How to Build a Habit-forming Product

-to Understand the Hook Model through

an Analysis of WeChat

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[Keywords]

Habit-forming, Hook Model, WeChat, Trigger, Variable rewards

1. Introduction

A data from Global Web Index shows that the average social media user spends about 2 hours using social platforms each day[1]. The technologies we use have turned into compulsions, if not full-fledged addictions. It's the impulse to check a message notification[2].

For many products, forming habits is important for survival. The world is becoming more habit-forming because the convergence of access, data and speed[3].For businesses, creating customer's habit means gaining significant competitive advantages[4].As infinite distractions compete for our attention, companies are learning to stay relevant in users' minds. In order to win the loyalty of customers, companies must learn not only how to attract users, but

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[1] Global Web Index. https://www.globalwebindex.net/the-data(Final access: 2017.10.04)

[2] Eyal(2014) p.7.

[3] Business changed with the development of social media.(in Japanese)
 (Ministry of Internal Affairs and Communications)
  http://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h27/pdf/n4200000.pdf(Final access: 2017.08.30)

[4] 7 things you can learn from WeChat product development' (Startup-grind)
 https://medium.com/startup-grind/7-things-you-can-learn-from-wechat-product-development-ef31b8d97b24(Final access: 2017.12.30)

also how to form their users' habits[5].

How do companies learn about users' mind? What makes some products so habit-forming? The aim of this study is to clarify the important steps for companies to create user's habits, through the analysis of WeChat[6], which is the most popular social media in China now[7].

This study will be divided into 4 parts. The first part mainly talks about the research of habit-forming products and introduce the hook model. The hook model includes 4 steps—Trigger, action, variable rewards and investment. Each of them is important for forming user's habit. The second part focuses on the development of WeChat. Mainly the outline and some functions are explained. The third part is to use the Hook Model to analyze the case of WeChat, and clarify how WeChat formed user's habit step by step. Finally, the conclusion part aims to pick up some key points for a habit-forming product and show some further research about this subject.

2. Definition and Content of the Hook Model

How do successful companies create habit-forming products? Why can some products capture widespread attention? What makes us engage with certain products through habit?

To answer these questions, Eyal(2014)explains the "hook model" — a four steps process embedded into the products of many successful companies to subtly encourage customer behavior[8]. Through consecutive "hook cycles", these products reach their ultimate goal of bringing users back over and over again[9].

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[5] Customer central marketing' (Customer think)
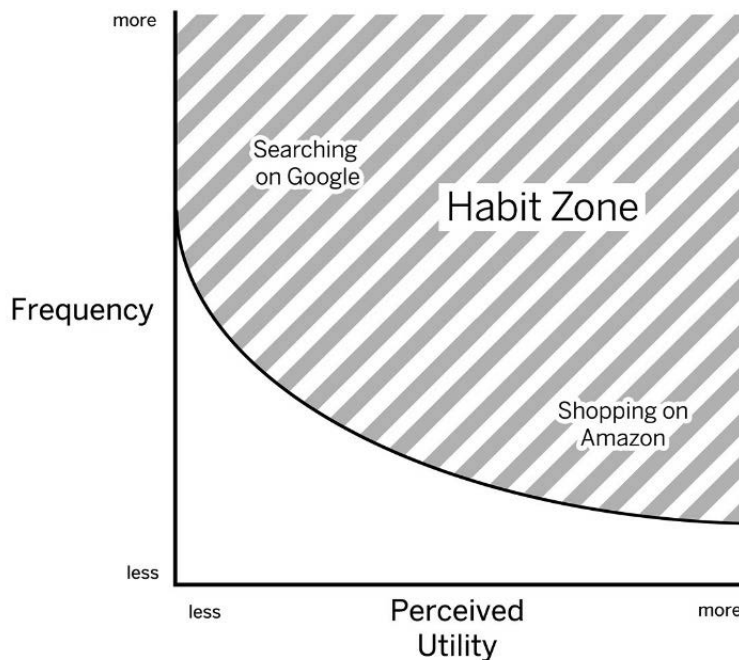　http://customerthink.com/ (Final access: 2017.11.21)
[6] Today, WeChat has almost 980 million of users and about 902 active users every day. 60% of WeChat users open it 10 times per day[6]. Most of WeChat users log in to this social media to get some information and use their WeChat public account. To achieve 100 million users, QQ spent 10 years, FaceBook spent 5.5 years, and Twitter spent 4 years, and WeChat only spent 433 days. Therefore, WeChat seems to be agood example for the research of habit-forming products.
[7] Tecent Home Page
　https://www.tencent.com/en-us/system.html (Final access: 2018.01.04)
[8] Eyal(2014)p.39.
[9] Eyal(2014)p.43.

In definition, a habit means behaviors done with little or no conscious[10].

Source: Eyal(2014)p.42

Figure 1: Habit Zone

As represented in figure 1[11], a behavior that occurs with enough frequency and perceived utility enters the habit zone[12]. If either of these factors falls short and the behavior lies below the threshold, it is less likely that the desired behavior will become a habit[13]. Habits cannot form outside the habit zone, where the behavior occurs with enough frequency and perceived utility.

The hook model explains the rationale behind the design of many successful habit-forming products and services we use everyday. It is a framework for building products that solve user's needs through long-term engagement. It includes 4 steps as represented in figure 2[14].

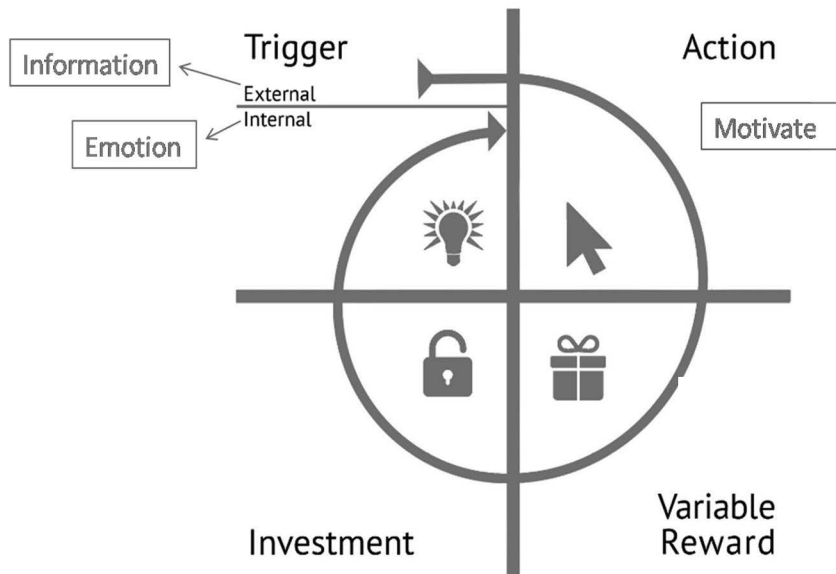[10] What is a habit' (Cambridge Dictionary)
 https://dictionary.cambridge.org/dictionary/english/habit(Final access: 2017.08.13)
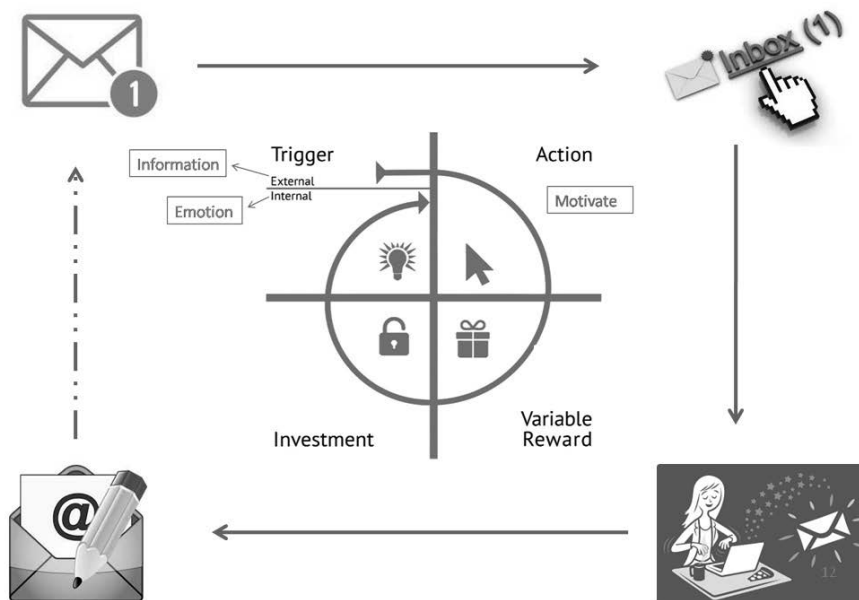[11] Eyal(2014) p.42.
[12] Eyal(2014) p.44.
[13] Eyal(2014) p.44.
[14] Eyal(2014) p.42.

Source: Eyal(2014)p.56

Figure 2: Hook Model

In order to make it easier to explain, I would like to use the e-mail model as showed in figure 3. The hook model constitutes by following 4 steps.

Source: Eyal(2014)p.56

Figure 3 : The hook model and the e-mail model

① Trigger[15]

　　The first step of the　hook model is trigger[16]. New habits need a foundation
upon which to build. Triggers provide the basis for sustained behavior change.
Triggers take the form of obvious cues like the morning alarm clock but also
come as more subtle, sometimes subconscious signals that just as effectively
influence our daily behavior[17].Whether we are cognizant of them or not,
triggers move us to take action.

　　Triggers come in two types, external and internal. External triggers tell
the user what to do next by placing information within the user's environment,
while internal triggers tell the user what to do next through associations
stored in the user's memory[18]. Just as the first step in thee-mail model,
an external trigger is like the　notification on your e-mail application,
which keeps informing you to open the e-mail. Email relieves us of uncertainty
and staying connected and it became a trigger for us.

② Action[19]

　　The second step in the Hook is action. As described by Dr. B. J. Fog's
behavior model[20]:　For any behavior to occur, a trigger must be present, at
the same time, the user must have sufficient ability and motivation to take
action. To increase the desired behavior, increase ability by making the
action easier to do[21] is very important part for a habit forming product.

　　Every behavior is driven by one of three core motivators: seeking pleasure
and avoiding pain, seeking hope and avoiding fear, and seeking social
acceptance while avoiding social rejection. Ability is influenced by the six
factors of time, money, physical effort, brain cycles, social deviance, and
non-routine[22]. Ability is dependent on users and their context at that moment.

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[15] This term is described on the basis of Eyal(2014, pp.59-60). If necessary, other materials are shown in
　　footnotes.
[16] Eyal(2014)p.59.
[17] Eyal(2014)p.60.
[18] Eyal(2014)p.65.
[19] This term is described on the basis of Eyal(2014,pp.82-88). If necessary, other materials are shown in
　　footnotes.
[20] Dr. B. J. Fog's behavior model.
　http://www.behaviormodel.org/(Final access: 2018.01.04)
[21] Eyal(2014)p.82.
[22] Eyal(2014)p.88.

In order to improve the ability of users, the product designer should try the best to make the product as simple as possible. Just like the second step in the e-mail model, to see the content of the e-mail, users only need one simple click.

③ Variable rewards[23]

Variable reward is the third phase of the hook model. Providing variable rewards after actions keeps users excited and motivated to keep on using and returning to your product[24]. There are three types of variable rewards; the tribe, the hunt, and the self. Reward of the tribe is the search for social rewards fueled by connectedness with other people. Reward of the hunt is the search for material resources and information[25]. Reward of the self is the search for intrinsic rewards of mastery, competence, and completion.

Experiences with finite variability become increasingly predictable with use and lose their appeal over time. Experiences that maintain user interest by sustaining variability with use exhibit infinite variability.

Variable rewards must satisfy users' needs while leaving them wanting to reengage with the product. As in the e-mail model, users want to open the e-mail just because the content of the e-mail is unpredictable for them.

④ Investment[26]

The investment is the fourth step in the hook model. Unlike the action, which delivers immediate gratification, the investment concerns the anticipation of rewards in the future. Investments in a product create preferences because of our tendency to overvalue our work, be consistent with past behaviors, and avoid cognitive dissonance[27].

Investment comes after the variable reward, when users are primed to reciprocate.

Investments increase the likelihood of users returning by improving the

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[23] This term is described on the basis of Eyal(2014, pp.120-125). If necessary, other materials are shown in footnotes.
[24] Thompson(2014)p.201.
[25] Eyal(2014)p.120.
[26] This term is described on the basis of Eyal(2014, pp.160-164). If necessary, other materials are shown in footnotes.
[27] Eyal(2014)p.164.

service the more it is used. They enable the accrual of stored value in the form of content, data, followers, reputation, or skill. Investments increase the likelihood of users passing through the hook again by loading the next trigger to start the cycle all over again[28]. The investment step of the hook model is just like writing back an e-mail in the e-mail model, which makes it possible for users to gain another new e-mail.

The 4 steps all above form a cycle in the hook model. It explains the process of forming a habit-forming product. The next part will show a successful habit-forming product, WeChat.

3. Outline of WeChat

3-1. Development of WeChat[29]

WeChat is Chinese social media mobile application developed by Tencent. Tencent was established in 1998 by Pony Ma, with 40.000 employees[30].

WeChat was first released in 2011, and by 2017 it was one of the largest standalone mobile applications. WeChat has over 980 million monthly active users (902 million daily active users)[31]. That's 70 active monthly users for every 100 people[32]. It has been called China's "supper app" because of its wonderful functions and platforms.

WeChat has a lot of functions, like instant messaging, sharing life events, chatting to family members and est. WeChat covers almost all the services that users may do in their daily lives as presented in figure 4. WeChat allows user to arrange a catch-up with a friend, pre-order food from a restaurant, book a taxi to the restaurant, get directions on foot, pay for the meal (or send your friend the money), check movie times and book tickets, and also buy that coat

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[28] Thompson(2014)p.156.
[29] This section is basically written on Wu(2017, pp.170-240). If necessary, other materials are shown on footnotes.
[30] Wu (2017) p.222.
[31] WeChat's key trends report(in Chinese)
http://tech.qq.com/a/20160321/007049.htm#p=30(Final access: 2017.12.29)
[32] Wu (2017) p.233.

that you've been after for ages that has just been put on sale.

Figure 4 : A typical WeChat users engages 11 separate times per day

WeChat not only makes it possible to use one platform to complete various different tasks throughout the day, but also makes using your phone a little bit easier by providing a solution to the inevitable 'curse of the forgotten password'. But whilst the main benefit may appear to be the ease of use for the user, WeChat is actually one of the world's most comprehensive and intelligent data-gathering tools. It develops quickly in China as figure 5 shows[34].

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[33] 7 things that we can learn from WeChat's development by YC PARTNER (in Chinese)
  https://36kr.com/p/5070923.html (Final access: 2017.11.30)
[34] Future landscape: 2017 China media trend report
  https://mp.weixin.qq.com/s/kgM8U57pjRUdy5mYGayaxg (Final access: 2018.12.14)

Source : The development of WeChat[35]

Figure 5:The number of WeChat's Users(million)

3-2. Important Functions and Points of WeChat

The lines above macroscopically explain the development of WeChat, next I would like to show some concrete functions of WeChat.

① WeChat Voice Message- Good attraction for users in China

WeChat started quietly on January 21, 2011 when Tencent, already China's social media giant with its MSN-style QQ instant messenger and accompanying Qzone social network (with 780 million active users at the start of 2011), made a mobile-only messaging app[36].

The new app was called Weixin in Chinese[37]. There was no English name yet. The Next Web, the only major news outlet to report the launch, transliterated

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[35] The development of WeChat.(in Chinese)
    http://www.pintu360.com/a8603.html (Final access: 2017.12.27)
[36] Wu (2017) p.209.
[37] The development of WeChat.(in Chinese)
    http://www.pintu360.com/a8603.html (Final access: 2017.12.27)

the Chinese name and dubbed it "micro letters[38]."

China's three telecoms companies already had online messaging apps that were proving popular, but Tencent wanted to bring down the Telco barriers that existed between people and make a chat app that disrupted SMS and worked on any phone and on any mobile service.

The launch of Weixin came as Kik and WhatsApp - both released in 2010 - were gaining traction. Neither Kik nor WhatsApp are blocked in China. WeChat's first iteration started out basic, with just text messaging, voice clips, and the ability to send photos[39].

② WeChat Moments -Circles that encourage people to share lives

Moments (Chinese: 朋友圈) is a function of WeChat. It was launched on 19 April 2012 in the WeChat version 4.0[40]. It serves new social-networking functions for Wechat users. The Chinese translation of moment is known as "friends' circle"[41], which means users can share and get access to accepted WeChat friends' information, creating an intimate and private communicating circle within the users' choice of close friends. To some extent, WeChat has created a familiar circle for people and their acquaintances, in which they can share their lives and gain unpredictable [likes] or [comments] from friends they have already known. It provides people sense of safety and privacy, and encourages them to share or give [like] and [comments] to acquaintances.

③ WeChat official accounts- Use present users' original power to attract more users

WeChat official accounts are the WeChat equivalent of a Facebook page: they are an interface a brand can use to;

- Gather followers
- Send followers push notifications

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[38] WeChat leads APAC mobile messaging' (We are social)
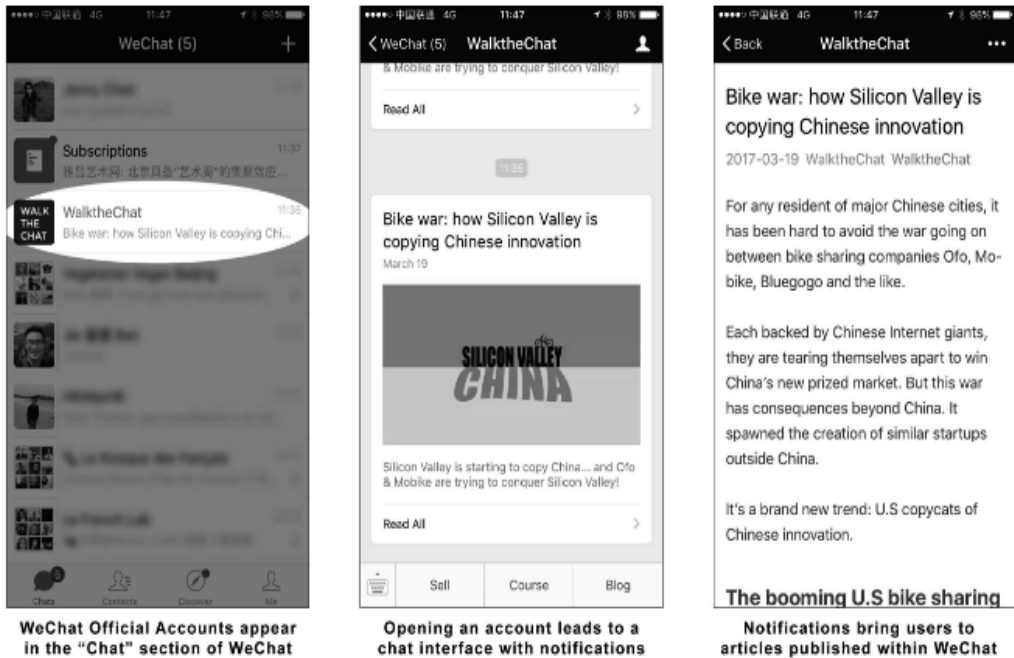https://wearesocial.com/uk?s=china+social+network(Final access: 2017.11.10)
[39] Wu (2017) p.178.
[40] The development of WeChat(in Chinese)
http://www.pintu360.com/a8603.html (Final access: 2017.12.27)
[41] The development of WeChat(in Chinese)
http://www.pintu360.com/a8603.html (Final access: 2017.12.27)

●　　Redirect followers to a website / e-commerce

Most WeChat official accounts appear in the "Chat" section of WeChat. This is the section of WeChat which is similar to WhatsApp / Messenger. Upon sending notifications, WeChat official accounts are brought to the top[42].

WeChat Official Accounts appear in the "Chat" section of WeChat

Opening an account leads to a chat interface with notifications

Notifications bring users to articles published within WeChat

Source: Pictures of WeChat's official account[43]

Figure 6: WeChat's official account

Users can then open the account to access a conversation interface where they can either click on push notifications or access information through the bottom menu interface as showed in figure 6[44].

In China, nearly anyone can register for a public account. As a result, there

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[42] Discover all of WeChat's secrets ' (Marketing to China)
https://www.marketingtochina.com/discover-all-of-wechat-secrets/ (Final access: 2017.11.18)
[43] WeChat's key trends report.
http://tech.qq.com/a/20160321/007049.htm#p=30(Final access: 2017.12.29)
[44] WeChat's key trends report.
http://tech.qq.com/a/20160321/007049.htm#p=30(Final access: 2017.12.29)

are many bloggers in China who use WeChat as their primary channel for publishing posts. Some of these bloggers write on specific themes and amass loyal followings, while others publish posts, like a daily journal.

4. To Analyze WeChat from the Perspective of the Hook Model

　Part 3 has showed the development of WeChat, then part 4 will use the hook model to explain how WeChat became such a popular application in China. The analysis in the hook model is as follows.

① Trigger—Find its Difference to Attract Users

　　WeChat had competitors when it was launched-Weibo, which is also famous in China and kind of similar to Facebook, is a big competitor for WeChat when it was launched[45].

　But Weibo wasn't very good at interpersonal communication, so it left a giant hole for WeChat[46]. WeChat focused on the information shared among acquaintances, found the needs of interpersonal communication[47], and did well in privacy protection made it different from any other social media, which was a good trigger for users at the beginning.

　　WeChat was just an application for chatting and sharing among acquaintances, but its team keeps finding users' needs and developing its new functions to create new triggers for its users in these several years, such as WeChat Moments and WeChat Pay. Innovation help WeChat grow into a big success in China.

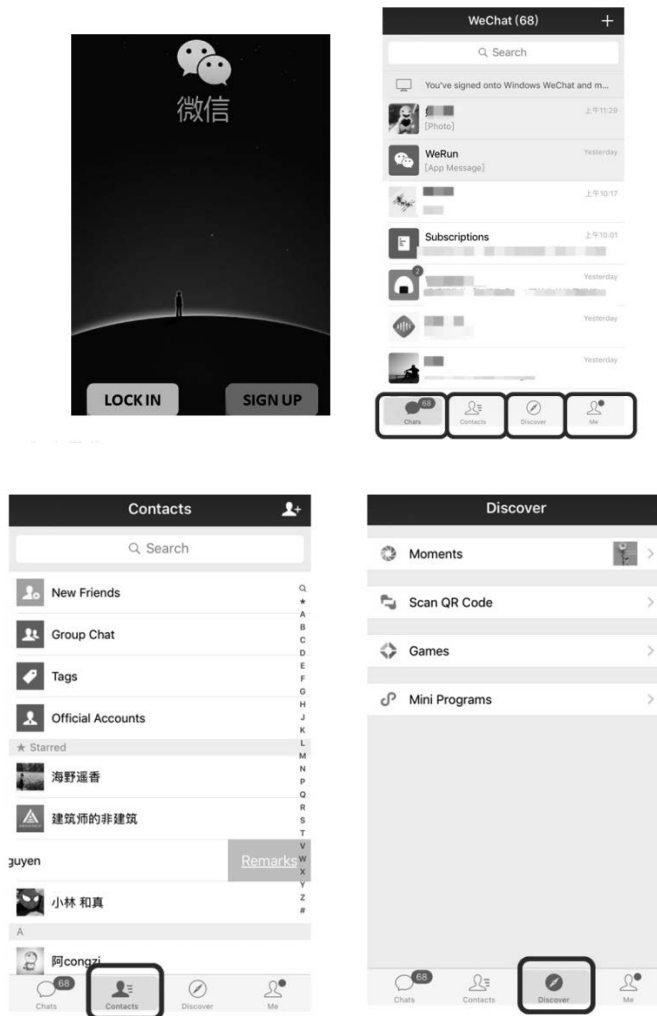② Action —Make It Easier for Users to Use Its Functions

　　As mentioned in the theory part, the ability is dependent on users and their context at that moment. In order to improve the ability of users, the product designer should try the best to make the product as simple as possible. WeChat's team also paid great attentions to the design of WeChat. They keep

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[45] Wu (2017) p.135.

[46] 7 things that we can learn from WeChat's development by YC PARTNER.(in Chinese)
　https://36kr.com/p/5070923.html (Final access: 2017.11.30)

[47] Wu (2017) p.169.

trying their best to make the app as easy as possible for their users to get access to[48]. Just as showed in figure 7, it is quite simple that everyone (even the first-time-user)do not have to spend too much time to learn about it. The simple design of WeChat makes it easier for users to take action, which plays an important role in the widespread of WeChat.

Source: Pictures of WeChat's design[49]

Figure 7: WeChat's Design

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[48] Discover all of WeChat's secrets ' (Marketing to China)
  https://www.marketingtochina.com/discover-all-of-wechat-secrets/ (Final access: 2017.11.18)
49 WeChat's key trends report.
  http://tech.qq.com/a/20160321/007049.htm#p=30 (in Chinese)(Final access: 2017.12.29)

③ Variable Rewards —WeChat Moments Give Its Users Rewards to Encourage Them to Use It Frequently

WeChat moment makes the information interchanging and sharing only among acquaintances possible. People can gain various unpredictable [likes] or [comments] as reward if they share something about themselves. What's more, for those who do not like sharing, it is possible to use WeChat Moments to see recent statements about their friends or acquaintance without sending messages. As a data shows, users of WeChat averagely open WeChat 10 times a day and check WeChat Moments almost every time they open WeChat[50].

Consequently, WeChat Moments' variable rewards play an important part in forming WeChat users' habits. It helps WeChat to make its users connect more. Therefore, it is possible for WeChat to engage more and more users.

④ Investment —Use the Power of Users to Make It More Attractive

For the investment part, WeChat create the Enterprise office account and original content function, which encourage users to create value on the platform and make it possible to create the next trigger by idea spreading[51]. For example, Warfalcon is a famous WeChat official account on WeChat platform in recent years. It is an online account of a thirty-something IT professional. Warfalcon first earned online fame in 2011 when he set out to read one book every day. Since then he's become a time management figure in China, and he'll publish daily posts on his WeChat public account on habit-forming and time management. What's more, he also creates some lesson and sells on WeChat platform[52].

As the example has showed, making users invest time or money on WeChat not only help WeChat engage deeper in people's lives, but also has changed a lot of users' lives.

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[50] Global Web Index
https://www.globalwebindex.net/the-data(Final access: 2017.10.04)
[51] Wu (2017) p.188.
[52] Warfalcon WeChat official account(in Chinese)
http://chuansong.me/account/read01(Final access: 2017.12.29)

Through these 4 parts, we can understand that WeChat has become such a popular application because it has formed a customer-oriented business. It pays great attentions to users' behavior and tries to solve their problem, and form users' habits in their daily life.

5. Conclusion

Overall, through the analysis of WeChat's development and how it engages in users' daily life, we have clarified the important steps for companies to create user's habits.

This study is divided into 3 parts. The first part of this study mainly explains the hook model, which includes 4 steps - triggers, actions, various rewards and investment. The second part introduced the outline of WeChat and picked up some important functions of it. The third part analyzed the case of WeChat through the hook model. Through the analysis, it could be concluded that WeChat became such a big success because it keeps finding users' real needs in their daily life, creating different triggers to attract users and trying to forming users' habits by implementing the four steps of the hook model. Each step is necessary for forming users' habit, especially the final one-investment, because it helps to create another trigger for the next cycle, and a successful habit-forming product needs cycles one by another to keep their users' habits.

Through the analysis of WeChat, we have known that there are 4 steps to consider about, when building a habit-forming product, and it is important to create one and another habit cycle to keep users' habit. However, there is still further research to do. Forming users' habit is quite comprehensive problem which has deep connection with psychology. Although this study has clarified some key points of forming users' habits, it still needs further studies about customer behaviors and consuming psychology. What's more, this study mainly focused on technology companies. To make different types of companied benefit from the hook model -it still needs further research. These points will be future research subjects.

[Acknowledgements]

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   http://customerthink.com/
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[5]WeChat leads APAC mobilemessaging (We are social)
   https://wearesocial.com/uk?s=china+social+network
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　　https://www.globalwebindex.net/the-data

　　(Final access: 2017.10.04)

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　　(Final access: 2017.08.30)

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