and Revenue are completely out of the picture as they are instead incorporated into the remaining metrics. Patel & Taylor argued that the Referral metrics is part of Acquisition as "it is just another way of getting traffic". Referral serves as a method of getting visitors via the referral mechanism and thus should not be put in its own category. Similarly, Patel & Taylor explained their reasoning for not putting Revenue as a distinct step of the Growth Hacker Funnel as it shares much resemblance with Activation, especially if a business' customer activation step includes purchasing products or services. The final modification that Patel & Taylor made for McClure's Pirate Metrics is the inclusion of customers' states as visitors, members and users as they move down the funnel. Figure 10 illustrates Neil Patel and Bronson Taylor's Growth Hacker Funnel.

FIGURE 10. Growth Hacker Funnel by Neil Patel and Bronson Taylor (2016, 32).

Patel & Taylor (2016, 32-33) also noted that the term funnel and its model above is representative of the amount of customers through each stage. A wide opening and narrow bottom show that the number of customers is gradually shrinking as they move down the funnel.

5.2 Acquisition/ Get Visitors

Acquisition refers to acquiring first time or lapsed customers (Gupta & Zeithaml 2006, 718-739). Acquisition stage is the first point at which customers come into contact with the business and users experience, price, promotion… all come after the customers being acquired (Gooding 2014). There is a plethora of channels from which customers can be acquired, namely: social networks, display ads, affiliate programs… It is important that acquired customers are broken down into channels/leads and properly tracked using analytics or tracking system. This helps the business monitor the quality and performance of each channel/lead as their customers move down the Growth Hacker Funnel and make informed decision based on the return on investment of each channel/lead. (Teneva 2016a.)

5.3 Activation

The second stage of the Growth Hacker Funnel, activation, refers to the first interaction between a business and its customers. These interactions could be as simple as registering membership, subscribing to newsletter, browsing the catalogue to more engaging such as downloading a free resource or starting the checkout process. (Murry 2015.) While customers performing these actions does not indicate that they are active or returning customers, they are indicators that the products or services potentially provide sufficient value to satisfy the customer needs. (Gooding 2014.) As mentioned above, monitoring the activation metric also allows for the quality assessment of acquisition channels/leads and is clearly indicative of which channel/lead is worth investing (Teneva 2016b).

5.4 Retention

The last stage of Growth Hacker Funnel, retention, refers to having activated customers returning to purchase or use the product/service (Gooding 2014). As it is the bottom stage of the Growth Hacker Funnel, the amount of users retained is the lowest compared to acquisition and

activation. Retention rates vary dependently on the industry and it could be as low as 25% of acquired users in the case of mobile application industry pertaining to Figure 8 (Perro 2016). A good set of strategies aiming for maximizing is necessary not only for minimizing dead acquisition leads/channels but also because of the high profitable impact of each retained customer (Teneva 2016c).

5.5 Which is the most important?

Bronson Taylor (2013) put it “Retention trumps acquisition”, asserting that the final stage of the Growth Hacker Funnel is the most important of all the stages (Holiday 2013). Every new customer requires their own acquisition, activation and the cost associated with the process while existing customers require such process only once per customer. A business with customers moving down the Growth Hacker Funnel as Acquisition > Activation > Churn has the possibility of not breaking even after calculating their acquisition costs. (Teneva 2016c.) In fact, the cost of acquiring a new customer could amount to as high as 15 times the cost of retaining an existing customer (Gillen 2005).

Not only is it cost-effective to putting more emphasis on retention, the actual return on investment is also higher. The probability of selling to a new customer is 5-20 % while the same figure for existing customers is 60-70% (Farris 2010). With every purchase that an existing customer make, the cost of acquisition per purchase is driven down. An increase of 5% in customer retention rate yields a 25-95% increase in profit according to Reichheld & Schefter (2000). Additionally, the probability of selling to a new customer is 5-20 % while the same figure for existing customers is 60-70% (Farris 2010). All these data points out toward the conclusion that retained customers are of utmost significance and thus the retention stage of the Growth Hacker Funnel becomes the most important stage.

6 HOW DID THEY DO IT?

In this chapter the authors laid out various marketing strategies, methods and tools that have been utilized in historical cases by different businesses. These strategies are separated into two different groups based on their focus on the Acquisition or Retention stage on the Growth Hacker Funnel. To ensure the success of these strategies, A/B Testing is also provided as a standalone marketing tool. It is important to note that the strategies and tools mentioned are not strictly applicable to either acquisition or retention only; with minor tweaking, they can be utilized to achieve both purposes.

6.1 Acquisition

The customer acquisition strategies include Display and Social Ads, Referral Program and Cross Promotion.

6.1.1 Display and Social ads

Display ads are banner ads that appear across thousands of website spanning many types such as blog, forums, and media… on their designated ads spaces. Advertisers can have their ads displayed on websites by either directly buying it from the website owner or from consolidated ads networks, namely Google's Display Network, AOL's Advertising.com, AdBlade... Such ads networks span the majority of the internet, offering different targeting methods for the advertisers' desired demographics and contents. Google Display Network itself has 4 billion daily page views and 700 million monthly visitors, representing 80% of total online audience. Display ads is one of the standard method of customer acquisition for marketers. (Weinberg & Mares 2015.) An example of display ads is shown in the upcoming Figure 11.

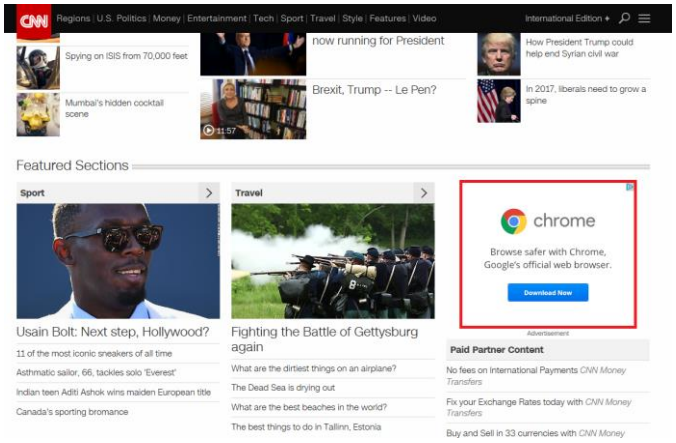

FIGURE 11. Display ads on CNN homepage in red outline (CNN 2016).

Social ads are ads on social networks such as Facebook, Twitter or LinkedIn. The goal of social ads is to build an audience rather than to get customers immediately. This is based on the nature of social networks: people visit them to interact with their social circle and for entertainment, not for purchasing products or services. By creating compelling marketing contents and engaging with the audience, businesses reap the benefits of having their audience generating leads by sharing the contents and eventually convert the audience to customers. (Weinberg & Mares 2015.) Figure 12 below shows examples of social ads on Facebook.

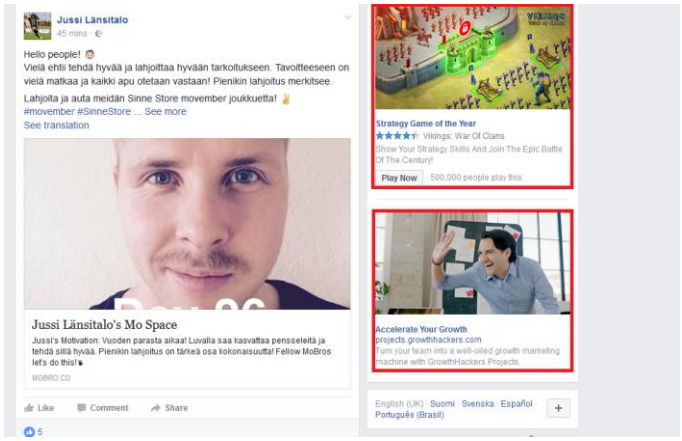

FIGURE 12. Examples of social ads on Facebook in red outline (Facebook 2016b).

Social ads take advantage of the large user base with clear segmentation of social networks. Of the three mentioned networks, Facebook boasts an

active user base of over a billion users while Twitter and LinkedIn has 250 million active users each. In its 2011 study, CareOne, a debt consolidation and relief company, compared the effectiveness between its social ads and other channels. CareOne's customers from social ads are 179% more likely to fill out the consultation form (Activation stage of the Growth Hacker Funnel) compared to other channels. Even if they fill out the signup form then quit, social media customers go back and complete their forms at a rate of 680% higher. Regarding sales, social media customers make their first payment 217% more than other channels. (Weinberg & Mares 2015.)

6.1.2 Referral program

Referral program (also known as ambassador, Tell-A-Friend or Refer-A-Friend program) is a powerful growth hacking tool, especially in web and mobile app environments. The premise behind it is to provide ways for existing customers to generate leads by themselves and attracting more customers via word of mouth with their social sphere, in turn boosting customer acquisition. Referral programs are often accomplished by offering incentives for both existing customers (referers) and latent customers (referees) in forms of cash, credit or discount. (Patel & Wornley 2016.)

Uber is one of the prominent users of this marketing method. In short, Uber is a platform currently that lets people who want to traverse but do not want to use public transportation or taxis (riders) connect with people who own cars and want to earn money via driving customers (drivers) (Pullen 2014). Uber is available on iOS, Android and Windows Mobile with two versions for drivers and for riders. Started as a side project among friends, Uber currently boasts $62.5 billion worth, over two billion ride made and operating in over 500 cities (Alba 2016).

In order to attract both drivers and riders to its platform, Uber employs a number of referral programs at once. Uber generating a unique referral or promotional code for each of their drivers and riders accomplishes this.

The referrer can give this code to their peers who are not yet Uber drivers/riders. Every time the referee completes a certain action or milestone, the original referrer receives an amount of credit if they are a rider and money if they are a driver. (Uber 2015.) The process is made streamline and easy and able to be completed within the Uber app itself or in the physical form of Uber business card (Hum 2015). Figure 13 is an Uber business card.

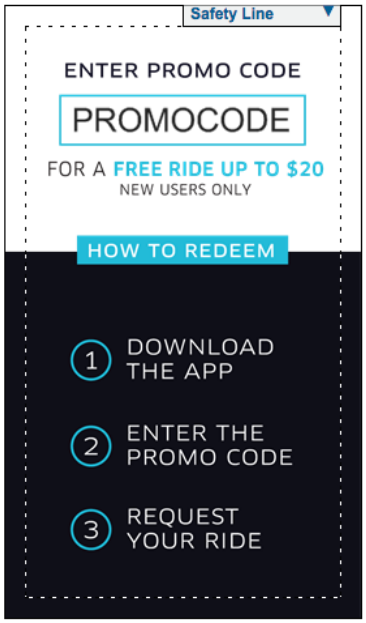

FIGURE 13. Uber business card (Hum 2015).

Rider referral program: the referee enjoys a $20 discount on their first Uber trip by applying the referrer's referral code before requesting the trip. For every referee who completes his or her first trip, the referrer receives a $5 credit in his or her Uber account. (Uber 2015.)

Driver referral program: the referee's account is linked to the referrer's account by applying the referrer's referral code. When the referee completes ten trips, the referrer receives $100 if the referee is a new driver and $500 if the referee is a driver of competing services. (Uber 2015, Hum 2015.)

Specifically, if the referee in the driver referral program is a driver of Uber's competitions such as Lyft, they themselves receives a payment of $500 if

they have a Lyft payment receipt as proof and complete 25 trips within 30 days (Rideshare Dashboard 2015). While the system is vulnerable to exploits such as drivers working for both platforms, it encourages the growth of Uber's driver base and shows that Uber is confident enough that their drivers' service can attract drivers working for their competitors.

6.1.3 Cross Promotion

Cross Promotion is a marketing strategy that involves two or more businesses working in partnership to promote their services or products. In addition to the product or service they are currently use, customers are marketed a relevant product or service coming from the partner business. (Picard 2005.) Cross promotion could be done by creating incentives for customers to experience the partner business's products or services. It is a great method to boost customer acquisition for all businesses (Patel & Wormley 2016).

Foody is a website created for allowing people to find locations to eat. The website allows restaurants/ cafes/ tearooms owners to list their locations, menus and prices as well as discounts online for customers to find using the website search engine and filter. Customers are provided ability to leave ratings, reviews and comments about the businesses at which they use the service. Foody is currently operating exclusively in Vietnam and the company has developed a mobile app titled FOODY on both iOS and Android platforms. (Foody 2016.)

During April 14th to July 31st, 2016, Foody and Uber Vietnam announced partnership, which offered various perquisites for customers of both platforms when using both services simultaneously. For the duration of the promotion, mobile users of the FOODY app were able to launch and find available Uber drivers from within the FOODY app after they had chosen a location from it. By doing this, customers would receive a promotion code that offered a 100,000 VND discount on their first trip. In addition, the payment receipt from said trip also acted as a coupon of 10-20% discounts at specific partner restaurants. (Uber Vietnam 2016.)

This is an example of cross promotion among three parties (Uber Vietnam, Foody and the restaurants). To receive the benefits, customers are required to perform specific tasks forming a funnel involving potentially all three businesses. Thus, it is a great way to create values for customers as well as generate revenue to all businesses involved.

6.2 Retention

Three strategies in the retention stage are Push Notifications and I-app Mesaages, Loyalty Program and Contest.

6.2.1 Push Notifications and In-app Messages

Push notifications are messages delivered to mobile users while they are not using their phones, on their homescreen or using a different app that the users can choose to opt in or not. The content of push notifications includes reminder for mobile users to use the app or notice of promotion and offers. (Adler 2014.) Example of push notification is shown in Figure 14 below.

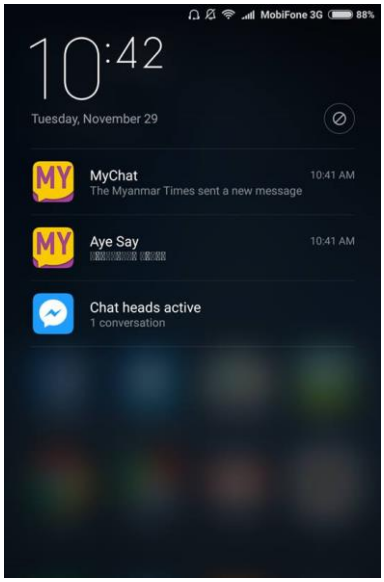

FIGURE 14. Examples of push notifications.

It is an effective method to increase user engagement with the app by driving idle users back to the app, prompting specific action from the users

or creating awareness of a business's marketing campaign. In fact, mobile users with push notifications enabled open the apps three times as many as those without, representing a 171% increase in user engagement (O'Connell 2015). Furthermore, the average retention rate for both short and long periods are higher for users with push notifications enabled. This can be seen in Figure 15 below.

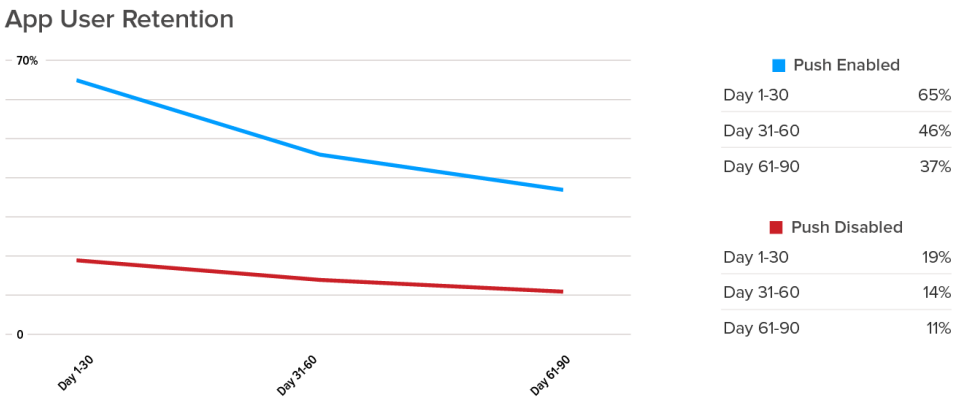

FIGURE 15. Percentage of users opening app days after downloading (O'Connell 2015).

However, push notifications is not a tool that guarantees success as up to 52% of mobile users find them annoying and distracting. There is not a definite threshold to the frequency at which mobile users prefer receiving push notifications, but evidence points toward a fewer side of the scale. According to a collaborated survey conducted by Localytics and Research Now in 2015 with a sample of 1000, 46% of correspondents would choose to opt out of push notifications if they receive 2-5 notifications per week. 32% of respondents would stop using the app entirely if they receive 6-10 notifications per week. (O'Connell 2016.)

The same survey also reveals that mobile users respond more positively to push notifications tailored specifically to their interests. Additionally, the average opt in rate after users have warmed up to the app (4-6 sessions) reaches 70%, doubling compared to if they are ask to opt in between the first and third session (O'Connell 2015). Thus, the effectiveness of push notifications depends much on their content, frequency and timing.

In-app messages are notifications that appear when mobile users are using its particular app. Fundamentally, in-app messages deviate from push notifications not only in where they appear, but also the ability to be situation specific. By using software development kit (SDK) in conjunction with mobile analytics, in-app messages can be programmed to prompt user action based on their personal interest and usage or event specific. If implemented correctly, in-app messages can be a native part of the app that does not distract and be considered spams. (Adler 2014.) Figure 16 is a screenshot of an in-app message MyChat sent to its user.

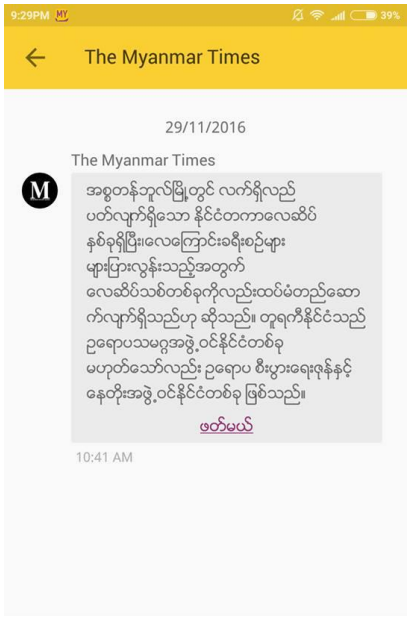

FIGURE 16. An in-app message sent to MyChat users.

On average, apps that send in-app messages see 27% more launches per month compared to apps that do not (13.2 compared to 10.4). In addition to user engagement, in-app messages increases app retention rate significantly, reaching 2-3.5 times than apps without. (Hoch 2015.) The upcoming Figure 17 illustrates such statement.

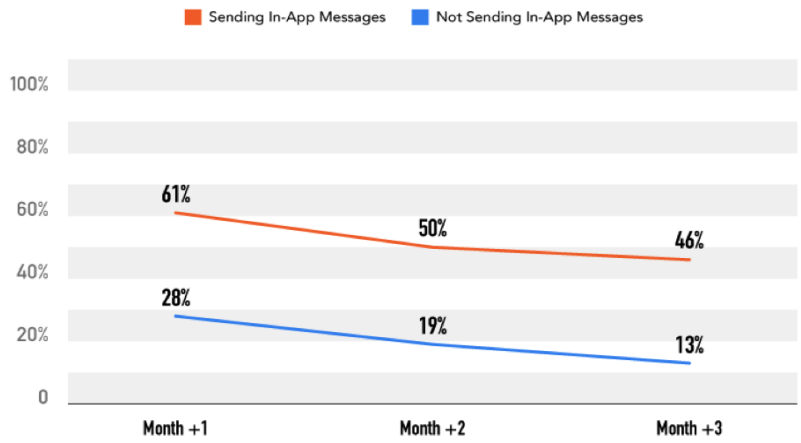

FIGURE 17. Percentage of users opening the app months after downloading (Hoch 2015).

Particularly, in-app messages can be triggered by in app specific actions completed by mobile users rather than just appearing when the app launches or in intervals. On average, in-app messages triggered by events are twice as likely to be clicked by users as messages appearing on app launches (Hoch 2015). Thus, for in-app messages is an immensely powerful tool to boost user engagement and retention and it is best used with mobile analytics to create a personalized experience for the user to reach its full potential (Adler 2014).

6.2.2 Loyalty Program

Customer loyalty program has long been a tool used by marketers. The idea behind it is to provide a greater range of benefits to customers with repeated purchase or usage than to newly acquired or less frequent customers. (Dowling & Uncles 1997.) By doing this, businesses aim to strengthen their relationship with frequent customers as well as encourage less frequent customers to become more engaged with them, thus increasing the retention rate and (Uncles, Dowling & Hammond 2003). Typical customer loyalty programs include tier system for frequent flyers utilized by airlines or credit accumulation system used by retailers and credit card companies. However, there are examples of innovative loyalty programs that provide more methods of encouraging customer loyalty.

Amazon Prime is a subscription based loyalty program by internet-based retailer Amazon. By paying an annual fee of $99, customers are eligible for various benefits and perks such as favorable shipping cost and time, free streaming of movies, music and books… spanning the extend of services Amazon provides (Amazon 2016).

According to a study conducted by SaleCycle across 500 global leading brands, the average cart abandonment rate in 2016 is 74.4% across all industries. It means three out of four customers leave their order instead of checking out and 23% of these abandons is caused by issue with shipping cost and time. (Docherty 2016.) Amazon Prime program is created to deter this abandon issue with competitive shipping conditions including free two-day shipping and weekend shipping. By having a flat annual rate, Amazon also makes a point to its customers that the more frequently they purchase, the more they save on shipping. It is the original selling point of Amazon Prime and matches its customer need incredibly well. (McEachern 2015.) Figure 18 displays the shipping policy of Amazon Prime.

Addresses in the Contiguous U.S.

Shipping Speed	Amazon Prime Member Price
Two-Day Shipping	Free
Same-Day Delivery	Free on qualifying orders in certain cities. Learn more.
One-Day Shipping	Price varies by item size and weight - as low as $2.99 per item
Saturday Shipping	Price varies by item size and weight - as low as $7.99 per item
No-Rush Shipping	Free
Standard Shipping (4-5 business days)	Free
Release-Date Delivery(on qualifying items)	Free

FIGURE 18. Amazon Prime shipping policy (McEachern 2015).

This loyalty program has brought immense succeed to Amazon in term of customer engagement. By the end of 2014, roughly 45% of Amazon's customers in the United States have Prime membership, which amounts up to 40 million customers. Additionally, Amazon Prime members spend

an average of $1500 worth of purchase per year compared to $625 by non-members. (Consumer Intelligence Research Partners 2015.) The key takeouts of this example is having a loyalty program that highlights its benefit well and provides the solution to a prominent issue in its customer base.

Starbucks Rewards is a reward based customer loyalty program by American coffee house chain Starbucks. Customers receive accumulation points call Stars based on the amount of money spent at Starbucks coffee houses and partner retailers. These Stars can be redeemed for products at Starbucks coffee houses in addition to various perks such as free birthday rewards and free refill. At enough cumulated Stars, customers are able to upgrade their status to Gold to reap further benefits such as more rewards and a personalized Gold member card (Starbucks 2016).

However, the key benefit of Starbucks Rewards is the integration of mobile platform into the customer loyalty program. Members of the program are encouraged to use the Starbucks app available on iOS and Android, while Starbucks app users are automatically eligible for Starbucks Rewards. The Starbucks app streamlines customer experiences by providing the ability to pay and order ahead Starbucks products. It also acts as a hub for Starbucks customers to see their stars and rewards progress and a centralized marketing tool for Starbucks. (McEachern 2016.) Figure 19 shows the benefits of Starbucks Rewards.

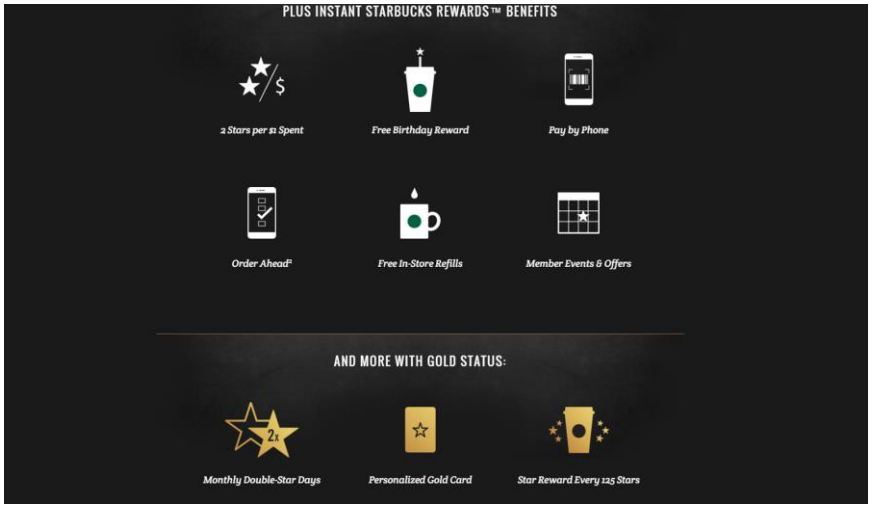

FIGURE 19. Starbucks Rewards benefits (Starbucks 2016).

As of the first quarter of 2016, Starbucks Rewards has 11.1 million participants. Thank to the outstanding customer experiences on its mobile app, Starbucks is reporting 6 million sales per month, or roughly 22% of its transactions are completed on mobile. (PYMNTS 2016.) Starbucks's customer loyalty program has often been regarded revolutionary and one of the best in existences (McEachern 2016). The key takeouts of this example is the integration of mobile platform, providing a centralized way for customers to track their benefits as well as streamlined payment method.

6.2.3 Contest

Contests are a great marketing tool for both customer acquisition and retention. It is based on the assumption that people want to take advantage of opportunities to receive freebies. As an acquisition tool, contests can be used to increase brand awareness, expand mailing list and boost traffic. As a retention tool, contests can be used as a reward program for loyal customers. (Patel & Wormley 2016.) Contests come in different forms such as referral contest in which participants are required to refer their friends and family, submission contests that participants have to create and submit contents to be evaluate, or simply sweepstake and giveaway in which personal info is sufficient for entry (Patel & Taylor 2016).

AppSumo's contest is an ample example of using contests for customer acquisition. AppSumo is a website that aggregates daily deals for digital products and services. In 2014, AppSumo launched a giveaway contest in which participants are required to give their email contacts. Ten participants are randomly chosen to receive the prize, which is a lifetime Pro account on web storage service Dropbox. (Kagan 2014.) The upcoming Figure 20 on the next page shows the registration form and prize of this contest.

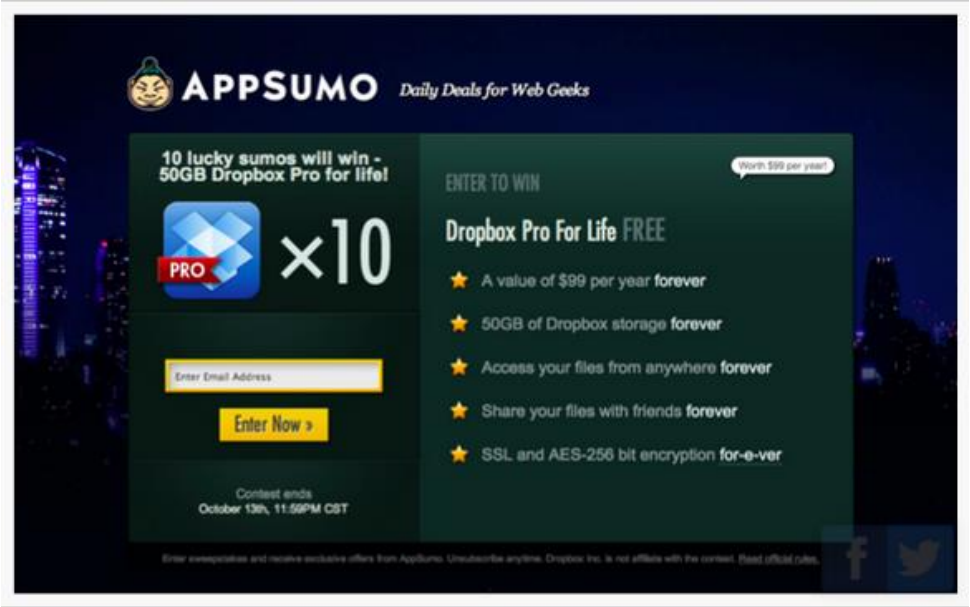

FIGURE 20. AppSumo giveaway registration form and prize (Kagan 2014).

The result was nothing less than stunning. Within the 11 days of the contest, AppSumo received 482,044 visits from 398,896 unique visitors compared to an average of 7,593 visits and 5,806 visitors in the same timeframe before the contest. AppSumo's founder Noah Kagan more than double his Twitter followers, jumping from 13,460 to 32,427. By the end of the contest, AppSumo got 364,104 email address registrations, even after duplicated, cheating and invalid email addresses were eliminated, it was left with 187,991 email addresses, representing a 3,418% leap in AppSumo's mailing list. (Flynn 2014.) By Kagan's calculation, it normally takes AppSumo $5 per email subscriber through online ads but the contest brought in nearly 200,000 subscribers for a cost-effective $0.30 each (Kagan 2014).

6.3 A/B Testing

A/B Testing, also known as split testing, are controlled experiment in which two variants (A and B) with minor variations between them are pitched together to compare their performance. A/B tests are used to answer the question "If a specific change is introduced, will it improve key metrics?" (Kohavi & Longbotham 2010.) In the case of online A/B testing, website

visitors are randomly chosen to see a variation out of available ones. By employing web analytics, testers are able to measure the effectiveness of each variant based on set metrics such as page views, click rate, buy rate… (Macdonald 2014.)

Fab.com, an online home furniture retailer, conducted an A/B test to determine the effect of its Add to Cart button functionality. The original button used an image cue of a cart and a plus sign, the first variation button was a text cue “Add to Cart”, the second variation used both text and image cue with a plus sign and the word “Cart”. (Macdonald 2014.) Figure 21 displays these variations.

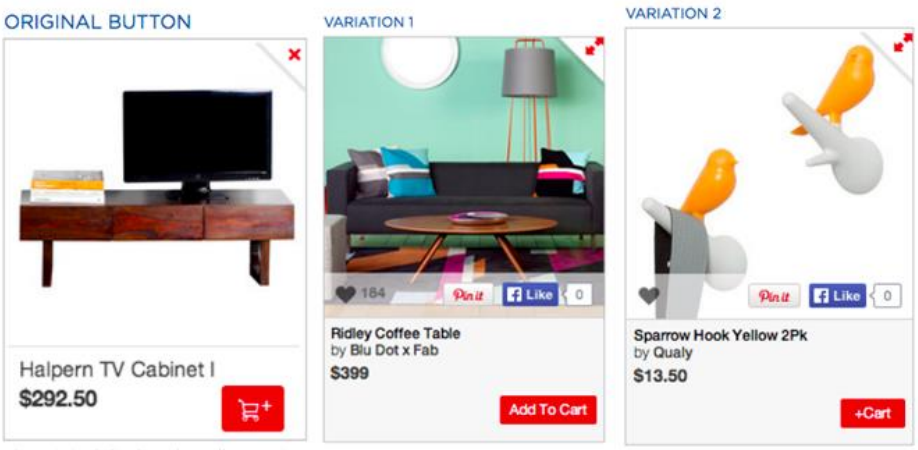

FIGURE 21. Fab.com’s three variations of the Add to Cart button (Macdonald 2014).

The result saw an improvement of 15% in click rate for the second variation while the first variation produced a staggering 49% increase in click rate (Macdonald 2014). Such as the case example, A/B testing can be employed as a supplement tool in the process of implementing different mentioned marketing strategies.

7 CASE: MYCHAT THE SOCIAL CHAT APP

The authors dedicate this chapter to answering the research question: “How can MySQUAR incorporate growth hacking into its launch strategy for MyChat 2.0 to secure success while laying the basis for its future growth?”. The readers will first walk through a precise introduction to the case company MySQUAR, and later on a more in-depth study of the app MyChat and its 2.0 version. A comprehensive SWOT Analysis of MyChat will also be presented at that stage. After that comes the implementation plan the authors construct based on earlier findings. The plan is the authors’ solutions to the launch challenge of MyChat 2.0.

7.1 MySQUAR - The case company

MySQUAR PTE LTD is a tech startup specializing in mobile apps. The company target at Myanmar market only, and have been releasing many apps exclusively in the market. MySQUAR hit 6 million registered users across all of their apps and games this October 2016 (MySQUAR 2016a), 3 years after their foundation. The company have indeed enjoyed steady growth rate.

At the moment, the company have three offices: one in Singapore, one in Ho Chi Minh City, Vietnam, and one in Yangon, Myanmar. Development, management, and marketing teams are based in Ho Chi Minh City office; this is also where the authors were working.

7.1.1 History

The story of MySQUAR began in 2013. Having identified key opportunities for internet products in Myanmar, the company launched operations in June 2013 (MySQUAR 2016b). For years, their primary activity has remained the same: to “design, develop and commercialise Myanmar-focused internet-based mobile applications” (MySQUAR 2016a). Now, the company’s product portfolio encompasses a wide range of apps, re-affirming themselves as a “Myanmar-language social media, entertainment

and payments platform" (MySQUAR 2016a). The products of MySQUAR may fit in different categories, but they all share one mutual purpose – to fulfill the mission of MySQUAR.

7.1.2 Mission

As the company put it on their LinkedIn profile, "MySQUAR (...) [is] created to enrich the lives of the Myanmar people through deep, accessible and rich online experiences". The company work to deliver the kind of technology that can inspire creativity, deliver entertainment, and ultimately facilitate better standards of living for the people of Myanmar. (MySQUAR 2016c.) To live up to that mission, MySQUAR have been continuously developing apps and expanding their product portfolio.

7.1.3 Product

Ever since their establishment, MySQUAR have released many apps in Myanmar market, especially in 2016. The year 2016 has witness a variety of apps launching back-to-back, marking a prominent growth phase for the company. At the moment of this thesis, MySQUAR's range of product consists of:

- MyChat - mobile app (flagship)
- MyFlip - mobile app
- Lann Kyaung - mobile app
- Destroyer King - mobile game
- MyFish - mobile game
- Hawk Hero - mobile game

Moreover, voice call and payment services will soon be released in the fourth quarter of 2016, while M-commerce and social media intelligence will be released beyond 2016 (MySQUAR 2016d, 6).

The product portfolio of MySQUAR is remarkable for a young tech startup. However, this thesis will focus solely on MyChat - the company's flagship app. Here comes the introduction to MyChat.

7.2 MyChat - The flagship social chat app

In 2010, MyChat was beta-launched in Myanmar market as an Android free mobile messaging app (Digital Market Asia 2014; San 2014). By beta-launching, it means that at the time, MyChat was open only to a limited number of users so they could try out the app before its official release to general public (Oxford Learner's Dictionaries 2016). MyChat's key strength at the time was its being tailored to Myanmar people: language, look, emoticons, and sticker sets were all localized (San 2014). Such value is still upheld by the current MyChat, and will continue to be. MyChat is built for Myanmar, and is developed with an eye to Myanmar people.

The target audience of MyChat consists of 2 groups: the young adults between the age of 16 and the age of 25, and the adults between the age of 26 and the age of 35, with the former being the primary target. Regardless of their age, the target audience of MyChat are urban inhabitants living in Yangon and Mandalay. They own smartphones. They are open to innovations, and are eager to improve their standards of living. They are trend followers.

Years have passed, MyChat has evolved from an Android messaging app into an Android social chat app. The first release of MyChat was all about chatting, and that was literally the only thing people could do with MyChat. However, the current MyChat is more concerned about the connection between the people of Myanmar, and thus has offered more features to emphasize and facilitate such connection. This justifies the app's tagline "Connecting Myanmar".

Similar to other apps, new versions of MyChat have been released on a regular basis; and each time that happened, the app underwent minor-to-major technical changes. Yet, those changes will be little compared to

what will arrive in the end of 2016. MyChat 2.0 will be open to public before the end of 2016 (MySQUAR 2016a), and this version marks a full transformation of the app. How does it surpass the current MyChat? It is time to delve into (and compare) these versions.

7.2.1 MyChat 1.7

MyChat 1.7 is shortened from 1.7.8679.f8090fe, which is the latest MyChat version available for download on Google Play Store at the time of this thesis (Google Play Store 2016). The main features which this version offers are Chat, Feed, Channels, Game Corner, Look Around and Timeline. The upcoming Figure 22 – Figure 27 displays specific screenshots of each feature, accompanied by detailed description of each of them.

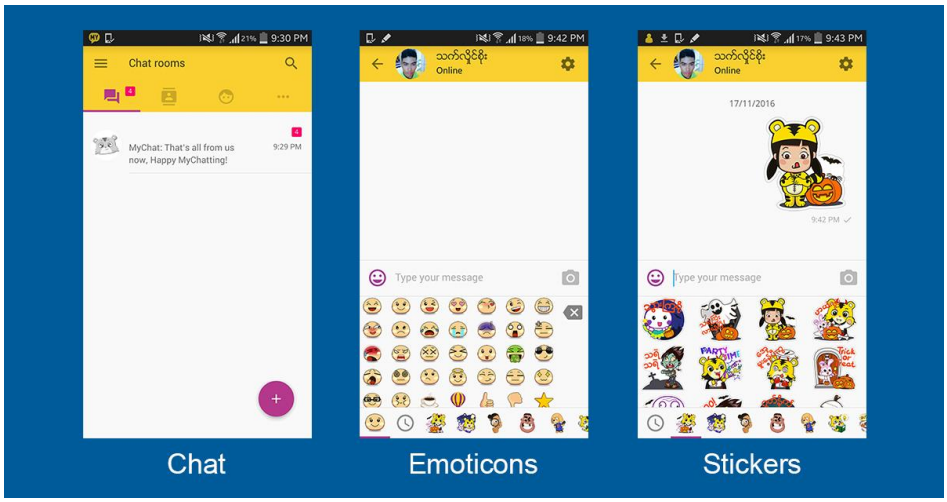

FIGURE 22. Screenshots of Chat feature.

Chat feature allows users to send messages to their friends. With MyChat 1.7, users can:

- Carry out 1-on-1 chat to chat with 1 friend;
- Carry out group chat to chat with multiple friends at once;
- Send Myanmar emoticons and stickers during the chat to express emotions and/or enliven the chat experiences. These emoticons

and stickers are tailored to Myanmar culture, and can be downloaded at no charge.

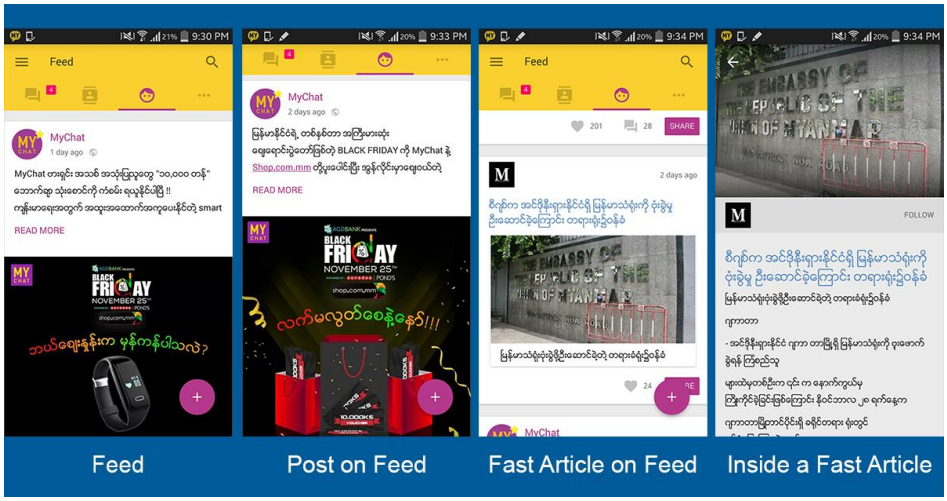

FIGURE 23. Screenshots of Feed feature.

Feed displays updates from friends and Official Accounts. These updates belong to either one of the following categories:

- Post: Post contains text and can be attached with only one photo. Post can be uploaded by both user account and Official Account. Users can also tag other user accounts (not Official Accounts) in their posts;
- Fast Article: Fast Article contains longer text and can be attached with multiple photos. As the name depicts, Fast Article disseminates news, and is reserved only for internal Official Accounts and media outlet Official Accounts.

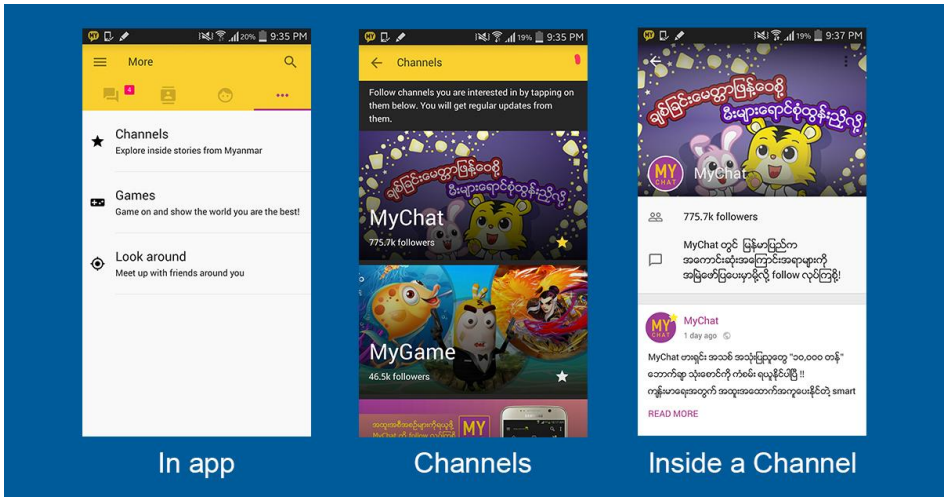

FIGURE 24. Screenshots of Channels feature.

Channels (also internally referred to as Official Accounts) are accounts created to represent an interest or an organization. Official Accounts are entirely different from user accounts. Official Accounts can neither add friend, comment, nor chat. They can upload Post and/or Fast Article only, and have to use a web-based platform to perform that task. User accounts on the other hand can upload post directly in MyChat app. Moreover, users do not “add friend” the Official Accounts; they follow the interesting accounts to get the latest updates. These Official Accounts are categorized as:

- Internal Official Accounts: These accounts are handled by MyChat content team. They include MyChat Official, MyGame, MyPay, Lifestyle, Humor, Sports, Astrology, Health and Fitness, and Quotes.
- External Official Accounts: These accounts are handled by the organization they represent. They include Shop.com.mm (e-commerce), Myanmar Times (media outlet), Chelmo (media outlet), Aye Say (media outlet), and so on.

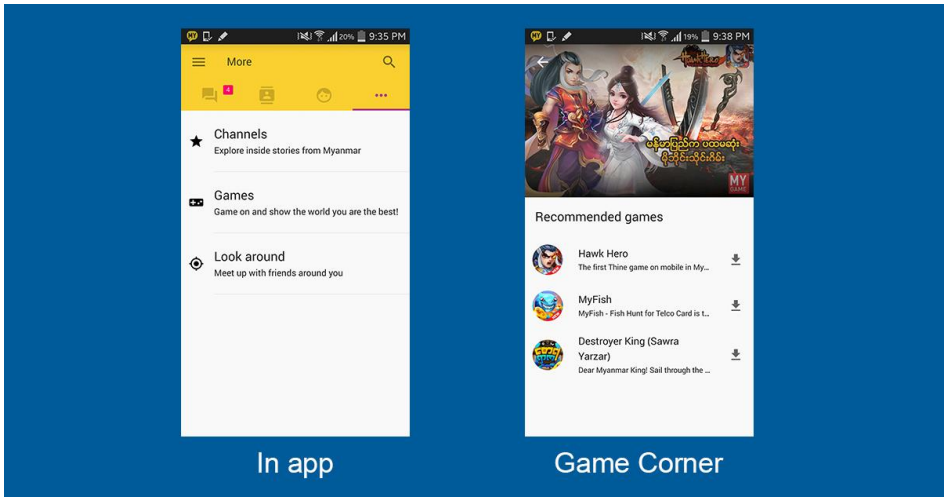

FIGURE 25. Screenshots of Game Corner feature.

Game Corner gathers all the games published by MyGame (MyGame is the name of MySQUAR's game division). These games include, but not limited to, Destroyer King, MyFish and Hawk Hero. Upon tapping on the game icon, if users have already installed that game, they will be taken directly to the game and play. Otherwise, they will be redirected to a specific landing page to download the game.

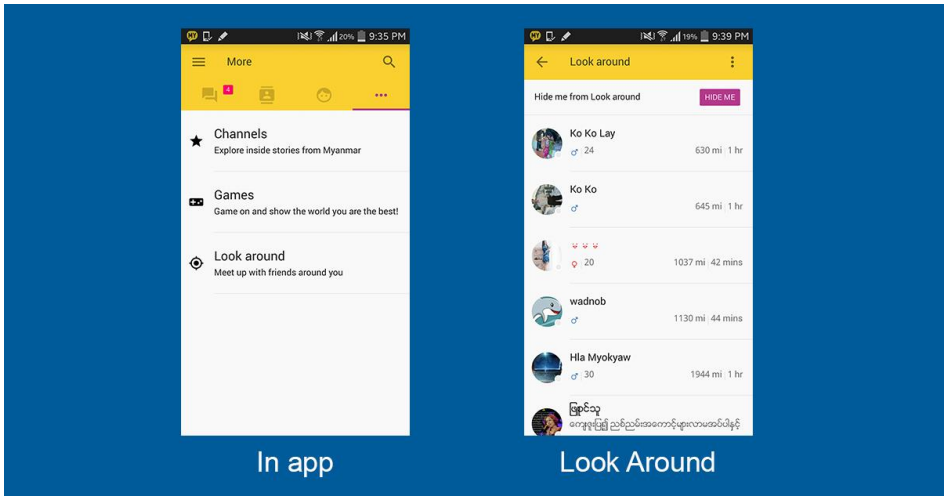

FIGURE 26. Screenshots of Look Around feature.

Look Around enables users to find other MyChat users living in the nearby areas based on their GPS signal. This feature gives a good overall look of how many people are living close by, as well as the distance between the one "looking" and the one being "looked". The point of Look

Around is to facilitate the connection between MyChat users, starting from the people living near them. However, if necessary, users can opt to “hide” themselves from being “looked around” by others.

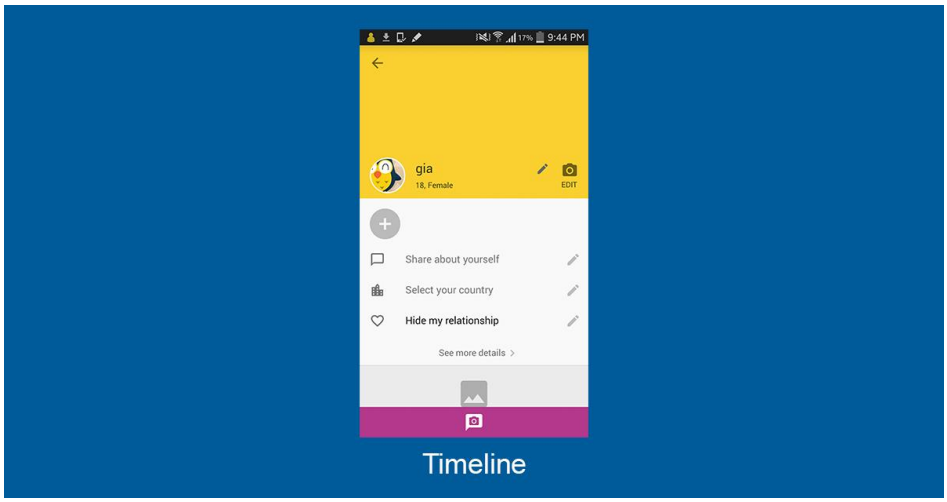

FIGURE 27. Screenshots of Timeline feature.

Users can go to their Timeline to edit profile and update basic information such as birthdate and name. Also, Timeline stores all the personal posts which the user has been uploaded (but not the one they are tagged in).

Certainly there are more to MyChat 1.7. However, the above features are the fundamentals of the app. Moving on, it is MyChat 2.0’s turn to be scrutinized.

7.2.2 MyChat 2.0

As announced by MySQUAR, MyChat 2.0 will be released to the public before the end of 2016 (MySQUAR 2016a). At the time of this thesis, this version is still in its development stage; therefore, the authors are unable to provide a description as detailed as MyChat 1.7’s. Nonetheless, here come the screenshots of MyChat 2.0’s alpha version (alpha version is open to employees only) displayed in the upcoming Figure 28.

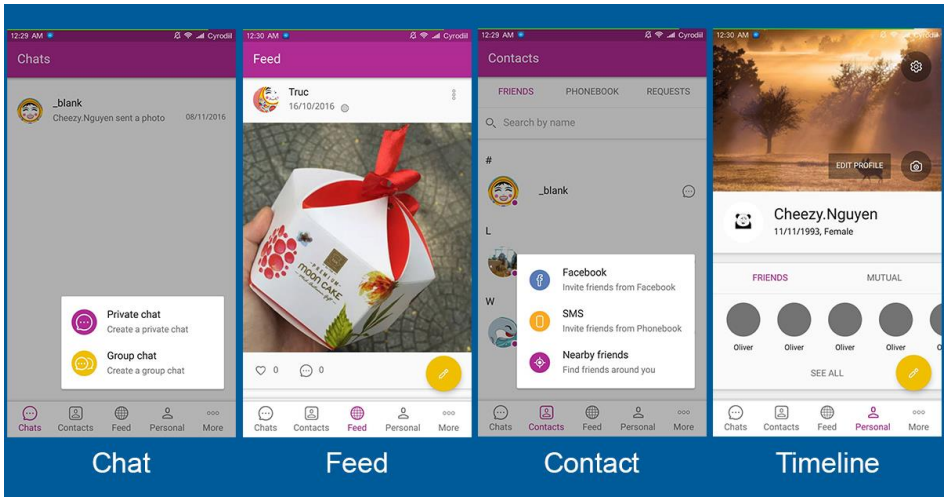

FIGURE 28. Screenshots of MyChat 2.0 - alpha version.

It can be noticed at first glance that MyChat has undergone what can be called “a full body transformation”. The app’s User Interface and User Experience (UI/UX) have been completely redesigned: the colors change, the icons are modified, hamburger menu is omitted and navigation bar is moved to the bottom, and so on. Moreover, it is not only the look that advances, but also the technical details.

According to Truc N. Nguyen, the product director of MyChat, with MQTT being fully optimized, MyChat 2.0 promises less data-consuming, faster, and more reliable chat experiences. MQTT means MQ Telemetry Transport, a “lightweight publish/subscribe messaging protocol” (MQTT 2016); to put it simply, let’s think of MQTT as a platform based on which the chat feature operates. Channels zone will too be upgraded so users can browse Official Accounts more easily. Furthermore, a Sticker Store will be added to MyChat 2.0 to store all the available sticker sets. (Nguyen 2016).

In short, MyChat 2.0 can be considered a brand new MyChat. Not only UI/UX, but also the technical bits have improved to better benefit Myanmar users. Most prominently, MyChat 2.0 comes with superior chat experiences, an easy-to-browse Channels zone, and a Sticker Store. MyChat 2.0 is expected to well surpass its predecessor MyChat 1.7; details are further explained in the following part.

7.3 SWOT analysis of MyChat

As specified previously, MyChat 2.0 is not yet made available to the public at the time of this thesis; the authors thereby have limited knowledge of this version, much less experiences. As a result, instead of performing SWOT analyses of these 2 versions, the authors provide only SWOT analysis of MyChat 1.7, and then compare it to MyChat 2.0 to the best of their knowledge.

7.3.1 SWOT analysis of MyChat 1.7

The list of MyChat 1.7's Strengths, Weaknesses, Opportunities and Threats are long. Therefore, in order to portray a concentrated SWOT analysis of this version, the authors include only its most prominent factors in Table 1.

TABLE 1. SWOT analysis of MyChat 1.7.

STRENGTHS	**WEAKNESSES**
Product: • Advocate local cultures • Partnerships with local and international brands • Consume little amount of data Brand: • Strong local presence • Good understandings of the market • Strong brand awareness	Product: • Unstable app performance • Primitive features • Lack of comprehensive in-house analytics system • Android only Brand: • Weak communication of brand value • Misunderstood brand image

OPPORTUNITIES	THREATS
• Decreased competition • Increased interest in MyChat • High urbanization rate • Development in telecoms industry • High economic growth • Exclusive partnerships with smartphone retailers • Advances in technology • User satisfactions with new versions/ changes	• Increased competition • Changes in user behaviors • Slow urbanization rate • Economic downturn • Development in telecoms industry • War • Users dissatisfaction with new versions/ changes

To begin with, upholding the core value of its predecessors, MyChat 1.7 strongly advocates the culture of Myanmar. This is evident in its localization of sticker sets and content. The stickers are specifically tailored to the taste and aesthetic of Myanmar people, and are produced either by Myanmar sticker artists, or by in-house artists who have gone under training in the country's culture. Additionally, MyChat 1.7 has partnered with local media outlets e.g. Aye Say, Chelmo, and Myanmar Times to provide users with a steady stream of local content. MyChat 1.7 creates Official Accounts for these media outlets and promotes them; in turn, they publish their articles by means of Fast Article on MyChat regularly. Such Myanmar-centric dedication is in fact, MyChat 1.7's most vital strength. Moving on, one of the pride of MyChat development team is that they have built MyChat 1.7 to consume as little data as possible. Myanmar's telecoms market is still in its primitive stage (Oxford Business Group 2016), and hence internet data is considered expensive goods by most people (Gingold 2016). As a result, the less data MyChat 1.7 consumes, the stronger a strength it is. Next, MyChat 1.7 has a team made up of young but experienced Myanmar natives. They are based in Yangon, Myanmar, and are responsible for activities such as customer

support, marketing support, content editing, and business development. Not only the team enhance MyChat 1.7's local presence, but they also provide excellent insights into, and deep understanding of, the market. This in turn adds to MyChat 1.7's advantage in knowledge. Also, even though MyChat has not invested much in offline (traditional) marketing activities, the name MyChat is well-known among Myanmar people. MyChat 1.7 now enjoys the strong brand awareness its predecessors have accumulated for the past 2 years.

Now come the weaknesses of MyChat 1.7. Technically speaking, while competitors, e.g. Viber and Line, are seniors with years-long experience, MyChat 1.7 is a toddler having a long list of things to catch up with. The app's performance is unstable, with frequent occurrences of crashes and bugs. More importantly, its core features (including Chat, Feed, Look Around, etc.) are still in their somewhat primitive stages. Saying primitive is indeed making a mountain out of a molehill, but it emphasizes the fact that these features, albeit having been constantly being developed, are lacking. They need a multitude of tweaks and optimization to meet the competition. Moreover, MyChat 1.7 is deficient in features dedicated for marketing/growth hacking, particularly a comprehensive tracking system. MyChat does have an in-house analytics system, but there exist many limitations to it. Furthermore, being an Android-only app has its own drawbacks, especially when Myanmar market is experiencing growth in iPhone users. Concerning the brand name MyChat, as mentioned in the strengths of MyChat 1.7, the name MyChat is well-known, and yet well-misunderstood at the same time. Until recently, MyChat has not carried out any proper brand communication; there was no guidelines for doing so. Besides, even though MyChat is marketed as a social chat app to connect the people of Myanmar, more than often it is seen as Myanmar's Tinder (an online dating app) by its users. People go to MyChat not to simply make friends.

Coming up are the opportunities that the external environment can bring to MyChat 1.7's benefits. The list of opportunities is long, but here are the main factors. First, if either the competition decreases with competitors

opting out of the market, or the interest in MyChat escalates, MyChat 1.7 has more chances to grow its market share. Second, for now, the majority of Myanmar internet users is located in urban. They are the people that can afford smart-phones and internet data, and are living in areas with better telecoms infrastructure. As a result, a faster speed of urbanization, especially if accompanied by progress in telecoms industry and growth in income, will substantially increase the number of internet and smart-phone users, and inherently potential MyChat 1.7 users. Fourth, in Myanmar, it is common to go to smartphone retailers to have apps installed (because downloading them would be costly). Hence, acquiring exclusive deals with these retailers to have them recommend MyChat, or even pre-install MyChat on their offer of phones, would profoundly affect MyChat 1.7's growth. Fifth, advances in technology can boost the development of the app, and open the door to a more efficient and more competitive MyChat, more happy users, and eventually more growth.

Onto the last part of SWOT analysis, here are the most important threats to MyChat 1.7. Most of them are the contrary to opportunities, and thus holds polar opposite effect on the app. For instance, with more communication apps enter the market, the competition will rise and MyChat's market shares may plummet. Likewise, if users change behaviors and switch to other kind of apps, such as Instagram or Snapchat, for social connectivity, MyChat 1.7's growth will be harmed. Besides, a diminishing urbanization rate or an economic downturn can hinder user base growth of MyChat 1.7. Progress in telecoms industry can also become a threat to MyChat. With better internet speed and internet data package, Myanmar people can gain access to a wider range of apps, and this again intensifies the competition for MyChat. Finally, internal conflict is still around in Myanmar, and war is still a possibility. War is detrimental to MyChat's operations in various ways.

7.3.2 MyChat 1.7 vs MyChat 2.0

MyChat 2.0 inherits the key strengths of MyChat 1.7, and is built on the knowledge of its predecessor's vital weaknesses. As an attempt to improve the core Chat feature, MyChat 2.0's development team has implemented MQTT to enhance chatting experiences - less lags and less missing messages. The team have also added or optimized other features to make the experiences smoother and more enjoyable, as described previously in the introduction of MyChat 2.0. They have too invested in rebuilding the in-house analytics system, promising a more sophisticated, more comprehensive, and more reliable tracking system. In addition, marketing team has compiled official brand guidelines to tackle the issue of ungoverned brand communication. The guidelines are inclusive; not only do they provide directions for MyChat 2.0's brand communication, but also regulations for the components of its brand identity. Bringing in the guidelines will enable consistency in communication, and ultimately reinforce MyChat 2.0's brand image.

Concerning the opportunities and threats the external environment poses to MyChat 2.0, they are practically the same as what MyChat 1.7 is now facing. Nonetheless, there is one element that is significantly more decisive to MyChat 2.0 than it is to MyChat 1.7: users' satisfaction with the new version. MyChat turns over a new leaf with this 2.0 version; it is the team's result of a year-long learning and building, and is their stakes in carving out a new era of MyChat. Hence, it is no exaggeration to state that users' satisfaction with 2.0 decides the life and death of the app. And in this game, MyChat 2.0's fresh UI/UX is a wild card. The current users of MyChat are specifically affected by this change in UI/UX; they will either love it, or hate it immensely. And the last thing MyChat ever needs is users' disapproval of 2.0. This leads to the next section: the authors' recommendations to MySQUAR on heightening MyChat 2.0's chances of success.

7.4 Implementation plan

The objective of this thesis is to assist the case company MySQUAR in formulating a viable launch strategy for MyChat 2.0, which can secure success while laying the foundation for the app's future growth. This section is the fulfilment of such objective. This implementation plan is the product of the authors' incorporating theoretical findings and lessons learnt from growth-hacked cases into the characteristic and conditions of MyChat app. Setting the official release of MyChat 2.0 as a signpost, the authors divide the implementation plan into 3 phases, each encloses different series of activities. Figure 29 on the next page is the outline of this plan, giving the readers a concise overview.

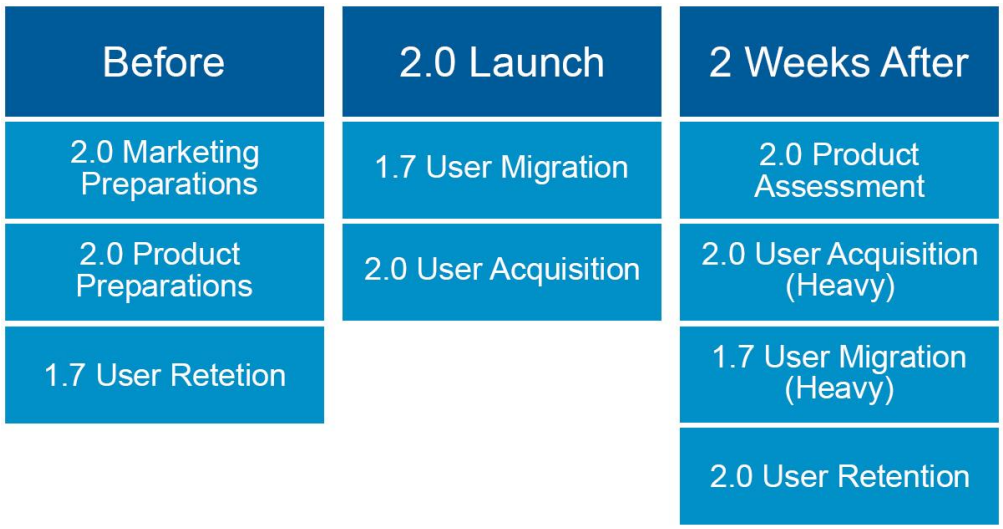

FIGURE 29. Outline of the implementation plan.

7.4.1 Phase 1: Before the launch of MyChat 2.0

Weeks in advance of the official launch of MyChat 2.0, the authors suggest MySQUAR carry out the following 3 series of activities: (1) 2.0 marketing preparations, (2) 2.0 product preparations, and (3) 1.7 user retention.

7.4.1.1 2.0 marketing preparations

As the name depicts, this series encompasses activities which marketing team should execute as preparations for the release of MyChat 2.0. Details of these activities are shown in Table 2.

TABLE 2. Phase 1 - MyChat 2.0 marketing preparation activities.

Departmernt	Objective	Activity
Marketing	Raising awareness of 2.0	Publishing sneak-peek series on social media
		Running display ads
	Preparing 2.0 walk-throughs	Making 2.0 how-to series
		Training customer support in 2.0 details
	Acquiring more content publishers	Establishing affiliate program targeting at amateur blogger/writers
	Acquiring cross-promotion deals	Seeking online cross-promotion deals
		Seeking online-offline cross-promotion deals
Marketing and product	Contracting smartphone retailers	Establishing commision system
		Building tracking system

Raising awareness of 2.0 involves publishing teasers of MyChat 2.0 on social media and running banner ads simultaneously. For the former, teasers are meant to offer a sneak peek at MyChat 2.0, and are supposed to create hype around this version before its launch. Their target audience consists of MyChat 1.7's current users, as well as the Myanmar youth who have never used MyChat before. To attract this group's attention, on one hand, these teasers should be informative; they should give a thorough introduction to the superiority of MyChat 2.0. On the other hand, their wording should be simple, and their sentences should be the easiest to understand. The authors suggest saving the in-depth technical details for tech-savvy people; an employment of specialized terms at this stage is too likely to discourage the audience. Additionally, these teasers' visuals should be the most eye-catching possible; they should be in the form of static image, animated image, or even video. Moving on, marketing team should publish these teasers regularly on MyChat's social media, including Facebook and Instagram. For this execution, the authors have 2 suggestions for marketing team: they should (1) start the publishing with twice a week and increase the frequency as the launch of 2.0 draws near, and (2) adjust the content of these teasers accordingly to the taste and characteristics of each social media's users, e.g. Facebook users and Instagram users have different expectations for visuals. For the latter, running display ads, the authors have the same suggestions on the ads' content, including text and image, as they do on teasers' content. In addition, as the display ads' audience is the website's audience, the authors recommend marketing team to select websites and/or ad networks cautiously to meet the right group of audience.

Preparing 2.0 walk-throughs entails getting MyChat 2.0's how-to series done and training customer support in the details of this version before its release. How-to series is, in other the words, a series of tutorials showing users how to use MyChat 2.0, e.g. how to upload photos, where to find Official Accounts, how to find more friends, etc. Current users of MyChat 1.7 and new users of MyChat 2.0 are all new to this version's UI/UX, and are bound to have questions and confusions about its features and usage.

This series is thereby of great importance. The less confusing (and probably frustrating) a user is about an app, the more likely they are to stay. To fulfill the preference of different users, how-to series should be in as many forms as possible, including infographics, GIF, video, and even live support. This results in a need for customer support training. Certainly, every member of MyChat 2.0 team should be familiar with its details; however, if they belong to customer support team, they have to take their knowledge to the next level. A customer support team member should be a walking encyclopedia of how to use MyChat 2.0, from whom the users can always expect an answer. Consequently, the authors suggest giving customer support team a comprehensive training in MyChat 2.0's features and usage before the official launch. This preparation of walk-throughs will take off when MyChat 2.0 is publicly released and questions come flooding in.

Acquiring more content publishers is another crucial milestone of this phase. A longer and more diverse list of Official Accounts will give users more sources of information and entertainment, and hence more reasons to stay. However, media outlets have been on the list, so the authors propose establishing a writing affiliate program targeting at native bloggers/ writers. Beforehand, marketing team should start with running a survey asking users which reading topics appeal to them the most. Then, based on the results, they can bring in more interest-based Official Accounts while recruiting bloggers/writers for those accounts. For this affiliate program to achieve cost-effectiveness, it is advisable that marketing team opt for young and amateur bloggers/writers. MyChat's target audience is the youth of Myanmar; therefore, the writers/bloggers' being young is more an advantage than a disadvantage. Their insights into the community, and their employment of slang and youth language in writing make them capable of producing relevant and interesting pieces of content for MyChat 2.0's users. Furthermore, they have the enthusiasm of the young, and they usually prefer experience to monetary gain. Marketing team can reward these writers/bloggers with intangible privilege, e.g. chances to learn from MyChat content editor team, in addition to stipend.

Acquiring cross-promotion deals involves seeking both online and online-offline cross-promotion opportunities. Similar to the case of Uber and Foody, marketing team can partner with other internet-based services to carry out an online cross-promotion program. In fact, the authors suggest the team approach e-commerce sites, offer to promote them on MyChat's marketing channels in return for exclusive promotional codes for MyChat users. Besides, the team can investigate online-offline partnership opportunities with brick-and-mortar businesses as well, and the target which the authors recommend is tea houses. Tea house are the go-to place for social gathering for Myanmar people, especially the youth (Jordan 2015). The cross-promotion for this case works as follow: MyChat's content editor team can copywrite Posts, or even Fast Articles to introduce and promote the tea house on MyChat. In return, the tea house can give MyChat users special discount under the conditions that they take a photo at the tea house and upload it on their MyChat (another form of Facebook check-in). The potential of cross-promotion is unlimited; yet, this tactic relies heavily on marketing team's negotiation competence. No matter how creative the team are at devising the plan/ program, all will come to nought if they cannot strike a deal.

Contracting smartphone retailers is to have them recommend MyChat 2.0 to their buyers, or even pre-install MyChat 2.0 on their offer of phones. As explained in the Opportunities of MyChat 1.7, it is a common thing in Myanmar to go to smartphone retailers to have app installed. This is too an opportunity from which MyChat 2.0 can benefit tremendously if taken carefully. In this case, in order convince the retailers to enter the contract with MyChat 2.0, the authors propose building a commission system to incentivize them. To be more precise, first, marketing team offers specific retailer an APK (Android Application Package) attached with specific code acting as source identification tag. Second, the retailer installs MyChat 2.0 using the given APK. Third, the phone buyer opens the pre-installed MyChat 2.0, registers, and then activates their account. Only when the account is successfully activated, fourth, will MyChat pay the retailer the promised commission. Because the APK is tagged, marketing team can

track down the exact retailer the user comes from, and rewarding the right retailer would not be a challenge. However, this plan is time-consuming and human-resource-consuming. Not only does it compel marketing people to locate the retailers and then negotiate the terms with them, but it also requires product people to individually tag each APK and build a tracking system to track those APKs. The disadvantages of this plan are noteworthy, but its impact is indeed too significant to be ignored.

7.4.1.2 2.0 product preparations

This series of activities has two principal meanings: (1) ensuring MyChat 2.0 meets users' expectations, and (2) making suggestions for features that the version should have. For that, it requires full cooperation between product department and marketing department. Table 3 drafts the most important components of this series.

TABLE 3. Phase 1 - MyChat 2.0 product preparation activities.

Department	Objective	Activity
Marketing and Product	Keeping MyChat 2.0 on track of PMF	Beta testing MyChat
		Running user surveys
Product	Developing baked-in marketing features	Developing referral feature
		Developing dialog box feature

Achieving PMF is never one-day journey; it takes time investment and human resource investment. Nevertheless, here are the authors' ideas on what product and marketing departments should do before the official launch to **keep MyChat 2.0 on track of PMF**. Most prominently, it is essential that the team release a beta version of MyChat 2.0 for user

testing in advance of the official launch to collect actual user feedback. Such feedback is honest and is invaluable to the PMF journey. Additionally, the authors strongly suggest there be three categories of beta users: MyChat users, ex-MyChat users, and non-MyChat users. They are the people who are currently using any version of MyChat, who used to use any version of MyChat, who have never used any version of MyChat respectively. The motivation behind such requirement is that, analyzing feedback from all these three categories at the same time will generate more objective results. However, simply gathering these people and asking them to test out the app is inadequate; the authors advocate building a community of MyChat beta users to make the best out of this procedure. Building a community, in the intention of the authors, entails maintaining interactive communication between MyChat 2.0 team and beta users while giving beta users “red-carpet” treatment. By “red-carpet” treatment, the authors imply activities that demonstrate how much MyChat value beta users, e.g. giving premium access to MySQUAR games, giving out marketing swags such as T-shirt, sending thank-you messages, etc. MyChat 2.0 and its successors all need beta testing, and thus it is optimal to have happy and motivated beta users who would like to come back again. Meanwhile, marketing team can also run several small and quick surveys on social media asking the general public for opinion on MyChat 2.0. These surveys are more or less dripping teasers of MyChat 2.0 attached with questions. The difference is that, these questions are not rhetorical, they are purposeful. For instance, marketing team can display the new UI of MyChat 2.0 and ask for thoughts on the color or font size. For another instance, the team can show an icon in MyChat 2.0 and ask people if they know what it is for. If the majority of them answer correctly, that icon is suitable. Otherwise, they should consider changing the icon design.

The authors have drafted an abundance of campaigns for once MyChat 2.0 is launched. However, the execution of most of these campaigns demand certain product features which are unavailable in the current MyChat 1.7. Henceforth, the authors propose **developing baked-in**

marketing features during the pre-launch, to ensure the necessary features are built in by the time MyChat 2.0 is released. These features include referral and dialog box. First, the referral feature here is the same in spirit as Uber referral program, i.e. to get users to do the acquisition; however, it is not as sophisticated. The referral feature in the authors' mind is no more than an "Invite your friend" button with an underlying tracking system. Each user is assigned with a specific code, and all invitations sent from this button are attached with that specific code to act as source identification tag. That is to say, everything that follows the invitations can all be tracked and traced back to its root. For example, user A invites a group of friends, and marketing can see in the analysis system that how many of his invitations have been opened, clicked, and converted into actual users. Second, dialog is, to put it simply, popup text message from the app to user. If the message is sent when users are using the app, dialog box will appear in the middle of their phone screens, but not taking up the whole thing. Dialog provides a means of two-way communication between app operator and users: it can include an action which the receivers take in reply to the sender's message. For example, the message is "Are you sure you want to exit? Yes - No", with "Yes" and "No" being clickable options. The action in this case is for users to tap on either one of the options. Once tapped, their answer will be recorded automatically in MyChat system, and can be retrieved later. In other words, the action prompted by a dialog has more meaning than just confirmation.

7.4.1.3 1.7 user retention

In Table 4, activities of this series are drafted with aim to retain the users of MyChat 1.7, which is still in operation at the moment of this thesis.

TABLE 4. Phase 1 - MyChat 1.7 user retention activities.

Department	Objective	Activity
Marketing	Get MyChat 1.7 users to stick with the app	Running contests
		Sustaining (and expanding) a steady stream of content on Feed

To retain the users of MyChat 1.7 is to give them the reasons to open and use the app time after time. Because the above 2 series have already called for big investment and commitment, for this series, the authors suggest marketing team keep doing what they have been doing thus far to retain users: running contests in MyChat and sustaining (and expanding) a steady stream of content on Feed. Regarding the former, marketing team can attempt themed contests or giveaway events. For instance, the authors' proposal is a New Year photo contest which takes place between the end of the old year and the beginning of the new year. In order to join, users have to upload photos of their family together to their MyChat timeline, then proceed to get as many likes as possible from their circle of MyChat friends. Users whose photos with the most likes will be rewarded by MyChat. Nevertheless, it is important to take note that the sky is not the limit in this case. Marketing team has to consult with product team on the possibility of execution, e.g. whether it is possible track all the participants' photos, or whether it is possible for the participants to share the photo's link to their friends directly, etc. Regarding the latter, the authors advise marketing team to gradually increase the inputs of in-house content while having the currently onboard media outlets do the same with their Fast Articles. They should also incorporate knowledge of user behaviour into this activity to achieve bigger impact. The team can look into users' habits and routines, e.g. at what time they are most online, which topics draw

more attention, and based on the findings to improve the content and content schedule effectively.

With 1.7 user retention being presented, phase 1 of the implementation plan has reached its end. Now comes phase 2 of the plan - the authors' intentions for MyChat 2.0 team during the official launch of this version.

7.4.2 Phase 2: The launch of MyChat 2.0

When MyChat 2.0 is released to the general public, the authors strongly recommend MyChat 2.0 team to focus solely on two series of activities: migrating 1.7 users, and acquiring new users. However, at the time of this thesis, it is completely uncertain how the general users will react to this version, or how intact MyChat 2.0 and its features are when thousands of users are online at the same time. The app may have gone under a beta test, but such test rarely involves more than hundreds of users. Hence, it would be too risky to go all out at this point. As a result, the authors suggest only small to medium scale projects, and intend this phase to last two weeks at the longest.

7.4.2.1 1.7 user migration

In this context, to migrate users is to encourage users to update their app to the latest version available. Likewise, the aim of this series is to get as many 1.7 users as possible to update to MyChat 2.0. For that reason, the authors put forward activities as shown in Table 5.

TABLE 5. Phase 2 - MyChat 1.7 user migration activities.

Department	Objective	Activity
Marketing	Migrating users with push notification and in-app messages	Segmenting users into demographic groups
		Copywriting content for push notifications

		and in-app message for each group
		A/B testing the content
	Incentivizing users to update to MyChat 2.0	Running online cross-promotion program

To migrate users via push notifications and in-app messages is to alert them to the release of MyChat 2.0, and subsequently motivate and remind them to update their MyChat. From the authors' perspective, this project boils down to the content of the notifications and messages - how attractive and how persuasive they appear to users. The answer for this can only be obtained from A/B testing. Therefore, the authors propose utilizing in-app messages as follows. Marketing team should begin with segmenting MyChat 1.7 users into age and gender groups, e.g. male below 20, and female below 20. For each group, the team should copywrite 2 variant messages based on the group's preference in tone and wording. The messages should be personal, informative and suitable for the group they target at. After that, each group will be divided into 2 smaller groups, group A and group B, and they will be sent different versions of the message. Marketing team can then observe the reaction and assess the variants. Whichever variant yields better result will become the "winning" one. For this test to achieve efficacy, the authors firmly advise re-visiting chapter 6 for further details of A/B testing. Nonetheless, the same approach can be also applied to push notifications to determine the right content. Yet, push notifications can be more challenging than in-app messages due to the restriction on character count. One last advice for this activity is that, during this phase, marketing team should refrain from sending out too many alerts, otherwise users will deem them spam. 3 of each kind for each group is a good number to stop at.

Running online cross-promotion program is an option **to incentivize users to update to MyChat 2.0**. This is one of the programs that the authors

propose being prepared for in phase 1. To put it simply, the e-commerce site provides exclusive promotional code(s) to MyChat users, and marketing team promote the site on every MyChat's marketing channel in return. In order to turn this cross-promotion program into a 1.7 user migration activity, the team have to make the code exclusive to MyChat 2.0 users only. That is to say, upon receiving the code(s) from the e-commerce site, marketing team will send it out to only MyChat 2.0 users via in-app message. Hence, in order to know the code, 1.7 users have to update to MyChat 2.0 to receive the message containing the code. The success rate of this type of activity relies heavily on the attractiveness of the "prizes". Users are motivated only if the code(s) offer significant value.

7.4.2.2 2.0 user acquisition

The point of this series is to get a moderate stream of new users into MyChat 2.0. These new users are completely new to MyChat in general, and thus they have no bias for/against any MyChat versions, which old users of MyChat 1.7 might have. As a result, getting both of these two types of users to experience MyChat 2.0 at the same time will enable marketing and product team to generate more objective analyses later on. This can be achieved by having this series and the above migration series run parallel to each other. Nonetheless, Table 6 displays the authors' plan for this series.

TABLE 6. Phase 2 - MyChat 2.0 user acquisition activities.

Department	Objective	Activity
Marketing	Acquiring new users	Running online cross-promotion program
		Running display and social ads

Acquiring new users at this phase entails running online cross-promotion program together with running display and social ads. The online cross-promotion program mentioned here and the online cross-promotion program mentioned above in user migration is just one program. If carried out appropriately, this program with e-commerce site can be both a user migration tactic and a user acquisition tactic simultaneously. That is the reason for the authors' suggesting putting such program into practice at this phase. It is killing two birds with one stone. The side of user migration has been covered; now, it is the user acquisition's turn. This side is as simple as requesting the e-commerce site to put up banners, posters, etc. about the promotion on their website and social media, or even send messages to their phone list, to spread the words to their audience. As a consequence, the audience who are not yet a MyChat user but want the code will have to download MyChat and register. Marketing team 's responsibility at that stage is to make sure that they download the right MyChat 2.0, and that they receive the code they want. Another activity to acquire new users is to run display and social ads. Similar to the teaser activity and ads activity in phase 1, the authors (again) strongly emphasize the importance of content. The copywriting should be ear-catching; the graphic should be eye-catching; and the both of them should meet the taste of the ads' target audience. There is also the role of ads network, too. There are many options available, and marketing team should investigate beforehand to select only the network(s) whose audience matches MyChat 2.0's target audience.

As explained previously, all the activities at this phase should remain small to medium scale. This is to enable both marketing team and product development team to observe and collect necessary datas to move onto the next phase: 2 weeks after the launch.

7.4.3 Phase 3: 2 weeks after the launch of MyChat 2.0

By the time the small to medium scale activities in phase 3 finish, it is time to assess the performance of MyChat 2.0. Depending on the results, there

are two courses of action in this phase: either prolong phase 2, or go all-out to migrate users and acquire users.

7.4.3.1 2.0 product assessment

This series is undoubtedly of vital importance; the results it generates affect not only MyChat app, but also the whole MyChat team. Its objective is to determine whether MyChat 2.0 is up to the mark, from both product and marketing perspective. To realize that objective, the authors propose activities as laid out in Table 7.

TABLE 7. Phase 3 - MyChat 2.0 product assessment activities.

Department	Objective	Activity
Product	Ascertaining PMF from product perspective	Evaluating the performance of MyChat 2.0 the past weeks
Marketing	Ascertaining PMF from marketing perspective	Running in-app user survey

If there really are major defects in this version, 2 weeks is a long enough time for the defects to materialize. Therefore, the very first activity of phase 3 is to **have product team ascertain the product aspects of MyChat 2.0 PMF**, by evaluating the performance of MyChat 2.0 during the weeks of phase 2. Has there been any significant event? Has any detrimental bug shows up? How many crashes has there been? The list of questions goes on, and product team has the knowledge and experience when it comes to app performance evaluation. If they raise a red flag, phase 3 will become prolongation of phase 2. In that scenario, marketing team either continues activities of phase 2, or runs new projects at the same small-to-medium

scale to buy time for product team to firmly focus on fixing the optimizing the app. They need to release a better-performing MyChat as soon as possible. Nevertheless, product team raising a green flag does not equal PMF. It signals marketing team's turn to step in to assess the market satisfaction with MyChat 2.0.

For marketing team to contribute to ascertaining PMF, the authors advocate running in-app user survey which is, in the intention of the authors, an adaptation of the Sean Ellis test. If the Sean Ellis test involves the question "How would you feel if you could no longer use [product]?", the authors intend to simply ask users to rate their experiences with MyChat 2.0 thus far. To be more specific, the team shall send all MyChat 2.0 users a message saying "What do you think about MyChat 2.0? Good - Neutral - Bad", with "Good", "Neutral", and "Bad" being options users can select as answer. Marketing team can utilize push notification, in-app message or post feature to carry out the survey; however, the authors highly recommend dialog as it is instant and thereby super convenient for users. Once sent, the message will automatically pop up on users' phone screens, and they can tap on the option right away. For other features, users are likely to be re-directed to a place (landing page) where they can submit their answer. The more steps users have to go through, the more unwilling they become. This is why the authors request developing dialog feature in phase 1 of the implementation plan. Anyhow, if the majority of answers are "Good", MyChat 2.0 is on the right track to PMF, and thus marketing team can move onto the next activities of phase 3. If the majority of the answers are "Neutral", even though marketing team can too progress to other activities, it is advisable to make further efforts to dig into the causes. The better the team understand users, the faster MyChat 2.0 can reach PMF. However, if the majority are "Bad", phase 3 will turn into prolongation of phase 2 just like the above scenario. Product development will become the focal point of this phase, while user migration and user acquisition activities will remain to stay low. In short, for the upcoming activities to take place, MyChat 2.0 must fulfill both of these 2 criteria:

product team confirm the stability and performance of MyChat 2.0, and users are (somewhat) satisfied with its performance.

7.4.3.2 2.0 user acquisition (heavy)

Once the app stability and user satisfaction are affirmed, it is time to go full-scale with 2.0 user acquisition activities. Table 8 on the next page summarizes the authors' plan.

TABLE 8. Phase 3 - MyChat 2.0 user acquisition activities (full-scale).

Department	Objective	Activity
Marketing	Acquire users online	Running social and display ads
		Running referral contest
	Acquire users offline	Running online-offline cross-promotion with tea house
		Running retailer commission program

The authors have selected two prevalent tactics for marketing team **to acquire users online** during this phase, including contest and online ads. First is the referral contest. This is where the previously-required referral feature makes its appearance. The contest aims at getting MyChat 2.0 users to send as many invitations as possible to their friends, and the users who have the most friends converted into MyChat 2.0 users will be rewarded plentifully. For such contest to take place and succeed, (1) the referral feature and its underlying tracking system need to be built in MyChat 2.0 already by then, (2) product team must make sure the links

enclosed in the invitations lead to the download of MyChat 2.0 and not any other versions, and (3) marketing team should make the prizes as valuable as possible to stimulate users, e.g. offering five high-priced smartphones instead of ten medium-priced ones. Next is running social ads and display ads. At this phase, marketing team shall consider running video ads in addition to static ads. Nonetheless, the advices for this activity are pretty much the same as what the authors have given for the previous ads activity; the tactic remains the same, but the content differs, and the budget increases. Activities at this phase are at a much larger scale than those at phase 2, and thus require much more significant budgets.

To acquire users offline is to reap what the marketing team sow during the pre-launch of MyChat 2.0. The possibility of the upcoming activities depends heavily on the preparations the team have accomplished in phase 1. The authors have previously suggested establishing an online-offline cross-promotion program with tea houses, as well as a commission program with smartphone retailers. Now, it is time to kickstart them. For the former, marketing team promote the tea houses on MyChat, and the tea houses offer MyChat users special discount in return. The team shall as well prepare materials, e.g. posters, leaflets, about this promotion for the tea house to put up at their store and on their social media (if applicable). The target audience of these materials are the customers who are not yet a MyChat users; therefore, not only do they give information about the promotion, but they also have to introduce MyChat 2.0 and provide a link to download directly. Their mission is to inform, motivate and make the download as convenient as possible. For the latter, by running the commission program, marketing team give smartphone retailers the incentive to recommend MyChat 2.0 to their customers, or even pre-install MyChat 2.0 in their offer of phones. Every time their customers convert into MyChat 2.0 users, the retailers gain monetary value. The authors expect that such program will have great impact once it runs. However, this tactic is a lot easier said than done, and that is why the authors strongly advocate making the preparations (tagging the APKs and negotiating with the retailers) in advance, particularly in phase 1.

7.4.3.3 1.7 user migration (heavy)

It is time to give the rest of 1.7 users one big push to get them to update their MyChat. For that, the authors select the activities as per the upcomingTable 9.

TABLE 9. Phase 3 - MyChat 1.7 user migration activities (full-scale).

Department	Objective	Activity
Marketing	Motivate 1.7 users to update their MyChat	Sending push notifications and in-app messages
		Running giveaways

Motivating 1.7 users to update to MyChat 2.0 at this phase also involves push notification and in-app message tactic, but at a much bigger scale. The authors' suggestions remain the same, with an addition of increasing the frequency. Under the circumstances that it is compulsory that every user update to MyChat 2.0, the authors propose that the team keep on sending out push notifications and in-app messages 1.7 users, so they have no choice but to update to MyChat 2.0 to stop receiving the alert. It is precarious, but it can force users to update. Another activity to migrate 1.7 users is to run giveaways. When the authors were part of marketing team, they have already implemented this tactic for the release of MyChat 1.7. At that time, in order to join the giveaway, users had to update to MyChat 1.7 during the specified time frame. Afterwards, marketing team randomly selected winners among the eligible users to reward with prizes. The idea was simple, and it did wonder. Hence, the authors see no reasons not to reuse it, but do have one suggestion: more prizes, less time. To be more precise, assuming this giveaway lasts for ten days, the authors propose dividing it into five periods, each period lasts for two days and has different sets of prizes. For example, period 1 has phones as prizes, and period 2 has makeups as prizes. Shortening the

time frame helps create a “Hurry! Take action now!” atmosphere around the giveaway, while the assortment of prizes can attract more group of users. This tactic is similar to the online cross-promotion program in phase 2 in the sense that its success depends on the appeal of the “prizes”. Therefore, the authors advise marketing team to do research beforehand as well as raise the budget for prizes. This phase 3 marks the time to go all-out with all activities after all.

7.4.3.4 2.0 user retention

The purpose of this series is to retain simultaneously the newly-acquired MyChat 2.0 users and the users having updated to MyChat 2.0. Table 10 gives a concise look at the authors’ plan.

TABLE 10. Phase 3 - MyChat 2.0 user retention activities.

Department	Objective	Activity
Marketing	Reminding new users of the app	Sending push notifications and in-app messages
	Helping users use the app	Publishing walkthroughs
		Live customer support
	Retaining users	Releasing more content on Feed
		Releasing more sticker
		Rewarding loyal users

More than often people sign up for an app and then forget about its existence. Hence, the first activity of this series is dedicated to **reminding those users of MyChat 2.0** before they completely churn; and push notification and in-app message tactic appears as the most befitting reminder tool. The target of this activity is new users who have not reopened the app three days after the day they activated their accounts. The content of the push notifications and in-app messages must intrigue these users to reopen the app, e.g. they introduce the features of MyChat 2.0 along with its superiority, or they present the exclusive benefits MyChat 2.0 users enjoy, etc. In order to determine which type of content, and/or which style of copywriting will do the trick, the authors (again) stress the implementation of A/B testing and the conduct of this activity running parallel to each other. Additionally, the frequency of sending push notifications and in-app messages to these users should stay moderate. The authors recommend the schedule as follows, counting from the day they activate their accounts:

- On the 3rd day of their being inactive
- On the 7th day of their being inactive
- On the 10th day of their being inactive
- On the 14th day of their being inactive
- On the 21st day of their being inactive

In other words, if the users have been inactive for three days after activating their accounts, send them push notification and/or in-app message on the 3rd day. Upon receiving the alert, if they reopen the app, stop sending them further reminder. If they still remain inactive, proceed to send them another push notification and/or in-app message on the 7th day, and so on.

Both newly- acquired users and old users having updated to MyChat 2.0 are bound to be unfamiliar with this version’s new UI/UX, and thus, the next activities in this series is to **help 2.0 users get used to the app**, by walkthroughs and live customer support. First, in phase 1, the authors have proposed investing in creating walkthroughs for MyChat 2.0; now in

phase 3, it is time to publish them. Marketing team should publish these walkthroughs regularly on MyChat Official Account as well as MyChat's social media; the aim is to inform and educate as many users as possible after all. Likewise, this is also where the training for customer support team in phase 1 takes off. It is expected that questions from users about MyChat 2.0 come flooding in at this stage, and having proficient customer support team will undoubtedly enable a more satisfactory service. These two activities are indeed, should have been carried out since day one of the official launch. However, the authors purposefully place them here in phase 3 as an attempt to keep phase 2 concentrated on PMF while emphasizing the scale of phase 3.

Finally, the last activity of this phase involves **retaining MyChat 2.0 users** in general. For that, the authors recommend releasing more content on Feed, more sticker sets for Chat, and rewarding loyal users. The release of more content on Feed is, yet, another fruit of phase 1's preparations. In phase 1, the authors have proposed establishing a writing affiliate program targeting at young and amateur writers/bloggers, and if such program is running by the time of this phase, it will bring in a more diverse stream of information and news for our users, keeping them entertained. In addition, marketing team shall frequently release new sticker sets to make the Chat feature more enjoyable and more exciting. Stickers are more powerful a hook than they appear to be; people more than often choose to stick with an (chat) app because of the app's exclusive stickers. At last, by rewarding loyal users, the authors mean sending MyChat 2.0 users personal messages to thank them for having used the version for a long time, e.g. twenty hours in total. The message can be short, but must be emotional, e.g. "We are very happy to see that you are enjoying MyChat 2.0! Lots of thanks from MyChat team". In addition, the authors recommend sending these messages via dialog, as it can make the messages (appear) personal while ensuring that users will see them. Such activity is, in the intentions of the authors, the premise of a much larger and much more potential user loyalty program.

This concludes the authors' implementation plan for the launch of MyChat 2.0. The plan consists of three main phases: before, during, and after the official release of MyChat 2.0. All the activities are drafted with one aim in sight: to ensure the release of MyChat 2.0 is a success. Nevertheless, the authors do have suggestions for the further future of MyChat, which are elaborated in the following section.

7.4.4 Into the future

To retain users and acquire new users, it is essential that product team continuously develop new features for MyChat in addition to app/feature optimization and performance improvement. For that, the authors strongly suggest taking the referral program to the next level, and in fact, to Uber's level. Once the payment service and paid stickers are in place, it would be greatly influential if MyChat 2.0 is equipped with a referral program similar to the one Uber is employing. To be more specific, each MyChat user at that time will be assigned with a specific code, and if they share their code with other users, they all will be rewarded with monetary value. They can later user the accumulated monetary value to buy paid stickers, or any other services the future MyChat offers. This program has the potential to strengthen not only user acquisition, but also user retention.

User loyalty program is another suggestion for further investment from the authors. Similar to Starbucks' customer loyalty program, MyChat should reward users for the hours they spend on using the app, and the reward increases with the amount of time spent. For example:

- 20 hours in MyChat: send them a personal thank-you message (as described above);
- 50 hours in MyChat: reward them with an exclusive sticker set;
- 100 hours in MyChat: reward them with an exclusive promotional code from any of MyChat's long-term partners.

The important thing is that this loyalty program is not a one-shot activity. It should run permanently and automatically. Users, regardless of when they

sign up, are entitled for its benefits. This program, as the authors firmly believes, will give MyChat’s user retention one big push once it is put into practice.

8 CONCLUSION AND FURTHER RESEARCH

The concluding chapter of this thesis contain two main sections. First, the authors shall present the findings and answers to the research question and its subquestions. Secondly, further research recommendations are proposed for future potential expansion of the topic.

8.1 Research findings and answers

The ultimate goal of this thesis is to define and explore Growth Hacking, a relatively new term coined in 2010, and to create an implementation planbased on Growth Hacking before, during and after the launch of social mobile app MyChat 2.0. Literature review provided a knowledgebase and understandings of Growth Hacking definition, history, prerequisites as well as various historical cases of its employement. This knowledge is consolidated and utilized to answers the five research subquestions in the following table 11, as well as the research question.

TABLE 11. Answers to five sub-questions.

Questions	**Findings**
Sub-question 1: Why is growth hacking decisive to app startups?	Growth hacking is a subset of marketing created under a contrained environment lacking funding, manpower and audience. The goal of growth hacking is to maximize growth with minimal resources used, thus making it vital and decisive to app startups.
Sub-question 2: What factors are necessary for a successful implementation of growth hacking?	Successful growth hacking requires a plethora of prerequisites, namely mobile analytics and product market fit. The growth hacker mindset is necessary to be fixated on growth and growth alone,

	and able to think from the perspective of both marketing and product development at the same time. Additionally, they need to be analytical, creative, curious, as well as experiment-driven (more details in Chapter Three and Four)
Sub-question 3: Which stage of growth hacking is the most influential to attaining growth?	The Retention stage in the Growth Hacker Funnel is the most important based on the impact of every retained customer on profitability (more details in Chapter Five)
Sub-question 4: Which user acquisition tactics did the historical cases employ to attain growth?	By utilizing tools such as display and social ads,referral program and cross promotion (more details in Chapter Six)
Sub-question 5: Which user retention tactics did the historical cases employ to attain growth?	By utilizing tool such as push notifications, in-app messages, loyalty program and contest (more details in Chapter Six)

Research question: *How can MySQUAR incorporate growth hacking into its launch strategy for MyChat 2.0 to secure success while laying the basis for its future growth?*

The authors aim to answer the research question by first identifying the objectives, choosing the right strategies and finally propose an implementation plan. The objectives here are to secure a successful launch for MyChat 2.0 and to lay the foundation for the app future growth.

The first objective, success, is tackled with a 3-phase implementation plan including before MyChat 2.0 launch, during and after launch. The authors introduce a set of activities specialized for each phase based on their goals. In short, product market fit is prioritized before launch to ensure that MyChat 2.0 as a product satisfy the technical and market requirements to minimize the risk of customer dissatisfaction. A comprehensive activities set immediately follow after with the ultimate goal is to maintain a high acquisition and retention rate while keeping user churn rate low.

The second objective, growth basis, is tackled by a detailed guideline that can be applied into MySQUAR's roadmap in order to retain ongoing benefits. This guideline includes four initiatives that can be implemented. The first is a writing affiliate program in which MySQUAR partners with blog writers to create content. The second is smartphone retailer commission program in which MySQUAR provides smartphone retailer with the APK of MyChat 2.0 and pays commission per customer install. The third is a referral program in the vein of Uber referral program to turn MyChat users into lead generation tools. Lastly, a user loyalty program should be considered in order to maintain customer retention rate.

8.2 Further Research Recommendations

This study has but explored a fraction of Growth Hacking as it is and as it will be. Growth Hacking is a definition that was created not more than seven years prior to this study and the science itself is still continually evolving. The authors recognized the limitation in qualitative materials during the literature review segment of this study.

Further understanding of multiple growth channels and situation in which they are applicable could supplement this study well. Growth channels differ much from marketing online channels, of which the differences stem from being in an online environment. A compilation of existing growth channels, how they work and how to decide the best fit for different busisnesses is recommended by the authors for future research.

Lastly, this study could be expanded with further research into the usage of mobile analytics in Growth Hacking. Speciafically, establishing a causal relationship between activities during different stages of the Growth Hacker Funnel and the change in key metrics could provide insight into the significance of analytics during Growth Hacking. Furthermore, this could potentially create a definitive and quantitative measurement system for each activities and stages of the Growth Hacker Funnel.

9 SUMMARY

For the last few year, the second boom of the Internet has brought about various new aspects such as social media, e-commerce, internet startup, mobile app… The business world has to evolve and adapt itself to utilize these facets of the information era. Growth Hacking is a term born from these conditions. While one can argue that growth hacking is a subset of marketing, it employs the tools and strategies not available ten or twenty years ago, guaranteeing a place of its own in the business world. The case company, in the wake of the largest update to its social app MyChat, is looking forward to incorporating growth hacking into its pipeline.

This study comprises of three sections: theoretical study, practices and implementation plan.

The theoretical study is covered from Chapter 2 to Chapter 5. In Chapter 2, the authors outline the research tools that are used in this thesis, their origin, definition and application. From Chapter 3 to Chapter 5, the authors delve into an extended research of the main concept of this thesis: growth hacking. The term's definition and origin are laid out in Chapter 3, along with a detailed history of growth hacking, spanning from the year of its creation 2010 until this study, which is conducted in 2016. Chapter 4 is dedicated to the two most important prerequisites of growth hacking which are Product Market Fit and mobile analytics, both of which are relatively recent as well. The final theoretical Chapter 5 carries the study of Neil Patel and Bronson Taylor's Growth Hacker Funnel and the analysis based on the importance of each stage.

Consequently, the practices section consists of only one Chapter 6 in which the authors study different historical case companies and the strategies they employed to achieve growth. Many of these cases are either within the last decade or ongoing, providing an update and timely look at their execution and effectiveness.

Lastly, Chapter 7 contains the overview and relevant information of the case company MySQUAR. A detailed implementation plan for its social

app MyChat 2.0 has been formulated and included. This implementation plan spans before, immediately after and long term after launch of MyChat 2.0. The basis of this plan is upon the theoretical foundation previously built in the prior chapters. The goal of this implementation plan is to ensure MyChat 2.0 growth by focusing on customer acquisition, retention and awareness of the app.

In conclusion, the theoretical study, practices and implementation plan are consolidated into findings and answer for the main research question and its sub-questions. Additionally, the authors are conscious that this study is not fully representative of Growth Hacking as a science, hence further research recommendations are included.

REFERENCES

Published Sources

Akdeniz, C. 2015. *Why Startups Fail: Deadly Mistakes of Business Startup Founders Explained*.

Allen, M. & Cervo, D. 2015. *Multi-Domain Master Data Management: Advanced MDM and Data Governance in Practice.* s.l.:Morgan Kaufmann.

Alvesson, M. & Sandberg, J. 2013. *Constructing Research Questions: Doing Interesting Research.* s.l.:SAGE.

Andrews, R. 2003. *Research Questions.* s.l.:Bloomsbury Publishing.

Blaikie, N. 2003. *Analyzing Quantitative Data: From Description to Explanation.* s.l.:SAGE.

Christensen, C. M. 2001. Assessing Your Organization's Innovation Capabilities. *Leader to Leader,* Summer 2001(21), p. 31.

Consumer Intelligence Research Partners 2015. *Amazon Prime Hits New Highs,* s.l.: Consumer Intelligence Research Partners.

Cooper, B. & Vlaskovits, P. 2010. *The Entrepreneur's Guide to Customer Development: A cheat sheet to The Four Steps to the Epiphany,* s.l.: CustDev.

DePamphilis, D. 2015. *Mergers, Acquisitions, and Other Restructuring Activities.* 8th ed. s.l.:Academic Press.

Dowling, G. & Uncles, M., 1997. Do customer loyalty programs really work?. *MIT Sloan Management Review,* 38(4), p. 71.

Epstein, M. J., Widener, S. K. & Verbeeten, F. 2016. *Performance Measurement and Management Control: Contemporary Issues.* s.l.:Emerald Group Publishing.

Farris, P. 2010. *Marketing Metrics: The Definitive Guide to Measuring Marketing Performance.* Upper Saddle River: FT Press.

Ferrell, O. C. & Hartline, M. 2010. *Marketing Strategy.* 5th ed. s.l.:Cengage Learning.

Fleisher, C. S. & Bensoussan, B. E. 2015. *Business and Competitive Analysis: Effective Application of New and Classic Methods.* 2nd ed. s.l.:FT Press.

Gillen, T. 2005. *Winning New Business in Construction.* Aldershot: Ashgate.

Gupta, S. & Zeithaml, V. 2006. Customer Metrics and Their Impact on Financial Performance. *Marketing Science,* 25(6), pp. 718-739.

Harty, J. & Aymer, A. 2015. *The Mobile Analytics Playbook: A Practical Guide to Better Testing,* s.l.: Hewlett Packard Enterprise.

Kivi, A., 1873. *Seittemän veljestä.* Porvoo: WSOY.

Kohavi, R. & Longbotham, R. 2010. Online Controlled Experiments and A/B Tests. In: C. Sammut & G. Webb, eds. *Encyclopedia of Machine Learning and Data Mining.* s.l.:Springer.

Kumar, R. 2010. *Research Methodology: A Step-by-Step Guide for Beginners.* 3rd ed. s.l.:SAGE.

Maurya, A. 2010. *Running Lean: Iterate from Plan A to a Plan That Works,* s.l.: O'Reilly.

Myers, M. D. 2013. *Qualitative Research in Business and Management.* s.l.:SAGE.

Nguyen, T. N. 2016. *Product Director* [Interview] (30 October 2016).

Olsen, D. 2015. *The Lean Product Playbook: How to Innovate with Minimum Viable Products and Rapid Customer Feedback,* s.l.: John Wiley & Sons.

Patel, S. & Wornley, R. 2016. *100 Day of Growth.* s.l.:s.n.

Penenberg, A. 2010. *Viral Loop: The Power of Pass-It-On,* s.l.: Hachette UK.

Picard, R. 2005. *Media Product Portfolios: Issues in Management of Multiple Products and Services.* Mahwah: Lawrence Erlbaum.

Pont, S. 2013. *Digital State: How the Internet is Changing Everything.* s.l.:Kogan Page Limited.

Punch, K. F. 2013. *Introduction to Social Research: Quantitative and Qualitative Approaches.* 3rd ed. s.l.:SAGE.

Ries, E. 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses,* s.l.: Crown Business.

Sarstedt, M. & Mooi, E. 2014. *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics.* 2nd ed. s.l.:Springer.

Saunders, M., Lewis, P. & Thornhill, A. 2012. *Research Methods for Business Students.* 6th ed. s.l.:Pearson.

Schindler, R. M., 1992. The real lesson of new Coke: The value of focus groups for predicting the effects of social influence. *Marketing Research,* 4(4), pp. 22-27.

Siegel, E. 2013. *Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die,* s.l.: John Wiley & Sons .

Smart, R. 2016. *The Agile Marketer: Turning Customer Experience Into Your Competitive Advantage.* s.l.:John Wiley & Sons.

Thomas, R. M. 2003. *Blending Qualitative and Quantitative Research Methods in Theses and Dissertations.* s.l.:Corwin Press.

Uncles, M., Dowling, G. & Hammond, K. 2003. Customer Loyalty and Customer Loyalty Programs. *Journal of consumer marketing,* 20(4), pp. 294-316.

Weinberg, G. & Mares, J. 2015. *Traction: How Any Startup Can Achieve Explosive Customer Growth,* s.l.: Penguin UK.

Vîrjan, D. 2013. The internet is changing our world. *Theoretical and Applied Economics,* Volume XX, pp. 117-124.

Stevens, R. E. et al. 2012. *The Marketing Research Guide.* 2nd ed. s.l.:Routledge

Wong, J., Haight, C. & Leow, A. 2015. *Market Guide for Mobile App Analyticsx.* s.l.:Gartner.

Zylka, M. P., Fuehres, H., Colladon, A. F. & Gloor, P. A. eds. 2016. *Designing Networks for Innovation and Improvisation: Proceedings of the 6th International COINs Conference.* s.l., Springer.

Electronic Sources

Adler, B. 2014. *Push Notifications vs. In-App Messaging: What's the Difference for App Marketing?* [accessed 26 November 2016]. Available at: http://info.localytics.com/blog/push-messaging-vs-in-app-messaging-whats-the-difference-for-app-marketing

Alba, D. 2016. *Uber Hits 2 Billion Rides As Growth in China Soars—For Now* [accessed 26 November 2016]. Available at: https://www.wired.com/2016/07/uber-hits-2-billion-rides-growth-china-soars-now/

Amazon 2016. *Amazon One Year Prime Membership* [accessed 26 November 2016]. Available at: https://www.amazon.com/Amazon-Prime-One-Year-Membership/dp/B00DBYBNEE

Andreessen, M. 2007. *The Pmarca Guide to Startups Part 4: The only thing that matters* [accessed 11 November 2016]. Available at: http://pmarchive.com/guide_to_startups_part4.html

AppBrain 2016. *Number of Android applications* [accessed 15 November 2016]. Available at: http://www.appbrain.com/stats/number-of-android-apps

AppDynamics, n.d. *16 metrics to ensure mobile app success* [accessed 12 November 2016]. Available at: https://www.appdynamics.com/media/uploaded-files/1432066155/white-paper-16-metrics-every-mobile-team-should-monitor.pdf

Apple 2008. *iPhone App Store Downloads Top 10 Million in First Weekend* [accessed 01 November 2016]. Available at: http://www.apple.com/pr/library/2008/07/14iPhone-App-Store-Downloads-Top-10-Million-in-First-Weekend.html

Blank, S. 2010. *Perfection By Subtraction – The Minimum Feature Set* [accessed 12 November 2016]. Available at: https://steveblank.com/2010/03/04/perfection-by-subtraction-the-minimum-feature-set/

Bussgang, J. & Benbarak, N. 2016. *Every Company Needs a Growth Manager* [accessed 11 November 2016]. Available at: https://hbr.org/2016/02/every-company-needs-a-growth-manager

Cambridge Dictionary, n.d. [accessed 01 November 2016]. Available at: http://dictionary.cambridge.org/dictionary/english/app

Carpenter, R. 2014. *How to Calculate Customer Retention* [accessed 12 11 2015]. Available at: http://www.evergage.com/blog/how-calculate-customer-retention/

Cecchi, T. 2016. *When Marketing is 'Baked Into' the Product* [accessed 11 November 2016]. Available at: https://medium.theuxblog.com/when-marketing-is-baked-into-the-product-d880345ceed7#.ml2391b88

Chen, A., n.d. *Growth Hacker is the new VP Marketing* [accessed 11 November 2016]. Available at: http://andrewchen.co/how-to-be-a-growth-hacker-an-airbnbcraigslist-case-study/

Chen, A., n.d. *The Law of Shitty Clickthroughs* [accessed 11 November 2016]. Available at: http://andrewchen.co/the-law-of-shitty-clickthroughs/

Chen, A., n.d. *When has a consumer startup hit product/market fit?* [accessed 12 November 2016]. Available at: http://andrewchen.co/when-has-a-consumer-startup-hit-productmarket-fit/

Chu, E. 2008. *Android Market: Now available for users* [accessed 01 November 2016]. Available at: http://android-developers.blogspot.fi/2008/10/android-market-now-available-for-users.html

Cipolla, H. 2014. *Session Lengths as a Measure of App Engagement* [accessed 13 November 2016]. Available at: http://info.localytics.com/blog/session-lengths-as-a-measure-of-app-engagement

CNN 2016. *Homepage* [accessed 27 November 2016]. Available at: http://edition.cnn.com/

Cummings, D. 2013. *5 Ways to Identify Product / Market Fit* [accessed 12 November 2016]. Available at: https://davidcummings.org/2013/07/04/5-ways-to-identify-product-market-fit/

Dev, R. 2016. *Let's define GROWTH HACKING for y'all* [accessed 11 November 2016]. Available at: https://medium.com/@reachrishabh/lets-define-growth-hacking-for-ya-ll-ccf1f570c74a#.iyh90yld7

Digital Analytics Association, n.d. *Digital Analytics Association* [accessed 12 November 2016]. Available at: http://www.digitalanalyticsassociation.org/

Digital Market Asia 2014. *MySQUAR's MyChat for Myanmar* [accessed 15 November 2016]. Available at: http://www.digitalmarket.asia/2014/08/mysquars-mychat-for-myanmar/

Docherty, P. 2016. *[Infographic] The Remarketing Report – Q3 2016* [accessed 26 November 2016]. Available at: https://blog.salecycle.com/stats/infographic-remarketing-report-q3-2016/

Dykes, B. 2013. *Web Analytics vs. Mobile Analytics: What's the Difference?* [accessed 12 November 2016]. Available at: http://www.analyticshero.com/2013/07/24/web-analytics-vs-mobile-analytics-whats-the-difference/

Ellis, S. 2010. *Find a Growth Hacker for Your Startup* [accessed 11 November 2016]. Available at: http://www.startup-marketing.com/where-are-all-the-growth-hackers/

Ellis, S. 2014. *Growth Hacking is for Smart Marketers – Not Just Startups* [accessed 11 November 2016]. Available at: http://www.startup-marketing.com/category/growth-hacking/

Ellis, S. 2016. *Ask GH: What is your best three word description of growth hacking?* [accessed 14 November 2016]. Available at: https://growthhackers.com/questions/ask-gh-what-is-your-best-three-word-description-of-growth-hacking

Ellis, S., n.d. *Using Survey.io* [accessed 12 November 2016]. Available at: http://www.startup-marketing.com/using-survey-io/

Espinal, C. E. 2013. *The Product / Market Fit Cycle* [accessed 11 November 2016]. Available at: http://thedrawingboard.me/2013/05/03/the-product-market-fit-cycle/

Facebook 2016. *Homepage* [accessed 27 November 2016]. Available at: https://www.facebook.com/

Facebook, n.d. *Facebook* [accessed 01 November 2016]. Available at: https://www.facebook.com/facebook/about/

Farr, C. 2013. *'Hyperdata,' 'growth hacker,' & other awful buzzwords that will rule in 2014* [accessed 01 November 2016]. Available at: http://venturebeat.com/2013/12/25/hyperdata-growth-hacker-other-awful-buzzwords-that-will-rule-in-2014/

Flynn, P. 2014. *What I Learned From Growing My Email List 3,418% (Nearly 200k) in Just 11 Days* [accessed 27 November 2016]. Available at: http://www.smartpassiveincome.com/what-i-learned-from-growing-my-email-list-3418-nearly-200k-in-just-11-days/

Fogarty, D. & Bell, P. 2014. *Should You Outsource Analytics?* [accessed 12 November 2016]. Available at: http://sloanreview.mit.edu/article/should-you-outsource-analytics-2/

Foody 2016. *Introduction* [accessed 26 November 2016]. Available at: https://www.foody.vn/gioi-thieu

Gingold, N. 2016. *Myanmar's connectivity catch-up* [accessed 20 November 2016]. Available at: http://frontiermyanmar.net/en/news/myanmars-connectivity-catch-up

Ginn, A. 2012. *Build it and they won't come: How and why growth hacking came to be* [accessed 11 November 2016]. Available at: http://thenextweb.com/entrepreneur/2012/10/28/build-it-and-they-wont-come-how-and-why-growth-hacking-came-to-be/

Ginn, A. 2012. *Defining A Growth Hacker: 5 Ways Growth Hackers Changed Marketing* [accessed 11 November 2016]. Available at: https://techcrunch.com/2012/09/07/defining-a-growth-hacker-5-ways-growth-hackers-changed-marketing/

Ginn, A. 2012. *Defining A Growth Hacker: Three Common Characteristics* [accessed 11 November 2016]. Available at:

https://techcrunch.com/2012/09/02/defining-a-growth-hacker-three-common-characteristics/

Ginn, A., n.d. *What is a growth hacker?* [accessed 11 November 2016]. Available at: http://www.aginnt.com/growth-hacker

Gooding, L. 2014. *Growth Hacking Like A Pirate, A Beginner's Guide To Pirate Metrics* [accessed 19 November 2016]. Available at: http://blog.trak.io/growth-hacking-like-a-pirate-a-beginners-guide-to-pirate-metrics/

Google Play Store, n.d. *MyChat - Chat in Myanmar* [accessed 15 November 2016]. Available at: https://play.google.com/store/apps/details?id=com.squar.mychat.release&hl=en

Google Trends, n.d. *Google Trends Explore "Growth Hacking" as a search term* [accessed 01 November 2016]. Available at: https://www.google.com/trends/explore?date=2010-01-01%202016-11-09&q=%22growth%20hacking%22

Google 2016. *Where Analytics gets the data* [accessed 14 November 2016]. Available at: https://support.google.com/analytics/answer/2799357?hl=en#where

Google, n.d. *Our history in depth* [accessed 01 November 2016]. Available at: https://www.google.com/about/company/history/#2008

Graham, P. 2012. *Startup = Growth* [accessed 11 November 2016]. Available at: http://www.paulgraham.com/growth.html

Gross, D. 2010. *Apple trademarks 'There's an app for that'* [accessed 01 November 2016]. Available at: http://edition.cnn.com/2010/TECH/mobile/10/12/app.for.that/

History.com 2010. *The Invention of the Internet* [accessed 01 November 2016]. Available at: http://www.history.com/topics/inventions/invention-of-the-internet

Hoch, D. 2015. *In-App Messages Drive 3.5X Higher User Retention [New Research]* [accessed 26 November 2016]. Available at: http://info.localytics.com/blog/in-app-messages-drive-higher-app-usage-and-engagement-benchmarks

Horowitz, B. 2010. *The Revenge of the Fat Gu* [accessed 12 November 2016]. Available at: http://blog.pmarca.com/2010/03/20/the-revenge-of-the-fat-guy/

Hum, S. 2015. *Ride-sourcing Mobile App Referral Program Examples: How Uber covered more than 50 countries in just 3 years* [accessed 26 November 2016]. Available at: http://www.referralcandy.com/blog/ride-sourcing-mobile-app-referral-program-examples-how-uber-covered-more-than-50-countries-in-just-3-years/

Joorabchi, M. E., Mesbah, A. & Kruchten, P., n.d. *Real Challenges in Mobile App Development* [accessed 12 November 2016]. Available at: http://www.ece.ubc.ca/~amesbah/docs/mona-esem13.pdf

Jordan, A. 2015. *In this Southeast Asian country, tea houses reign as the go-to hangout* [accessed 11 25 2016]. Available at: http://mashable.com/2015/11/08/myanmar-tea-houses/#5od5WUDAOkqP

Jorgenson, E. 2015. *Product/Market Fit: What it really means, How to Measure it, and Where to find it* [accessed 11 November 2016]. Available at: https://medium.com/evergreen-business-weekly/product-market-fit-what-it-really-means-how-to-measure-it-and-where-to-find-it-70e746be907b#.ydzgvwcjx

Kagan, N. 2014. *How we gained 200,000 new emails giving away some Dropbox accounts* [accessed 27 November 2016]. Available at: http://www.appsumo.com/giveaways-early-special/

Karch, M. 2016. *What Are Apps? - Definition and Examples* [accessed 01 November 2016]. Available at: https://www.lifewire.com/what-are-apps-1616114

Kutcher, E., Nottebohm, O. & Sprague, K. 2014. *Grow fast or die slow* [accessed 11 November 2016]. Available at: http://www.mckinsey.com/industries/high-tech/our-insights/grow-fast-or-die-slow

Law, R. 2016. *Pros and Cons of the Sean Ellis Product/Market Fit Test* [accessed 12 November 2016]. Available at: https://www.cobloom.com/blog/how-to-use-the-sean-ellis-product/market-fit-test#

Leiner, B. M. et al., n.d. *Brief History of the Internet* [accessed 01 November 2016]. Available at: https://www.internetsociety.org/internet/what-internet/history-internet/brief-history-internet

Lewis, A. 2014. *Guide to Google Analytics Demographics Reports: Age, Gender & Interests* [accessed 12 November 2016]. Available at: https://searchenginewatch.com/sew/how-to/2355504/guide-to-google-analytics-demographics-reports-age-gender-interests

Localytics, n.d. *The Beginner's Guide to App Analytics* [accessed 14 November 2016]. Available at: http://info.localytics.com/hs-fs/hub/367525/file-1246451878-pdf/eBooks/The_Beginners_guide_to_app_marketing.pdf

Localytics, n.d. *The Beginner's Guide to App Marketing* [accessed 12 November 2016]. Available at: http://info.localytics.com/hs-fs/hub/367525/file-1246451878-pdf/eBooks/The_Beginners_guide_to_app_marketing.pdf

Macdonald, M. 2014. *The Beginner's Guide to Simple A/B Testing* [accessed 26 November 2016]. Available at:

https://www.shopify.com/blog/12385217-the-beginners-guide-to-simple-a-b-testing

Martin 2016. *How to Assess Product Market Fit with the Sean Ellis Test* [accessed 12 November 2016]. Available at: https://www.cleverism.com/product-market-fit-sean-ellis-test/

McClure, D. 2007. *Startup Metrics for Pirates: AARRR!* [accessed 18 November 2016]. Available at: http://500hats.typepad.com/500blogs/2007/09/startup-metrics.html

McEachern, A. 2015. *Loyalty Case Study: Amazon Prime* [accessed 26 November 2016]. Available at: https://www.sweettoothrewards.com/blog/loyalty-case-study-amazon-prime/

McEachern, A. 2016. *Loyalty Case Study: My Starbucks Rewards* [accessed 26 November 2016]. Available at: https://www.sweettoothrewards.com/blog/loyalty-case-study-starbucks-rewards/

MQTT, n.d. *MQTT* [accessed 20 November 2016]. Available at: http://mqtt.org/

Murry 2015. *AARRR Metrics For eCommerce Stores: The Holy Grail of Growth* [accessed 17 November 2016]. Available at: https://www.metrilo.com/blog/aarrr-metrics-for-ecommerce/

MySQUAR 2016. *MySQUAR Corporate Presentation (September 2016)* [accessed 15 November 2016]. Available at: https://storage.googleapis.com/investors/MySQUAR%20Corporate%20Presentation%20(September%202016).pdf

MySQUAR 2016. *Registered user update* [accessed 15 November 2016]. Available at: http://investors.mysquar.com/registered-user-update/

MySQUAR, n.d. *Investor Website* [accessed 15 November 2016]. Available at: http://investors.mysquar.com/

MySQUAR, n.d. *MySQUAR's LinkedIn Profile* [accessed 15 November 2016]. Available at: https://www.linkedin.com/company/squar-asia

O'Connell, C. 2015. *2015: The Year that Push Notifications Grew Up* [accessed 26 November 2016]. Available at: http://info.localytics.com/blog/2015-the-year-that-push-notifications-grew-up

O'Connell, C. 2016. *The Inside View: How Consumers Really Feel About Push Notifications* [accessed 26 November 2016]. Available at: http://info.localytics.com/blog/the-inside-view-how-consumers-really-feel-about-push-notifications

Out, C. 2016. *Growth Hacking vs. Traditional Marketing* [accessed 11 November 2016]. Available at: https://rockboost.com/en-us/blog/growth-hacking-vs-traditional-marketing

Oxford Business Group 2016. *Myanmar's telecoms industry to see new entrant* [accessed 11 20 2016]. Available at: http://www.oxfordbusinessgroup.com/news/myanmar%E2%80%99s-telecoms-industry-see-new-entrant

Oxford Learner's Dictionaries, n.d. *Definition of bete version* [accessed 15 November 2016]. Available at: http://www.oxfordlearnersdictionaries.com/definition/english/beta-version?q=beta+version

Panici, J. 2016. *What is the biggest marketing challenge faced by early stage startups?* [accessed 11 November 2016]. Available at: https://www.quora.com/What-is-the-biggest-marketing-challenge-faced-by-early-stage-startups

Patel, N., n.d. *Growth Hacking Made Simple: A Step-by-Step Guide* [accessed 01 November 2016]. Available at: http://neilpatel.com/what-is-growth-hacking/

Patel, N. & Taylor, B., n.d. *The Definitive Guide to Growth Hacking* [accessed 11 November 2016]. Available at: http://quicksprout.uberflip.com/i/174558-the-definitive-guide-to-growth-hacking

Perro, J. 2016. *Mobile Apps: What's A Good Retention Rate?* [accessed 13 November 2016]. Available at: http://info.localytics.com/blog/mobile-apps-whats-a-good-retention-rate

PHKK 2010. *Henkilöstöluettelo* [accessed 30 November 2016]. Available at: phkk.fi

Porter, J., n.d. *Principles of Product Design* [accessed 12 November 2016]. Available at: http://bokardo.com/principles-of-product-design/

Pullen, J. P. 2014. *Everything You Need to Know About Uber* [accessed 26 November 2016]. Available at: http://time.com/3556741/uber/

PYMNTS 2016. *Starbucks Transactions Now 21 Percent On Mobile* [accessed 26 November 2016]. Available at: http://www.pymnts.com/news/mobile-payments/2016/starbucks-transactions-now-21-percent-on-mobile/

Reichheld, F. & Schefter, P. 2000. *The Economics of E-Loyalty* [accessed 18 November 2016]. Available at: http://hbswk.hbs.edu/archive/1590.html

Rideshare Dashboard 2015. *Uber New $500 Referral Bonus In July 2015 for Lyft Drivers* [accessed 26 November 2016]. Available at: http://ridesharedashboard.com/2015/07/14/uber-new-500-referral-bonus-in-july-2015-for-lyft-drivers/

San, M. S. 2014. *MySQUAR Launches Free Mobile Messaging App for Myanmar* [accessed 15 November 2016]. Available at:

http://www.mmbiztoday.com/articles/mysquar-launches-free-mobile-messaging-app-myanmar

Starbucks 2016. *Rewards* [accessed 26 November 2016]. Available at: https://www.starbucks.ca/promo/rewards

Statista, n.d. *Cumulative number of apps downloaded from the Apple App Store from July 2008 to September 2016 (in billions)* [accessed 01 November 2016]. Available at: https://www.statista.com/statistics/263794/number-of-downloads-from-the-apple-app-store/

Statista, n.d. *Cumulative number of apps downloaded from the Google Play as of May 2016 (in billions)* [accessed 01 November 2016]. Available at: https://www.statista.com/statistics/281106/number-of-android-app-downloads-from-google-play/

Statista, n.d. *Number of available applications in the Google Play Store from December 2009 to September 2016* [accessed 01 November 2016]. Available at: https://www.statista.com/statistics/266210/number-of-available-applications-in-the-google-play-store/

Statista, n.d. *Number of available apps in the Apple App Store from July 2008 to June 2016* [accessed 01 November 2016]. Available at: https://www.statista.com/statistics/263795/number-of-available-apps-in-the-apple-app-store/

Statista, n.d. *Number of monthly active WhatsApp users worldwide from April 2013 to February 2016 (in millions)* [accessed 11 November 2016]. Available at: https://www.statista.com/statistics/260819/number-of-monthly-active-whatsapp-users/.

Teneva, D. 2016. *Acquisition: AARRR Metrics Part 1* [accessed 18 November 2016]. Available at: https://www.metrilo.com/blog/acquisition-aarrr-metrics-part-1/

Teneva, D. 2016. *Activation: AARRR Funnel Part 2* [accessed 18 November 2016]. Available at: https://www.metrilo.com/blog/activation-aarrr-funnel-part-2/

Teneva, D. 2016. *Retention: AARRR Framework Part 3* [accessed 18 November 2016]. Available at: https://www.metrilo.com/blog/retention-aarrr-framework/

The Coca-Cola Company 2012. *The Real Story of New Coke* [accessed 12 November 2016]. Available at: http://www.coca-colacompany.com/stories/coke-lore-new-coke

THE PLAID AGENCY 2016. *Be Obsessed With Growth Hacking* [accessed 11 November 2016]. Available at: http://theplaidagency.com/blog/be-obsessed-with-growth-hacking/

TIME, n.d. *Top 10 Bad Beverage Ideas* [accessed 12 November 2016]. Available at: http://content.time.com/time/specials/packages/article/0,28804,1913612_1913610,00.htmlUber Vietnam 2016. *Thứ Sáu đi ăn gì với Uber và Foody?* [accessed 26 November 2016]. Available at: https://newsroom.uber.com/vietnam/thu6diangi/

Uber 2015. *Earn Cash between Rides!* [accessed 26 November 2016]. Available at: https://newsroom.uber.com/earn-cash-between-rides-2/
United Nations Human Rights Council 2016. *The promotion, protection and enjoyment of human rights on the Internet* [accessed 01 November 2016]. Available at: https://documents-dds-ny.un.org/doc/UNDOC/LTD/G16/131/89/PDF/G1613189.pdf?OpenElement

Vawter, M. 2014. *Analytics agencies vs. in-house: Which is best?* [accessed 14 November 2016]. Available at: http://www.imediaconnection.com/articles/ported-articles/red-dot-articles/2014/feb/analytics-agencies-vs-in-house-which-is-best/
Wight, M. 2016. *Is Growth Hacking Just Marketing? Know The Difference*

[accessed 11 November 2016]. Available at: http://www.business2community.com/marketing/growth-hacking-just-marketing-know-difference-01422349#cFkjKH5KSc8BXu1T.97

Wu, M. 2013. *Big Data Reduction 1: Descriptive Analytics* [accessed 12 November 2016]. Available at: https://community.lithium.com/t5/Science-of-Social-blog/Big-Data-Reduction-1-Descriptive-Analytics/ba-p/77766

Wu, M. 2013. *Big Data Reduction 3: From Descriptive to Prescriptive* [accessed 12 November 2016]. Available at: https://community.lithium.com/t5/Science-of-Social-blog/Big-Data-Reduction-3-From-Descriptive-to-Prescriptive/ba-p/81556

Yahoo, n.d. *Flurry Analytics* [accessed 14 November 2016]. Available at: https://developer.yahoo.com/flurry/docs/analytics/

APPENDICES

APPENDIX 1. Interview with Truc N. Nguyen, product director of MyChat.

First and foremost, sincerely thank you, Ms Truc, for having agreed to this interview.

Question 1: *Has MyChat achieved product-market fit in Myanmar yet? If yes, could you please elaborate more on this achievement?*

In term of product performance, there are still lots of things for improvement because the marketing always changes and users always ask for new features and the best experiences. However, one thing we have done well is providing a truly localized experience for Myanmar users by

- Dealing with font issue so we can cover all 3 most-used fonts in Myanmar: Zawyi, Zawyi + Roboton, NotoSan Unicode so all text on MyChat can be displayed clearly and correctly in every device.
- Dealing with APK installation issue as 50% users of Myanmar do not have Google Play in their Chinese device. So Myanmar users without Google Play can still have a dedicate APK package for installation.
- Sticker localization: all sticker content and characters are localized in Myanmar languages, daily emotion and activities. Stickers are all designed by Myanmar artists
- Content localization: all content published on MyChat feed are in Myanmar and we also bring in Myanmar publishers to give users healthy content to read.

Question 2: *From a product perspective, what are MyChat app's strengths?*

We are totally focusing on Myanmar market to create the best experiences basing on Myanmar users' demands. As we only are only operating in one

market so it is easy to adapt and change the product quickly based on users' expectation.

We also adapt new technology into the platform based on market infrastructure. For example, we recently use MQTT technology for our chat service. MQTT is a lightweight messaging protocol for small sensors and mobile devices, optimized for high-latency or unreliable networks so it is totally suitable for pre-emerging marketing like Myanmar where internet connection is still low and unstable.

Question 3: *From a product perspective, what are MyChat app's weaknesses?*

MyChat is only a 2-year-old platform (we would launch version 2.0 by the end of this year), in comparison, big players, such as Viber, Line, Facebook, already have a very mature product with full features. So we would need more time to complete core features as well as implement new specifications dedicated for the marketing.

Also, as the market grows quickly so does our users base, even quicker than our expectation. We were not well prepared for this situation regarding the the application infrastructure and architecture, so the application stability was not good for a long time. However, we have restructured the architecture from June and the performance has been better since then.

Question 4: *Generally speaking, what are your thoughts on the current MyChat app? Are you happy with its performance and its features?*

MyChat needs to improve the performance of key features as well as be competitive in specification servicing Myanmar users as MyChat won't be able to compete with other big guys who have entered and dominated the chat messaging market for years. Localization would be the navigation for product development so we are long way to go regarding specification developments. In general, I'm happy with the performance after we have reworked on the architecture and infrastructure of the application.

Question 5: *As a product director, what is your strategy for the development/ improvement of MyChat app? Please tell us about your short-term and long-term goals.*

My strategy regarding product development is based on Myanmar users' demand to prioritize the roadmap. I also need to balance between users' requirement and business strategy. In short term, I want to focus on MQTT optimization so we can bring the best chat experiences to users. In long term, I hope to build up MyChat as an app-in-app platform so users can do a bunch of things when they are on MyChat, order food, book a ride, play a game or pay for their bill.

Question 6: *There has been news about a brand new MyChat - a new version that the team at MyChat has been working so diligently for. Could you please tell us more about this breakthrough?*

We plan to release the version 2 by the end of this year. This would be a totally new MyChat which are

- Applying our brand guideline, with new friendly UI and brand identities.
- MQTT is fully optimized so chat experiences would be super-fast, stable and consume less data.
- New Stickers Store so users can easily look for their favorite characters designed by Myanmar artists.
- New Channels zone so users can browse, read and follow up with famous publishers in Myanmar.

Again, sincerely thank you for your time.

APPENDIX 2. Interview with Mr Dang H. Nguyen, digital marketing manager of MyChat.

First and foremost, sincerely thank you, Mr Dang, for having agreed to this interview.

Question 1: *How is MyChat positioned in Myanmar?*

MyChat is one of the leading mobile chat app in Myanmar which accounts for 20% of Myanmar internet users.

Question 2: *Has MyChat achieved product-market fit in Myanmar yet? If yes, could you please elaborate more on this achievement?*

MyChat has satisfied the demand of Myanmar market by offering the dedicated content for Myanmar people including trendy news and attractive sticker sets. Moreover, MyChat is improving routinely the UI and UX for providing a better experience for Myanmar users.

Question 3: *What is the current focus of the Marketing team at MyChat? Is it acquisition, activation, retention or something else?*

We will release the flagship version on December so retention is the current focus of the Marketing team in order to maintain the Daily Active Users as well as listen to user's feedback.

Question 4: *What method/ platform/ channel have you been implementing to acquire users?*

Facebook is the key channel for acquiring new users with a very competitive CPI as well as gaining the viral effect in order to improving the brand awareness and organic users.

Question 5: *What method have you been using to retain users?*

We are using push notifications and in-app messages to send segmented messages to a suitable user list with the latest content which is generated by internal channels and official publishers. Moreover, we are using

Facebook as a significant channel for engaging our current fans and encouraging them back to MyChat.

Question 6: *Tracking system is of utmost importance to an app. What are your thoughts on the current tracking system of MyChat? (If possible, please mention that the old tracking system is lacking in many areas)*

The tracking system is absolutely important for every digital products. As a mobile app, defining organic traffic is tough and we are also dealing with the limitation of User Journey tracking. Myanmar users like to get the APK file from official sources (our websites and social media) or from their friends or at the mobile store rather than download from Google Play Store so that the channel attribution is a challenge for us to define which one gains the effectiveness on user acquisition and user retention.

Question 7: *Will there be any investment to enhance the tracking system? If yes, how is the new tracking system superior to the current one?*

With the sophisticated user journey, we are trying to improve the tracking system as well as reform the BI system in order to get a deep understand of user behaviours.

Question 8: *As a digital marketing manager, what are your future plans for boosting the growth of MyChat app? Will your focus shift?*

The V2 of MyChat is the result of 2-years learning and experimenting in order to understand the local insights. We embrace every single pixel and code line with a simple goal is to deliver a most powerful, hassle-free and Myanmar-centric to every Myanmar people, especially Millennium who is looking for a modern, fun and attractive chat app. As a Digital Marketing Manager, there is nothing more delightful than the MyChat will be used by 40% of Myanmar internet users.

Again, sincerely thank you for your time.