

DETERMINING PLATFORM BUSINESS STRATEGIES

Creating a theoretical framework for platforms strategies from launch to growth

Master's Thesis
Sanni Siipilehto
Aalto University School of Business
Entrepreneurship and Innovation Management
Spring 2020

Author Sanni Siipilehto

Title of thesis DETERMINING PLATFORM BUSINESS STRATEGIES Creating a theoretical framework for platforms strategies from launch to growth

Degree Master of Science in Economics and Business Administration

Degree programme Entrepreneurship and Innovation Management

Thesis advisor(s) Myrto Chliova

Year of approval 2020**Number of pages** 114**Language** English

Abstract

Many platforms have gained their way into consumers daily lives by shifting values and expectations, increasing ability to self-express oneself, satisfying new needs while expanding markets and creating new industries. This is what platform revolution means, yet the strategies and logic behind platforms remain much unknown.

The current literature identifies as the key strategic variables for platforms to be *user acquisition*, *standalone value*, *credibility*, *profitability*, *design* and *openness*. However, these discussions don't give clear guidance on how to implement or prioritize these variables according different platform types. While the current understanding of strategic differences and how to combine tactics and variables towards each platform type is forming, so is classifying and separating platform types from each other. While the two papers have classified platform types their conclusions differed staying unconfirmed. Therefore, the purpose of this study is to determine platform businesses strategies and to create a theoretical framework reflecting it while answering to the research question: *what strategies platforms apply as they go in business and how they attempt to grow?*

The empirical part of this study is aimed at developing a theoretical framework representing the strategic decisions made by platforms. It was conducted as an in-depth multi case study by interviewing 14 platform as well as testing 70 platforms' user experience. Based on these two data sets a theoretical framework was formed that is applicable within the Western world.

Consequently, the theoretical framework representing the key finding of this thesis separates 12 unique platform strategies for launching a platform business across three platform types identified as an *e-marketplace*, *software as a service* and *social networking sites*. Thus, stating that there are at least 12 unique platform strategies that organizations follow. The framework guides what kind of MVP, key target group and social factors each 12 platform strategy types can utilize and the boundaries each type has. It also gives descriptions on all 12 platform strategies and minimum example of four businesses that follow that strategy. Furthermore, the thesis discusses multiple vertical and horizontal expansion strategies that each platform strategy type can apply when attracting further growth towards itself and the factors that need to be considered simultaneously.

The contributions done towards platform strategies, SaaS and SNS by the framework are groundbreaking and significant as they create new unique knowledge while invalidating and correcting two past attempts to classify and group platforms. However, this thesis contributes also to the conceptual understanding of the platform types, how different variables are interlinked to one another and to the framework. It also specifies the current understanding of e-marketplace platform strategies.

Keywords platform, strategy, e-marketplace, software as a service, social networking sites

Tekijä Sanni Siipilehto

Työn nimi DETERMINING PLATFORM BUSINESS STRATEGIES Creating a theoretical framework for platform strategies from launch to growth

Tutkinto Kauppätieteiden maisteri

Koulutusohjelma Entrepreneurship and Innovation Management

Työn ohjaaja(t) Myrto Chliova

Hyväksymisvuosi 2020

Sivumäärä 114

Kieli englanti

Tiivistelmä

Alustatalous on muuttanut yhteiskuntaa viime vuosina niin paljon, että on alettu jo puhumaan alustatalouden vallankumouksesta. Alustatoimijat ovat nousseet kuluttajien suureen suosioon samalla kun ne ovat laajentaneet markkinoita ja luoneet kokonaan uusia toimialoja. Tätä alustatalouden vallankumouksella tarkoitetaan. Alustatalouden toimijoiden strategiat ja toimintalogiikat ovat kuitenkin edelleen varsin tuntemattomia. Tämä tutkielma keskittyy niiden valaisemiseen.

Tämän hetkinen tutkimuskirjallisuus tunnistaa alustatoimijoiden strategisiksi toiminnoiksi *käyttäjien hankinnan, itsenäisen arvionluonnin, luotettavuuden, kannattavuuden, designin ja avoimuuden*. Kirjallisuus ei kuitenkaan anna selkeitä ohjeita siitä kuinka kyseiset toiminnot tulisi toteuttaa tai priorisoida eri alustatyypeillä. Myös alustatyyppejä koskeva luokittelu ja erottelu on vasta aluillaan. Vaikka kaksi aiempaa tutkimusta ovat luokitelleet alustatyyppejä, niiden johtopäätökset eroavat toisistaan eikä kummankaan tuloksia ole jatkotutkimuksin vahvistettu. Näidenkin syiden vuoksi tämän tutkielman tarkoituksena on kuvata alustatalouden toimijoiden strategioita sekä luoda sitä heijastava teoreettinen viitekehys. Tämä tutkielma pyrkii vastaamaan kysymykseen *mitä strategioita alustat käyttävät liiketoiminnan aloitusvaiheessa sekä kasvupyrkimyksissään?*

Tämän tutkimuksen empiirisen osion tavoitteena on luoda teoreettinen viitekehys, joka mallintaa alustatalouden toimijoiden tekemiä strategisia päätöksiä. Viitekehys luotiin monitapaustutkimuksen tuloksena haastatellen 14:ta alustatalouden edustajaa sekä testaten 70 eri alustaa.

Tämän tutkielman keskeisintä havaintoa edustava teoreettinen viitekehys tunnistaa ja erottelee 12 ainutlaatuista alustastrategiaa alustaliiketoiminnan käynnistämiseksi kolmella alustatyypillä, jotka on määritelty *digitaaliseksi markkinapaikaksi, ohjelmistoksi palveluna ja sosiaalisen median sivustoiksi*. Viitekehysten avulla organisaatiot voivat hahmottaa omasta strategiastaan tuotetun lisäarvon ja tärkeimmän kohderyhmän sekä ymmärtää miten sosiaaliset tekijät vaikuttavat heidän valitsemaansa alustastrategiaan. Lisäksi viitekehys avaa alustatyypin keskeisiä rajoitteita sekä mahdollisuuksia. Viitekehys antaa myös kuvaukset kaikista 12 alustastrategiasta ja esimerkit vähintään neljästä strategiasta seuraavasta yrityksestä. Lisäksi tutkielmassa käsitellään useita vertikaalisia ja horisontaalisia laajentumisstrategioita, joita toimijat voivat soveltaa lisäkasvun tavoittelussa.

Tutkielma tuo lisäarvoa etenkin alustastrategioiden, ohjelmisto palveluna ja sosiaalisen median sivustojen saralla ollen uraauurtavaa ja merkittävää, sillä tutkielmassa luodaan uutta ja ainutlaatuista tietoa. Samalla kumotaan ja korjataan kahta aiempaa tieteellisen kirjallisuuden yritystä luokitella ja ryhmitellä alustoja. Tutkielma tarkentaa myös nykyistä tieteellistä ymmärrystä digitaalisen markkinapaikan alustastrategioista. Tämä tutkielma edistää myös alustatyypien käsitteiden ja merkityksien tarkempaa ymmärtämistä.

Avainsanat alusta, strategia, digitaalinen markkinapaikka, ohjelmisto palveluna, sosiaalisen median sivustot

1. INTRODUCTION	1
1.1 Platform revolution and changing market environment	1
1.2 Superior value creation of platform businesses	2
1.3 Research questions and the main objectives.....	4
2. LITERATURE REVIEW	6
2.1 Platform terminology	6
2.1.1 Platform actors	6
2.1.2 Value creation in platforms	7
2.1.3 Governance.....	8
2.1.4 Boundary resources.....	8
2.1.5 Level of control and openness.....	9
2.1.6 Positive network.....	10
2.1.7 Pricing models	11
2.2 Platform business models	13
2.2.1 E-marketplace.....	15
2.2.2 Software as a service (SaaS).....	16
2.2.3 Social networking sites.....	17
2.3 Platform strategies	18
3. METHODOLOGY.....	24
3.1 Applied research method	24
3.2 Interview sample selection.....	24
3.3 Interview sample	26
3.4 Interview sample gathering.....	27
3.5 Interview data analysis	30
3.6 Planning complementary sample gathering.....	30
3.7 Testing platforms as a complimentary research method.....	31
4. ANALYSIS AND FINDINGS.....	35
4.1 Theoretical framework	35
4.2 E-marketplace.....	38
4.2.1 Offering	39
4.2.1.1 Consumer driven e-marketplace	40
4.2.1.2 Business driven e-marketplace	41
4.2.1.3 Balanced e-marketplace.....	42
4.2.2 Client and user	47
4.2.2.1 Local e-marketplace	48
4.2.2.2 Global e-marketplace.....	49

4.2.3 Monetization model	50
4.3 Software as a Service	52
4.3.1 Offering	53
4.3.1.1 Socially network dependent SaaS.....	54
4.3.1.2 Socially dependent SaaS on any user	56
4.3.1.3 Independent personalized SaaS offering	57
4.3.1.4 Independent standard SaaS offering	58
4.3.2 Client and user	59
4.3.3 Monetization model	64
4.4 Social Networking Sites	66
4.3.1 SNS strategies.....	67
4.4.1.1 SNS creating primary data.....	68
4.4.1.2 SNS organizing secondary data.....	69
4.4.1.3 SNS connecting with user's network.....	69
4.4.1.4 SNS expanding user's network.....	69
4.4.2 Offering	70
4.4.2 Client and user	72
4.4.3 Monetization model	74
4.5 Exception of the framework	75
4.5.1 Incumbents	76
4.5.2 New businesses.....	78
5. DISCUSSION	81
5.1 Framework's contribution to platform strategy.....	81
5.2 Framework's contribution to platform types.....	84
5.3 Framework's contribution to chicken or egg dilemma	86
6. CONCLUSIONS.....	89
6.1 Main Findings.....	89
6.2 Contributions, limitations and future research.....	93
7. REFERENCES.....	97
8. APPENDIX.....	107

Figure 1, Factors influencing and being influenced by changing environment.....	1
Figure 2, Top five publicly traded companies by their market value over 17 years.....	4
Figure 3, Boundary Resources.....	9
Figure 4, Network effects.....	10
Figure 5, Platform models.....	15
Figure 6, Five factors showcasing different platform models.....	20
Figure 7, Seeking positive network effects.....	21
Figure 8, Research sample and its link towards building the framework.....	30
Figure 9, Platform business strategies divided into three main categories and 12 subcategories.....	35
Figure 10, Vertical expansion towards an offer family.....	37
Figure 11, Horizontal expansion as an alternative to vertical expansion strategy.....	38
Figure 12, E-marketplace platform business strategies.....	39
Figure 13, E-marketplace division between consumer and business driven platforms.....	40
Figure 14, E-marketplace user experiences.....	44
Figure 15, Global and local e-marketplace focus points.....	48
Figure 16, Software as a Service platform strategies.....	53
Figure 17, SaaS division between independent user and socially dependent user platforms.....	54
Figure 18, Social Networking Sites platform strategies.....	67
Figure 19, SNS division between information and people driven platforms.....	68
Table 1 Comparing traditional pipeline business with a platform business.....	7
Table 2, Overview of different platform types in the literature.....	14
Table 3, Key variables when studying platform strategy.....	19
Table 4, Key contributing papers on platform strategy at launch.....	24
Table 5, Background information of the case companies.....	27
Table 6, Interview details of the case companies.....	29
Table 7, E-marketplace information and testing.....	32
Table 8, SaaS information and testing.....	33
Table 9, SNS information and testing.....	34

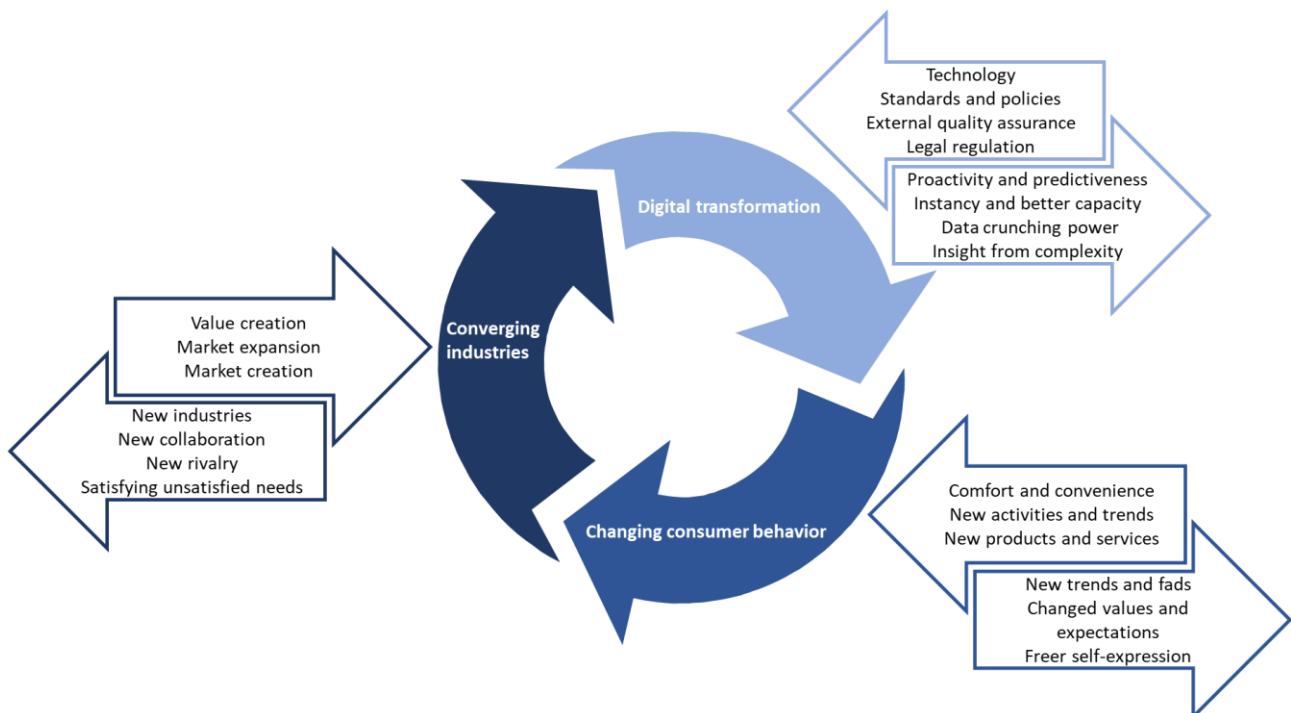
1. INTRODUCTION

This section sets the context of the platform business phenomenon and highlights its contemporary importance of our time as well as formulates both research questions and the main objectives of this thesis.

1.1 Platform revolution and changing market environment

Platform revolution, a fourth industrial revolution, is currently happening. What it means is that world around us has yet again changed. The factors and realities we have relied upon during the third industrial revolution, the digital revolution isn't necessarily accurate anymore and we need to find new ways to explain our time and to model it. (Schwab, 2017; World Economic Forum, n.d.; Pulkka, 2017a) One of the indicators to this development is converging industries (Berman, 2012; Hacklin, Battistini, & Von Krogh, 2013; Schwab, 2017) that highlight some of the logic behind the market expansion and shift in consumer preferences that we have experienced as platforms have gained their way into consumers daily lives. This, logic is shortly described in figure 1.

Figure 1, Factors influencing and being influenced by changing environment



Own creation based on (Duysters & Hagedoorn, 1998; Pennings & Puranam, 2001; Curran, Bröring & Leker, 2010; Lamberti & Lettieri, 2011; Berman, 2012; Hacklin, Battistini, & Von Krogh, 2013; Schwab, 2017).

When converging industry logic is applied to platform businesses, it can be noted that all of the three phases have and increasingly are being covered within various industries. One of the indicators is cross disciplinary papers, that have appeared on platforms covering technical, business, behavioral, psychological, educational and legal perspectives. Admittedly, the terminology still varies among the publications and hasn't quite settled.

Although, many incumbents think platforms as market disrupters as they challenge the status quo, in many cases platforms have in fact expanded the market. As platforms have been able to innovate, produce and scale value more efficiently than traditional companies, they have been able to offer goods at lower cost leading to many socio-demographic changes. To mention few, Uber and Lift have enabled cheaper taxi services. AirBnB and CouchSurfing have offered cheap alternatives for hotels and B&Bs. Skype, WhatsApp, Facebook and Snapchat have made staying in touch with your friends and family very affordable and convenient. Crowdfunding options have enabled innovators and startups to develop businesses that might not have succeeded via conventional funding. As a result of these affordable new goods, consumers are consuming more. Simultaneously consumers' expectations of future offerings have been influenced as new norms have been established.

The strongest indicator of converging industries is however the natural desire and the very business logic that many platforms rely upon when creating value, which is creating collaboration, alliances and networks to enable value creation on the platform. Some platforms seek to create this by innovating with external parties or solely relying on them to deliver innovative value propositions to the platform (Gawer & Cusumano, 2002; Gawer & Cusumano, 2008; Boudreau & Lakhani, 2009; Lee et al., 2010; Henfridsson & Bygstad, 2013). Additional collaboration benefits that platforms utilize include enabling positive network effects for business growth (Evans & Schmalensee, 2010; Lee et al., 2010; Cusumano, 2011a; Cusumano, 2011b; Parker, Van Alstyne and Choudary, 2016; Zhu & lansiti, 2019).

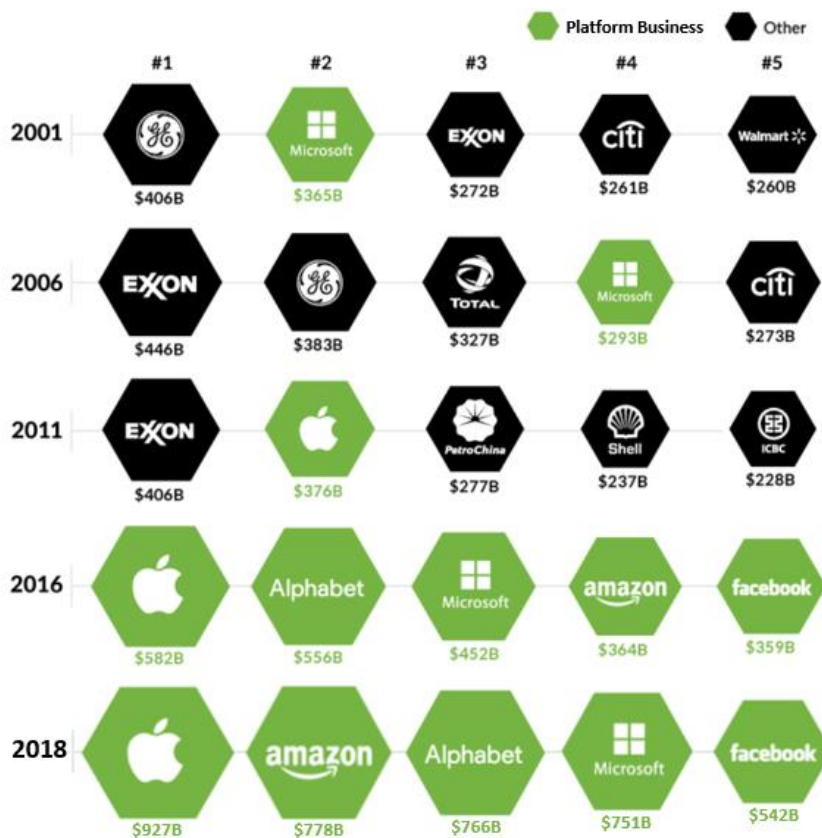
1.2 Superior value creation of platform businesses

The fast ability of platforms to scale up and utilize different parties in their value creation is why they are superior in value creation in comparison to many traditional businesses. A glimpse of this can be seen when comparing world's most valuable companies by their market value as many platform businesses are leading the race (Desjardins, 2016; Statista, 2018; FXSSI, 2019; Theonlineinvestor.com, 2019). The same goes for world's most valuable brands (Desjardins, 2017; Interbrand, 2017; Brand Finance Global 500, 2019) as the top is represented by platforms businesses. Given these things it seems that the change is happening globally. This same change is in motion but lagging when we compare companies based on their revenues. Yet even there we

have seen the rise of platform-based companies like Apple #11, Amazon #13, Alphabet #37, Microsoft #60 and Facebook #184 slowly climbing their way towards the top companies amongst Fortune Global 500 list (Fortune, 2019) as their revenue streams are showing signs of scale.

However, the ongoing change in the business world is better illustrated with a time series when comparing businesses in general in the market. Since platform business logic tends to take more time in profit and revenue creation than in value creation, variables such as market or brand value might be better in capturing platform's potential and future value. This is true as these businesses mature faster in their value creation and adaptation rate than they tend in finding a monetization model. The time series illustrate both the slow start and sudden success that expanding in scale enables means for successful platform companies. (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016) As these companies started dominating the top five since year 2016, while being only little present in the previous decade shown in figure 2 along the market value of top five companies over 17 years. The current leaders are Apple, known for its wide product and service family around iPhone and Mac within platforms like App Store and iTunes. Amazon, known for its online store. Alphabet, best known for its brands Google, Android and YouTube. Microsoft known for its Windows operating system, Microsoft office and LinkedIn. Facebook that has also inquired Instagram and WhatsApp. (FXSSI, 2019) These stories have inspired other businesses to try their luck in a platform space.

Figure 2, Top five publicly traded companies by their market value over 17 years



Adopted from Desjardins' work (2016) and updated with 2018 figures from Statista (2018).

1.3 Research questions and the main objectives

Despite the many opportunities that platforms have and the huge successes of the few, many platform businesses struggle to survive and end up failing. The two biggest hurdles seem to be in the start and again when scaling the business. (Marmer et al., 2011; Cantamessa et al., 2018; U.S. Small Business Administration, 2019) To understand more of this phenomenon and what might create the success or failure, this thesis will contribute to current understanding by determining platform business strategies to uncover what strategies platforms utilize when starting the business and when seeking further growth.

To support business decision makers and academia a theoretical framework is created to model platform business strategies. Thus, linking decision making closely to the selected platform type and the chosen value created for the key customer. Moreover, multiple important decisions are discussed and how different variables are likely to behave differently according to the chosen platform strategy. For instance, positive network effects play an important role within user acquisition and enabling value creation for e-marketplace platforms where as they play a minor role within standard SaaS offering. Similarly understanding social factors, advantages of location and

cultural proximity with the platform and its users are all factors that can help platforms to serve their purpose better and succeed within the changing market dynamics. Many of these decisions are in close link to multiple other decisions and often they open and close opportunities in other areas. Hence, the main attempt of this thesis is to answer *what strategies platforms apply as they go in business and how they attempt to grow?*

2. LITERATURE REVIEW

This section introduces the reader towards platform businesses explaining first key terms. It then moves into classifying platform businesses and continues with strategic decision making. The aim is to cover past findings and insights regarding the research question, what strategies platforms apply as they go in business and how they attempt to grow?

2.1 Platform terminology

In the simplest terms' platforms are technical architectures that enable value creation within their ecosystems. However, there are several definitions of **platforms** in the literature (Gawer & Cusumano, 2008; Tiwana, Konsynski & Bush, 2010; Yoo et al., 2012; Gawer & Cusumano, 2014; Seppälä et al., 2015; Ceccagnoli et al., 2017; Sebastian et al., 2017; Penttinen et al., 2018).

Although there is variation among them, majority of the variation is explained through the context among it was used as some are more technical, broad or concise by nature.

Similarly, the definitions among **ecosystem** vary as some believe them to represent nearly the set of functions and their interplay within the platform (Tiwana, Konsynski & Bush, 2010) while most include the parties involved in using the platform to be part of the ecosystem (Gawer & Cusumano, 2008; Yoo et al., 2012; Gawer & Cusumano, 2014; Seppälä et al., 2015; Dufva et al., 2017). For the purposes of this thesis an ecosystem is defined in line with most of the literature. Ecosystem is both the people with an access to the platform and engaging with it as well as the entire platform. These people can be understood as individuals, units, organizations or other groups of people representing different interest groups that are essential or involved in the usage of the platform.

2.1.1 Platform actors

The most common groups within the platform ecosystem are the platform owner, the interface provider, complementors, suppliers, third party developers, partners and users. A platform may have one or more user group of the above mentioned. However, they often include more than one (Gawer & Cusumano, 2008; Yoo et al., 2012; Gawer & Cusumano, 2014; Seppälä et al., 2015; Dufva et al., 2017).

The **platform owner** tends to be the creator of the platform that also provides common assets and the technical infrastructure to support the platform. Often the platform owner also builds and manages the interface, but not necessarily. **Complementors** provide goods and services that expand the usage and value of the platform. These can include suppliers, partners or third-party developers. **Suppliers** tend to provide the main goods to the platform that are consumed. Sometimes the suppliers and the users are the same group, but often they may also differ. **Partners** may provide

additional value on top of the regular value provided by the suppliers making the value proposition of the platform more extensive and potentially seamless. **Third-party developers** may develop new extensions to the platform. **Users** mean the ultimate end-users of the platform that consume the good, this may be separate party from the others, or it may be partially the same or the same as the other groups. (Seppälä et al., 2015)

2.1.2 Value creation in platforms

Ultimately what enables platforms to create superior value and differentiates them from traditional businesses is that platforms use external resources extensively in value creation where as traditional companies rely on internal resources (see more extensive comparisons from table 1). While pipeline businesses can control and manage their entire line, knowing what’s the outcome exactly and decide what the end product or service will be like. Platforms instead trust others to decide what to produce (Goodwin, 2015; Seppälä et al., 2015; Alstytne, Parker & Choudary, 2016) and provide tools, access point or ecosystem to facilitate it (Boudreau & Lakhani, 2009).

Table 1 Comparing traditional pipeline business with a platform business

Pipeline	Platform	Author
the conventional “pipeline” businesses that have dominated industry for decades. Pipeline businesses create value by controlling a linear series of activities—the classic value-chain model. Inputs at one end of the chain (say, materials from suppliers) undergo a series of steps that transform them into an output that’s worth more: the finished product. Apple’s handset business is essentially a pipeline.	Platform businesses bring together producers and consumers in high-value exchanges. Their chief assets are information and interactions, which together are also the source of the value they create and their competitive advantage.	Alstytne, Parker & Choudary (2016)
Full stack companies like Tesla, Warby Parker, BuzzFeed, Nest or Harry’s seek to ensure control by owning all layers. From R&D to marketing, from distribution to sales, these companies do it all. It’s a great way to keep profit in the family, yet it’s harder to scale and build.	are indescribably thin layers that sit on top of vast supply systems (where the costs are) and interface with a huge number of people (where the money is). There is no better business to be in. The New York Times needs to write, fact check, buy paper, print and distribute newspapers to get their ad money. Facebook provides a platform for us to write our own content	Goodwin (2015)
the previous business strategy that for long has followed product and service logic.	the current platform businesses many aspects of the market economy become amplified: multisided markets, third parties that provide complementary products or services, co-creation mechanisms, managing boundary resources from both technical and controlling perspective. It seems that to gain best ecosystem benefit from platforms managing boundary resources from both technical and controlling perspective is going to be the key.	Seppälä et al. (2015)

Own creation based on (Goodwin, 2015; Seppälä et al., 2015; Alstytne, Parker & Choudary, 2016)

Now, producing real products or services is an entirely different business than providing and supporting a platform as their end goals are rather different. Platforms don’t need heavy infrastructure to support their business in traditional sense as their value is mainly created online, providing access to things or people. Instead platforms need to figure how to get others to join their platform and to contribute and engage with it in order to build value. As noted by Goodwin (2015): “Uber, the world’s largest taxi company, owns no vehicles. Facebook, the world’s most popular media owner, creates no content. Alibaba, the most valuable retailer, has no inventory. And Airbnb,

the world's largest accommodation provider, owns no real estate. Something interesting is happening.” This business logic makes platforms dependent on other parties that expose the business towards a very different set of vulnerabilities than a traditional business. Now, companies can choose to operate as a pipeline or platform or as both. Apple has chosen the latter as their product business operates as a pipeline producing iPhones, iPods and Macs, but their App Store is an e-marketplace platform and their services such as iCloud and iTunes represent SaaS platforms.

2.1.3 Governance

Governance and control mechanisms help to direct how the platform is used and by whom.

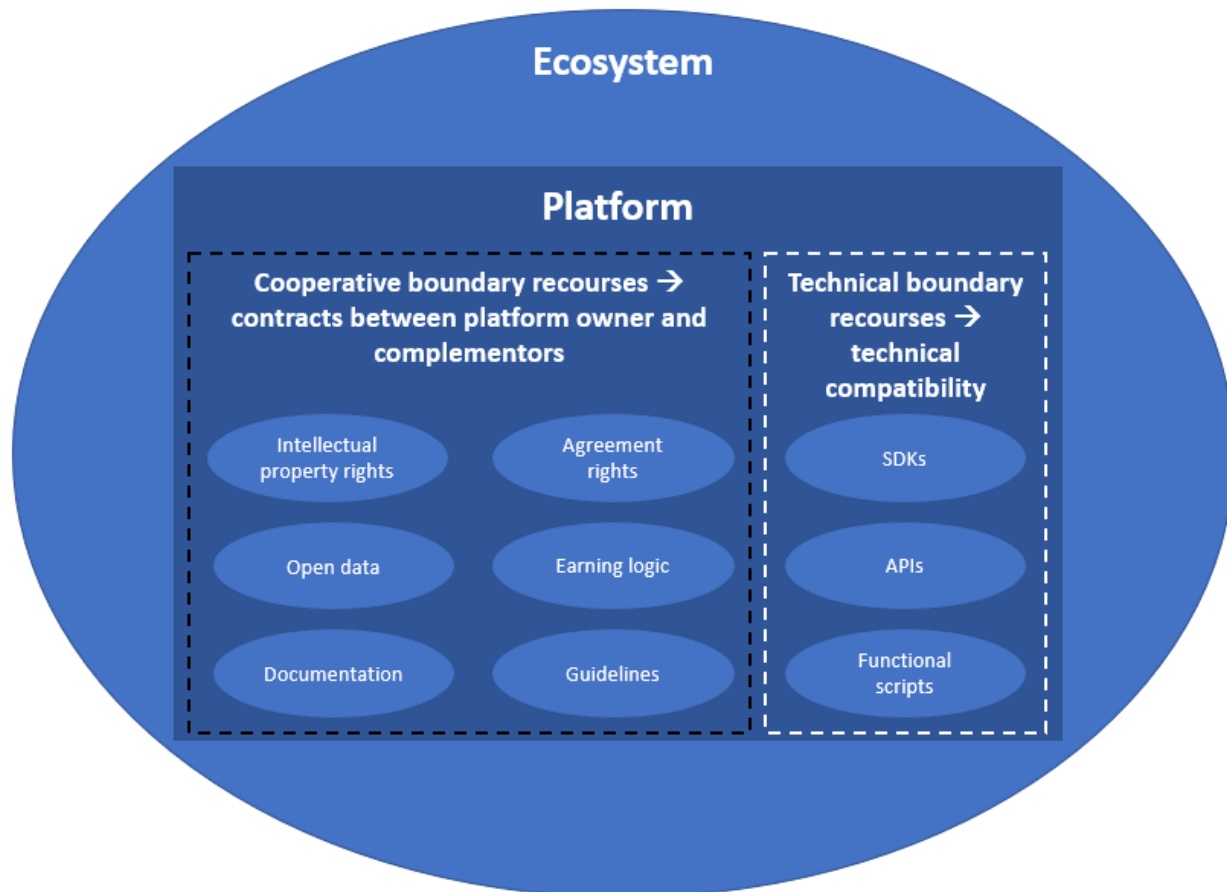
Adjusting these control points will significantly influence if the platform can produce the value the platform owner aimed at as they direct the actions of the players in the platform. Enabling and disabling access to the platform is one controlling mechanism that the owner needs to decide on as well as what actions each party can make. There are multiple ways by which the platform owner can direct the participant towards the desired behavior and engagement like rewarding them via social and monetary benefits. Similarly, the platform architecture guides its participants as well as monitoring their behavior on the platform. One of the main goals of governance is that platform provides quality content for its users as having a lot of content isn't the desired end goal. Since, low quality content may lower the value of engagement and hurt the platform in the process (Hagiu, 2014; Edelman, 2015; Wan et al., 2017). (Cusumano & Gawer, 2002; Boudreau & Lakhani, 2009; Van Alstyne & Choudary, 2016)

2.1.4 Boundary resources

Boundary resources seek to attract right kind of parties to join the platform by building and offering incentives and tools to participants. Boundary resources as seen in figure 3 refer to interfaces and rules within collaboration, legal, governance, functionality and technical application tools. These interfaces are needed so, that a wider community can contribute towards building, innovating and engaging in the platform. Interfaces and actions relating to them have a crucial function as to both restrict and enable production and development of applications. Restricting methods are used to create focus within the platform and to keep the control within the platform owner. Enabling functions seek to expand the existing applications within the platform. The platform owner can manipulate and direct resources within the platform via their governance and wealth management regarding patents and money flows. While exploiting the platform owner status in the expense of suppliers and third parties might seem tempting, the dependency of external parties' involvement is likely to mitigate the act itself. As third parties provide innovation, technology, products and services to the platform. (Seppälä et al., 2015; Alstyne, Parker & Choudary, 2016)

To make contributing and joining a platform as effortless, convenient and easy for suppliers and third parties, platforms tend to build business model covering all the actors and their involvement with regards to monetary compensation. Meaning that new joiners know in the beginning how they might gain a cash flow through the platform as well as what resources and other tools they have at their disposal. (Seppälä et al., 2015) These are crucial factors as new joiner carry risk when investing their efforts into joining a platform. (Alstyn, Parker & Choudary, 2016)

Figure 3, Boundary Resources



Own creation, based on (Yoo et al., 2012; Seppälä et al., 2015; Alstyn, Parker & Choudary, 2016)

2.1.5 Level of control and openness

By open platform the thesis adopts a definition by Eisenmann, Parker and Van Alstyn (2008) "A platform is 'open' to the extent that: (1) restrictions are not placed on participation in its development, commercialization or use; and (2) any restrictions – for example, requirements to conform with technical standards or pay licensing fees – are reasonable and non-discriminatory, that is, they are applied uniformly to all potential platform participants." When neither one of these claims are true the platform is closed and if the claims are partially true the platform is somewhere in between. Many platforms operate somewhere in between a closed and open system having some

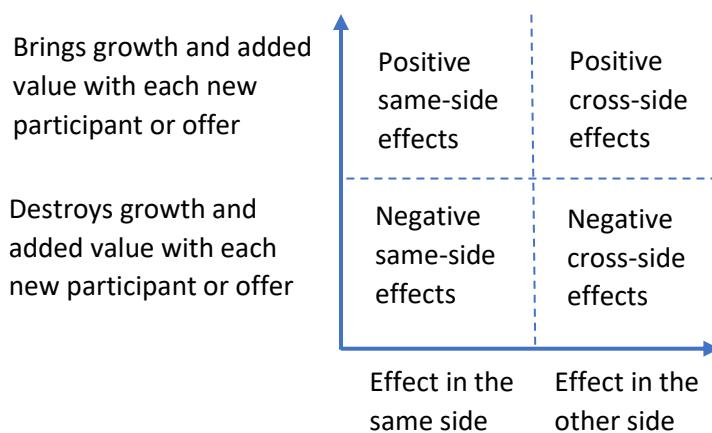
restrictions and limitations in place while allowing other areas to be more openly managed. (Parker, Van Alstyne & Choudary, 2016)

When a platform allows some level of openness and chooses to utilize third parties in their ecosystem, the level of control over the final product or service mastered by the external innovator can be greater or smaller than the platform owner's. The least control was mastered by the external innovators within integrator platform model (also referred as industry platform, extended intranet platform or platform leader), while the platform owner holds most of the control over the final product. A moderate level of control is hold by external innovators within product platform (also referred as intranet platform). The most control held by third parties was found among multisided platforms (also referred as two-sided platforms or internet platforms) and the least by the platform owner. (Boudreau & Lakhani, 2009)

2.1.6 Positive network

Network effects at their very basic level mean that a business can attract more people, services and value towards itself as it grows. These are often referred as same-side effects (also known as direct network effects) and cross-side effects (also known as indirect network effects) (Gawer & Cusumano, 2014; Hagiu, 2014; Tiwana, 2014; Seppälä et al., 2015; Zhu & lansiti, 2019). Network effects can be positive and negative, see figure 4. Thus, businesses seek to maximize positive network effects while mitigating negative ones from occurring (Seppälä et al., 2015; Zhu & lansiti, 2019) as this strategy influences their ability to succeed. Positive network effects refer to the benefit that the platform users gain when new users join the platform (Seppälä et al., 2015; Van Alstyne & Parker, 2017; Zhu & lansiti, 2019).

Figure 4, Network effects



Own creation (Gawer & Cusumano, 2014; Hagiu, 2014; Tiwana, 2014; Seppälä et al., 2015; Zhu & lansiti, 2019)

After a platform has found its initial user group or its main source of value creation it might attempt to expand its business beyond these by growing positive network effects. Positive same-side effects mean that the value of a platform grows when one of its homogeneous subgroups grows. For instance, in a multisided platform the side that grows gains the benefit thus the value for users become greater when a new user joins the platform. (Tiwana, 2014) Similarly complementaries may benefit when new suppliers, partners or third parties enter the platform (Tiwana, 2014) as the content of the platform becomes richer (Van Alstyne & Parker, 2017). Positive cross-side network effects occur when growth in one side attracts players to join the other side. A classic example is when growing user base attracts more complementaries to supply products and services for the platform users and vice versa. (Zhu & lansiti, 2019) These effects go however beyond users as they also apply to products as an increased demand of a single product, service or application is followed by an increased demand within its compatible and complementing products, services and applications (Seppälä et al., 2015).

Just like positive network effects can scale value and growth to the platform, negative network effects can destroy it as fast if not managed. Negative network effects refer to the lost value of the platform. This can happen through (1) users' disintegration by switching to another platform or lowering their activity level in the platform also referred as multihoming (Cusamano, 2011; Wan et al., 2017; Zhu & lansiti, 2019). (2) If the technical capacity of the platform can no longer facilitate the exchange. Once the platform can no longer satisfy all the inquiries as its capacity has been exceeded positive network effects become negative network effects instead (Seppälä et al., 2015). (3) If one of the subgroups becomes too dominant in contrast to other subgroups it can also weaken the platform's ability to create value. (4) If the aim of the platform or its design or controlling mechanisms are weak or become weakened by each new joiner to the ecosystem, the platform will become less efficient and able to deliver its value to its ecosystem. (Hagiu, 2014; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016; Wan et al., 2017)

2.1.7 Pricing models

Pricing models are used to monetize a platform. To do this efficiently, platforms are encouraged to apply multiple pricing models, to tie the price closely together with value created for each group. This also reduces platform's vulnerability and makes the earning more stable. (Brunn, Jensen & Skovgaard, 2002) Pricing is also used to lower the entry level to the platform (Brunn, Jensen & Skovgaard, 2002; Gawer & Cusumano, 2008; Edelman, 2015). This can be done by offering a freemium, lowering the price, offering a free trial, implementing flexible pricing model or subsidizing usage. These prizing techniques can be applied to one or more sides of the platform.

These pricing techniques tend to evolve and change as the platform gains more attraction (Wan et al., 2017). By selecting different pricing mechanisms, the platform can try to attract the right parties to join and potentially guide the growth on different sides. (Hagiu, 2014; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016; Wan et al., 2017)

Once a platform has attracted enough participants and activity, they tend to change their business model. Many reconstruct it in a way, that the party that is benefitting the most from the platform value pays the most from accessing it. An example of this kind of differentiating business model is Google. They provide many services free of charge for consumers, whereas businesses pay for their services. Offering these services for free to consumers is called a **freemium model**. It has helped the company to gain more attraction which has enabled the company to charge more money from businesses on its advertising spaces like Google maps and Gmail by applying **advertising fees**. (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015)

When platforms wish to charge users, they may implement a **pay-as-you-go model**. The idea is that a user only pays for the added value received while it protects users from low usage and limited interest towards the product or service. Pay-as-you-go model has replaced flat-fee model, where the income is more predictable, but the payer carries partial risk of the success of the payed good or service. (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015)

While pay-as-you-go offers great flexibility to the payee, a more predictable pricing model for the platform might be utilizing **transaction fees**, **license fees** or **subscription fees** (Brunn, Jensen & Skovgaard, 2002). Any of these models may additionally utilize a free trial or cheaper starting prize that will further lower the entry barrier to try the platform.

Another way to boost a platform's engagement while offering a discount for trying the product or service is to use a **subsidizing model**. This is especially used in e-marketplace platforms, that seek early joiners to grow the platform. This model can be applied to attract two or more sides to a market. An example of two-sided subsidizing model is Lyft, a ride sharing service. They decided to pay for early joined drives, not by the miles driven, but simply being on call in case customers would appear. Simultaneously, it offered five free rides for early on joiners in some cities. These two subsidies reinforced each other, helping the company to establish business operations in new cities. Subsidizing like this, may accumulate significant expenses for the business. However, it can be justified based on the believe, that once the platform reaches scale the platform will become desirable with less or no subsidizing. (Edelman, 2015)

2.2 Platform business models

Organizations choose the best platform for their needs based on what purpose the platform serves and how it works. Many organizations engage with the first level of platforms, being the product platform for internal usage whereas fewer engage in multisided platforms that can include many players. (Seppälä et al., 2015) These platform types are illustrated in table 2. However, these classifications aren't the only ones available, therefore others will be also introduced in this chapter.

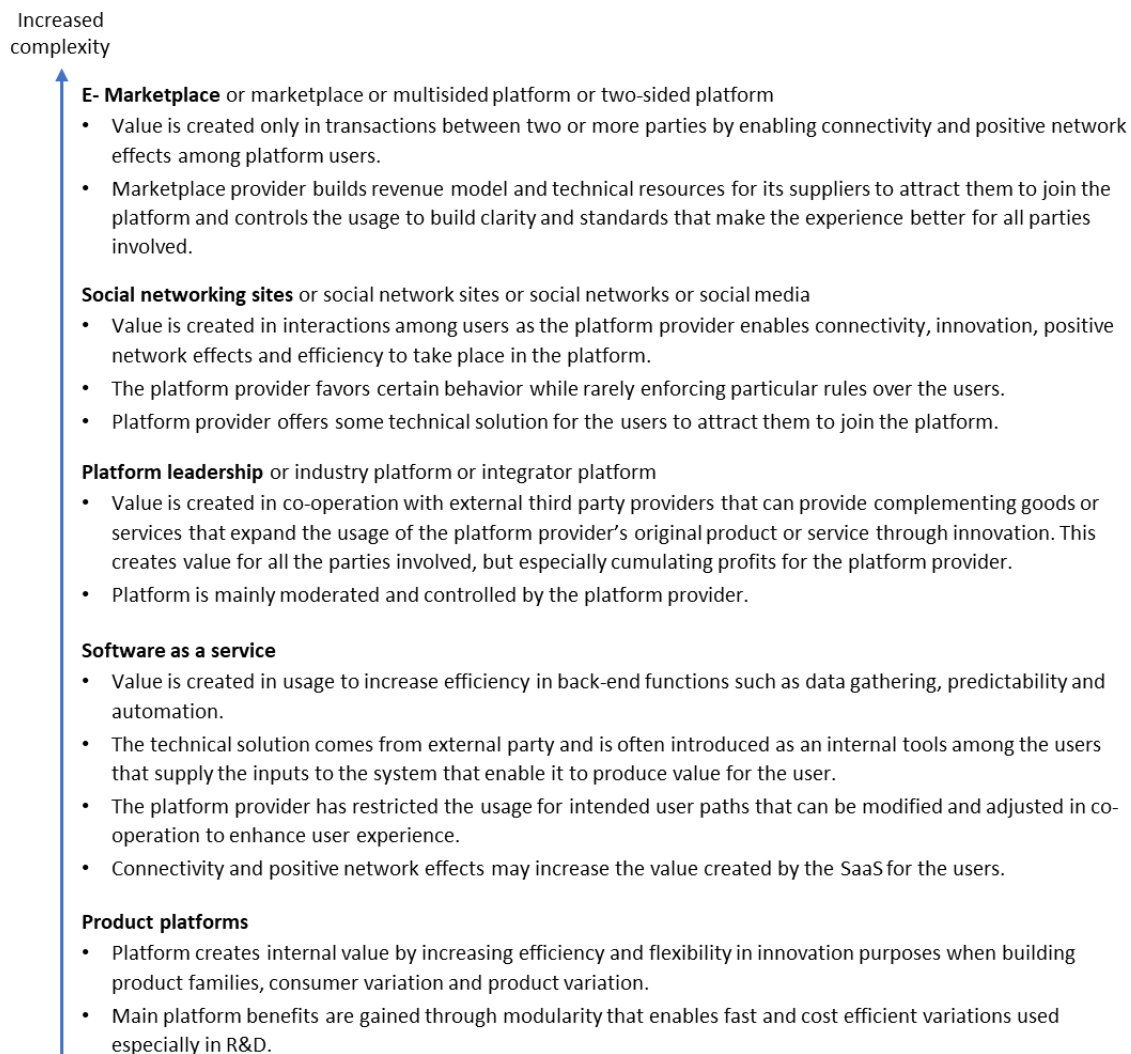
Table 2, Overview of different platform types in the literature

Platform types		
<p>Product platform</p> <p>Companies have less control with the product platform model, in which external innovators build “on top” of a foundation technology and then sell the resulting products to customers. The platform owner might directly contract with the external innovators and have some additional control over them through the technical design of the core technology, but it is the external innovators (and not the platform owner) who directly transact with the end-users. Thus, the external innovators typically have more control than they would in the integrator business model. They generally have, for instance, greater freedom to set prices and to retain the residual rights of control over their technical developments, thus providing them with more entrepreneurial autonomy. (Boudreau & Lakhani, 2009)</p>	<p>Platform leader</p> <p>In the integrator platform model, the platform is wedged between external innovators and customers. In other words, the platform’s owner sells to customers, conferring upon the company a relatively high degree of control. Some platform leaders like Apple has taken this strategy with its App Store by controlling tightly both content and the technical aspect while benefiting financially over its integrator role and taking 30% of the revenues. Its powerful position enables it to dictate the rules of the platform. (Boudreau & Lakhani, 2009)</p>	<p>Multisided platform</p> <p>In the two-sided (or multisided) platform model, external innovators and customers are free to transact directly with one another as long as they also affiliate with the platform owner. In such cases, the platform facilitates the transactions and interactions between the two parties, although the external innovators do not need to interact directly with the platform owner during the design, development and manufacturing of a new product. Nevertheless, the platform owner can still impose some degree of control over external innovators by, for instance, issuing to them various rules and regulations as a condition for their affiliation. (Boudreau & Lakhani, 2009)</p>
<p>Intranet platform was mainly for product development for creating product and service families. The users of these platforms involved mainly R&D researchers. The platform was used mainly for the creation and evolution of product and service families, consumer variation and product or service variation. These variations were made through modularity and variation within scale to be packed according consumer segmentation. Examples of these are product families with automobile and mobile phone industries where similar offerings were differentiated to better cater different customer segment needs. (Seppälä et al., 2015)</p>	<p>Extended intranet platform was a control point within industrial ecosystems. This enabled the provider to gain profits without producing any goods while harming the aggregated economy of that ecosystem. An example of this would be the rivalry between different web browsers in the late 90’s. When Microsoft added its own browser as the default browser within its operating system it harmed the rivalry between browsers within its own platform. This shaped the idea of a platform from being internal tool to external tool through which a third-party provider could provide complementors that expand the usage of the original product, service or technology that is provided by one or more companies. (Seppälä et al., 2015)</p>	<p>Internet platform is an enabler of new kind of transactions between two or more parties in a marketplace. This was expanded to cover both technical and contractual boundary resources. (Seppälä et al., 2015)</p>
<p>Importance of companies enhancing their new product development process through a multi-product strategy. This means planning the development of a product family upon a platform, which allows shorter lead times in developing new derivative models. The platform itself has proven to be more flexible when given a modular architecture, so this shifts attention onto evaluating product platform architecture. (Muffatto, & Roveda, 2000)</p>	<p>An industry platform is a foundation technology or service that is essential for a broader, interdependent ecosystem of businesses. The platform requires complementary innovations to be useful, and vice versa. An industry platform, therefore, is no longer under the full control of the originator, even though it may contain certain proprietary elements. (Gawer & Cusumano, 2008)</p>	<p>Multisided platforms (MSPS) are technologies, products or services that create value primarily by enabling direct interactions between two or more customer or participant groups. (Hagiu, 2014)</p>
<p>Scale-based product families derived from scalable product platforms that can be exploited from both a functional and a manufacturing standpoint to increase the potential benefits of having a common platform. (Simpson, Maier & Mistree, 2001)</p>	<p>Platform leaders are companies that do not just sell standalone products. They have a foundation technology that is sufficiently open so that outside firms can provide complementary products and services, ranging from prerecorded videotapes to software applications and downloadable digital content. The value of the platform and complements can grow exponentially with positive feedback loops. These “network effects” make the platform, and the complements, increasingly valuable (and profitable) as more users, application developers, service providers, content providers, device makers, and other ecosystem players such as advertisers adopt the same platform. (Cusumano, 2011b)</p>	<p>Two-sided platform businesses, those for which the costs of reversing participation decisions are negligible, generally face a critical mass constraint that must be satisfied at launch if the business is to be viable. This constraint, which is two-dimensional for two-sided platforms, does not involve production scale economies or fixed costs. We show that it depends instead on the nature of the network effects linking the platform’s two customer groups, the distribution of tastes among potential customers in both groups, and the nature of out-of-equilibrium dynamics. (Evans & Schmalensee, 2010)</p>
<p>A product platform is largely proprietary and under one company’s control (Gawer & Cusumano, 2008)</p>	<p>Platform leaders are companies that drive industrywide innovation for an evolving system of separately developed pieces of technology (Gawer & Cusumano, 2008)</p>	<p>Many two-sided platforms provide content, known as first-party content, often for free or as part of a product bundle, which makes participation more attractive to one side (typically, buyers), sometimes independently of the presence of the other side (typically, sellers). (Hagiu & Spulber, 2013)</p>

Own creation (Muffatto, & Roveda, 2000; Simpson, Maier & Mistree, 2001; Gawer & Cusumano, 2008; Boudreau & Lakhani, 2009; Evans & Schmalensee, 2010; Cusumano, 2011b; Hagiu & Spulber, 2013; Seppälä et al., 2015).

When moving beyond the definitions and how to group and discuss different platforms it is essential to understand, what is the purpose for a platform's existence. Thus, the value creation is explained in each type accompanied by some differentiating factors or use cases in figure 5 enabling separating the terms from each other. However, as these five terms may be overlapping with each three concepts (1) e-marketplace, (2) software as a service (SaaS) and (3) social networking sites are further discussed separately below.

Figure 5, Platform models



Own creation (Lee et al. 2010; Hagiu & Spulber, 2013; Seppälä et al. 2015; Strowel and Vergote, 2016)

2.2.1 E-marketplace

The electronic marketplaces (e-marketplaces) literature is very consistent ultimately referring for online marketplaces where people can buy and sell goods and services (Standing et al., 2006; Lee et al., 2010; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016; Wan et al., 2017). Although

variations within terminology exist as some authors use the terms e-marketplaces (Eng, 2004; Scott & Scott, 2004; Standing et al., 2006; Tao, Chen & Chang, 2007; Thakur, 2019), e-commerce sites (Hagiu & Spulber, 2013), online markets (Strowel and Vergote, 2016), “electronic market, e-Market” (Standing et al., 2006) and more simply marketplace (Oliver, 1990; Evans & Schmalensee, 2010; Cusumano, 2011b; Hagiu, 2014). Yet, the concept itself seems to be well defined and well covered in platform literature within topics of platform leadership, two-sided and multisided platforms. This thesis adopts the term of e-marketplace as it is less ambiguous than its shorter version, marketplace, as the term can be used to describe both online and offline markets and has more historical package whereas the thesis only concerns itself with online marketplaces.

Brunn, Jensen and Skovgaard (2002) defined e-marketplaces “as interactive business communities providing a central market space where multiple companies can engage in B2B e-commerce and/or other e-business activities.” This was followed by Eng (2004) with a rather similar definition of an electronic marketplace (e-marketplace) to be “as a many-to-many, web-based trading and collaboration solution that enables companies to more efficiently buy, sell, and collaborate on a global scale” as well as to manage supply chain processes (Brunn, Jensen & Skovgaard, 2002; Eng, 2004). “The primary objectives are to streamline complex business processes and gain efficiencies. It is based on the notion of aggregating buyers and sellers in a single contact point to allow participant organizations to enjoy greater economies of scale and liquidity; and to buy or sell anything easily, quickly and cost effectively. E-marketplaces also enable companies to eliminate geographical barriers and expand globally to reap profits in new markets that were once out of reach.” (Eng, 2004) Standing et al. (2006) added that these markets take place “in cyberspace with a price-making mechanism such as catalog aggregators, auction, reverse auction, or exchange.” These markets can be further “categorized into three types; i.e. sell side e-Marketplace, buy side e-Marketplace, and 3rd party e-Marketplace.” (Standing et al., 2006) “E-marketplace can be further classified based on industry type into horizontal, vertical, and diagonal market. The major difference between horizontal and vertical markets is that a vertical market targets specific products and services ... while a horizontal market targets multi-industries” that cover a variety of different industries (Tao, Chen & Chang, 2007).

2.2.2 Software as a service (SaaS)

The current Software as a service (SaaS) focused literature is rather technical (Concha et al., 2010; Lee, Park & Lim, 2013), concerned of implementation (Concha et al., 2010; Shuying, Shuai & Sun, 2013) and or changing current information technology (Focacci et al., 2003; Bibi, Katsaros, & Bozanis, 2012), risks involved and cost analysis of potential alternatives (Bibi, Katsaros, &

Bozanis, 2012). These papers seem to share a common understanding of what SaaS is although the term often varies or stays undefined. For this paper a definition by Lee, Park and Lim (2013) is used “SaaS can be defined as applications and computer-based services delivered and managed from a remote center to multiple customers via the Internet or a VPN” They further explain that “The SaaS provider acts as a mediator, mediating services between independent software vendors (ISVs). SaaS customers do not possess, manage or maintain the applications, but only use them as final products by accessing services with IT support. While SaaS is advantageous in that it reduces the repair costs of application-based construction and maintenance, the risk of data leakage becomes a major disadvantage because application servers are constructed by outside companies.” (Lee, Park & Lim, 2013) Despite the risks of SaaS it is growing into a mainstream solution within software-based solutions for businesses (Focacci et al., 2003; Concha et al., 2010; Lee, Park & Lim, 2013) due to its convenience (Bibi, Katsaros, & Bozanis, 2012), cost-efficiency (Focacci et al., 2003; Bibi, Katsaros, & Bozanis, 2012; Shuying, Shuai & Sun, 2013) and speed (Focacci et al., 2003; Bibi, Katsaros, & Bozanis, 2012). For these reasons SaaS is optimal for complex and heavy enterprise investments “such as CRM, enterprise resource planning (ERP), social computing, and e-commerce” (Bibi, Katsaros, & Bozanis, 2012). Some of the well-known SaaS are services like Google Docs and Salesforce CRM (Bibi, Katsaros, & Bozanis, 2012).

2.2.3 Social networking sites (SNS)

Although social networking sites (SNS) have become a distinct part of today’s social encounters the area has been explored academically rather limitedly. Majority of the papers about SNS have a focused on marketing perspective for commercial usage (Ullman, 2012; Li, Liu & Li, 2014; Park, Jun & Lee, 2015; Ansari et al., 2018) or have a behavioral aspect often concerned on how these networks shape people (Kwon, Stefanone & Barnett, 2014; Lee, 2014; Lim & Choi, 2017; Pornsakulvanich, 2017; Yang & Robinson, 2018) instead of simply focusing on exploring and explaining SNS. However, based on these papers SNS play an important role when we build our own identities (Lee, 2014; Yang & Robinson, 2018), connect with others (Lee, 2014; Li, Liu & Li, 2014; Park, Jun & Lee, 2015; Ansari et al., 2018), expand our network (Pornsakulvanich, 2017; Ansari et al., 2018; Gao et al., 2018) and seek attention (Ansari et al., 2018; Gao et al., 2018). In addition, social media provides means for companies and brands to get attention, connect and engage with individuals, building brand knowledge (Ansari et al., 2018; Gao et al., 2018) and brand communities with desire to both deliver information and appeal for buyers’ emotions and values (Gao et al., 2018).

When it comes to literature, papers often leave the terms around SNS undefined or vague. Due to this and the fact that there isn't clear consistency among the terms used it seems that the terminology is to some extent still in formation. However, social networking sites (Bergman et al., 2011; Carpenter, 2012; Kwon, Li, Liu & Li, 2014; Stefanone & Barnett, 2014; Park, Jun & Lee, 2015; Pornsakulvanich, 2017) is by far the most common term, whereas social network sites (Ullman, 2012; Lee, 2014; Lim & Choi, 2017; Yang & Robinson, 2018) appear approximately every fifth time in comparison to it. Moreover, both terms have adopted the same abbreviation that leaves the impression that authors don't necessarily differentiate between them. While these two terms occupy the literature only few diverge from these being social media networks (Cusumano, 2011a; Liu et al., 2012), social network (Ansari et al., 2018), social networks (Hagiu & Spulber, 2013; Strowel and Vergote, 2016), social networking Web sites (Gawer & Cusumano, 2008) and social media (Gao et al., 2018).

Despite the differences in terms, it seems that authors do use these terms in alignment with great consistency referring for social network platforms, which enable people to interact with both things and one another by producing and browsing through content. (Pornsakulvanich, 2017). However, there is one exception with Ansari et al., (2018) that use the term of social network in unexpected and wider manner for explaining relation between people amongst acquaintances and others instead of referring towards SNS (Wasserman & Fraust, 1994; Newman & Park, 2003). For the purposes of this paper a term of SNS is adopted following Pornsakulvanich's (2017) definition SNS are "one of the most popular platforms for people around the world to connect, participate, communicate, and share their information and feelings. Social networking sites and applications such as Facebook, Instagram, and Line are online communities that allow members to build and broadcast their profile information and interact with others. These online social networks allow users to do various activities such as sharing photos, sending messages, and playing online games."

2.3 Platform strategies

This chapter presents some of the most important strategic contributions in the field. Starting by analyzing strategic variables utilized by key literature in the field in table 3. The table seeks to find consensus and to compile knowledge from the different papers. Thus, the most used variables have been nominated as (1) user acquisition, (2) stand-alone value, (3) credibility, (4) profitability, (5) design and (6) openness. Now using these variables is little problematic as these are by no means mutually exclusive groups, but rather heavily interlinked to one another. Yet, this aspect is the reason why understanding and deciding strategic decisions based on all variables odd to be key concern and interest of all platform business. Thus, they are explained below in details.

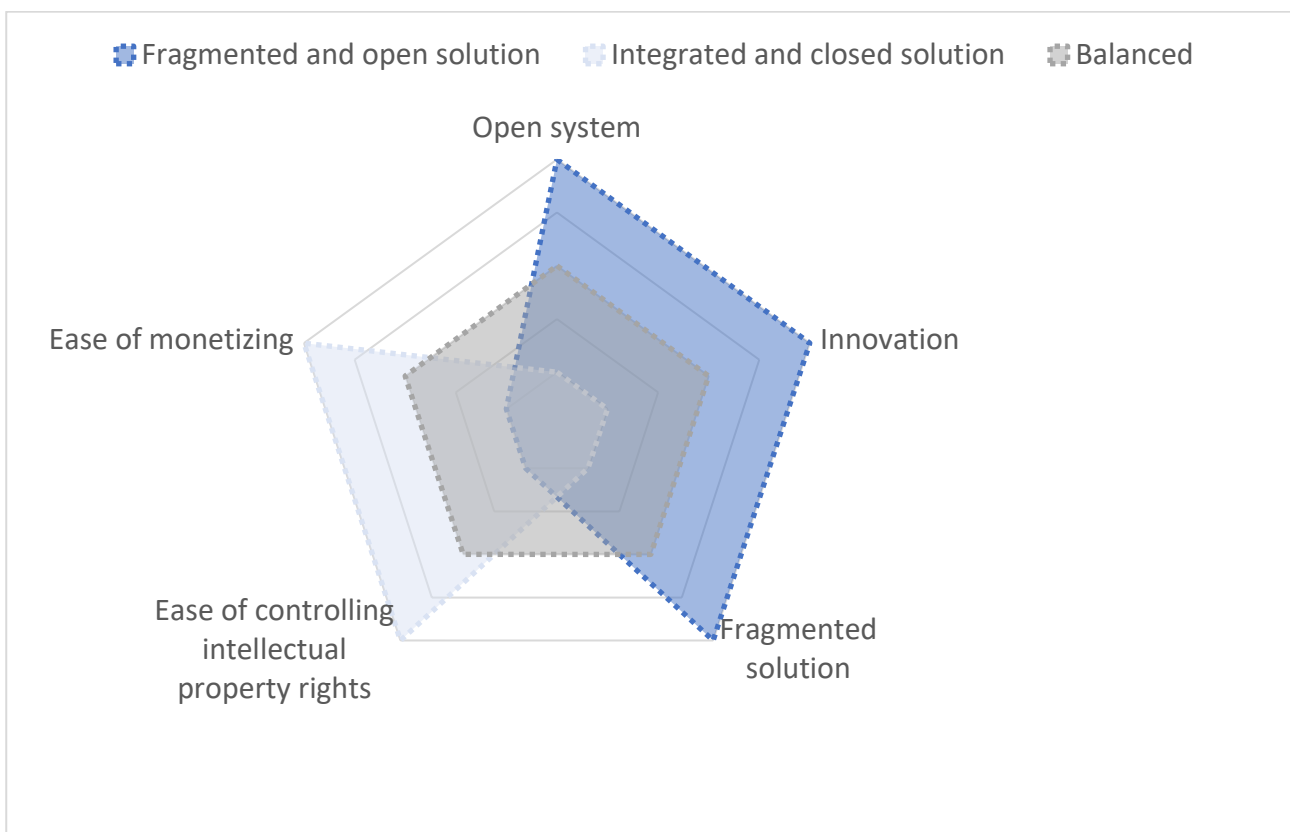
Table 3, Key variables when studying platform strategy

Study	User acquisition	Stand-alone value	Credibility	Profitability	Design	Openness
Brunn, Jensen & Skovgaard (2002)	Sign up few key players in the market who can bring volume to the e-marketplace.	Create as much value as possible and satisfying user experiences in order to keep them and not to switch to a rival substitute.	Be the dominant player and have the most transactions done on the market. Creating buzz in the market tends to be self-fulfilling for a success.	Maximize the conversion rate of the value into money flow and be profitable. The platform should adopt low prices for early customers and charge the party that benefits the most.	Create a value proposition that is compelling to target customers. Speed to the market over quality.	Have alliances with technology providers and key buyers and sellers.
Gawer & Cusumano (2002)	The amount of innovation the company does internally and how much it encourages outsiders to do.	The right internal structure can help platform producers manage external and internal conflicts of interest.	How collaborative or competitive they want relationships to be between platform producers and complementors.			How much modularity they want, how open their interfaces should be and how much information to disclose to outsiders.
Gawer & Cusumano (2008)		To allow new and even unintended end-uses.	An essential function that solves an essential technological problem within an industry.			Easy to connect to or to build upon to expand the system.
Lee et al. (2010)	Positive network effects, the more relevant people are involved the more value the platform offers for all the parties involved.	Innovation ability, the potential to create new value.	Efficiency, means that the platform can outperform the traditional way.		Connectivity, related to technical connectivity but also societal.	Complementarities, are additional products or services that expand the value perceived by the user.
Hagiu (2014)	The number of sides to bring on board to the platform.		Design and its ability to reduce search cost, transaction costs or product development costs.	Pricing structures suggest that platform should expect to offer the service for free or to subsidize it for at least one side and derive profits from the other side.		Governance rules especially directed towards third-party involvement in terms or how restricted or loose participating in the platform is.
Edelman (2015)	Ability to attract a large group of users at once.	Ability to offer stand-alone value.	Ability to build credibility with customers.	Ability to charge users.	Ability to be compatible with legacy systems.	
Parker, Van Alstyne and Choudhary (2016)	'Staging value creation' that enables value creation by one or more sets of users that will attract other users to join the platform.	'Designing the platform to attract one set of users' being the consumers or producers by providing tools, products or services for them and the other side will follow the first.	Rely on a proven infrastructure that attracts both sides of the market to engage simultaneously.			
Wan et al. (2017)	Differentiation is an alternative to pricing strategy that aims to provide a unique ecosystem attracting users to adopt it.	Design an envelopment strategy by operating in multiple platform-based markets simultaneously.	Vertical integration, platform owners should be cautious about moving into the spaces of their complementary products.	Pricing decisions greatly impact the size of customer bases, which are considered to be critical resources in network industries.		Platform openness refers to whether and to what degree an outsider needs permission from a platform owner to access or build on the platform.

Own creation

Like noted above on table 3, its variables are rather heavily interlinked. Although a platform would like to put their best efforts in building all these variables based on the best knowledge and implementing them in their platform, it isn't the recommendation. Rather, a platform should consider these variables as important decisions that have to be made consciously as these variables are heavily interlinked. Thus, weighting variables and decisions across multiple variables should be done simultaneously instead of individually by each variable. to give an example Eisenmann, Parker and Van Alstyne (2008) noted that openness and innovation factors are closely linked to decisions over how fragmented or integrated the solution is as well as how easy its monetization and controlling platform's intellectual property rights will be. Hence, the way these factors are interlinked is illustrated in figure 6. The authors emphasized that instead of having an open or closed platform, there are all kinds of variations that can be explored to find a suitable mixture between the two options. Similarly, the rest of variables have multiple balance points between the two extreme ones. (Eisenmann, Parker & Van Alstyne, 2008)

Figure 6, Five factors showcasing different platform models



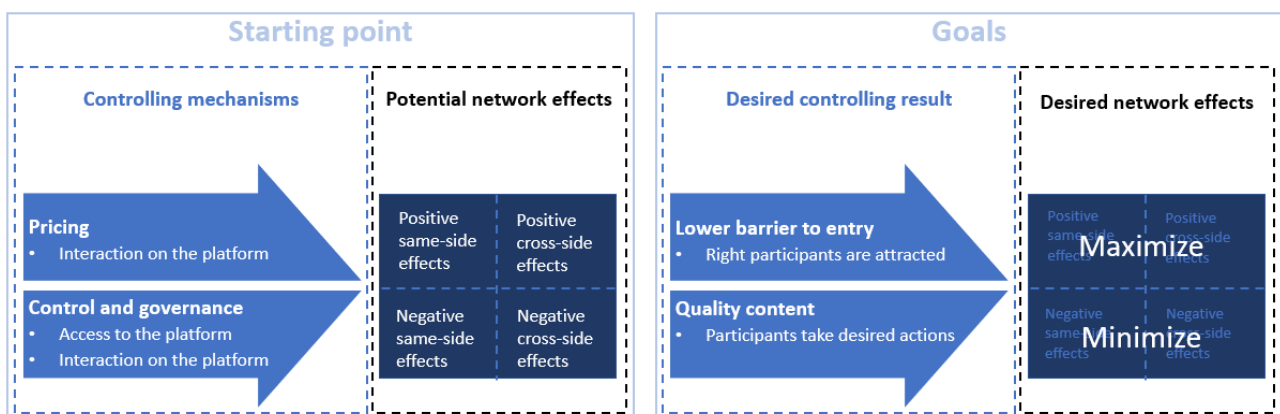
Own creation (Eisenmann, Parker & Van Alstyne, 2008; Parker, Van Alstyne & Choudary, 2016)

The three examples that are illustrated in figure 6 are a conceptual support to showcase some varieties among plausible combination while simplifying the equation. For instance, ease of

monetizing and controlling property rights go along best with a closed system, internal innovation and integrated solution. On opposite to this is an open, innovative, fragmented solution with more difficulty in monetizing it and controlling intellectual property rights. Instead of creating an equally balanced solution, it's good to focus on some areas. Depending on the execution of the platform a part of the solution might operate on different logic than others. It is also important to recall here that the restrictions based upon different user groups play a part. Meaning that what is open for internal developers isn't necessary open to third party developers nor to the different sides of the market. However, the more complex the distribution of boundary resources are or the variety of access points the more complex the business model becomes together with managing the platform. (Parker, Van Alstyne & Choudary, 2016)

Another pairing how these factors are interlinked is to look at user acquisition, profitability, design and openness as these are closely tied to positive and negative network effects as well as to platform's ability to scale. Since positive network effects enable companies to grow and gain benefits, they have developed different techniques to help them succeed in it, illustrated in figure 7. The influencing variables are here pricing, governance, control and shared boundary resources that seek to create positive network effects for the benefit of scaling the platform. Unlike the five interlinked variables above, here the interlinked decisions aren't as well understood. While low pricing lowers the entry barriers and might stimulate the positive network effect it is only true if right people are targeted. Similarly, while boundary resources might attract individuals to the platform, positive network effects are gained only if right people also take desired actions, that can be controlled via governance and other rewards.

Figure 7, Seeking positive network effects



Own creation (Gawer & Cusumano, 2014; Hagi, 2014; Tiwana, 2014; Seppälä et al., 2015; Zhu & Iansiti, 2019)

While finding a perfect balance between variables is important it doesn't yet secure platforms' success. Since all platforms need to find first some users before network effects can help them to scale. This part focuses on how to attract the first set of users to a platform, while it may be also utilized to gain additional growth. Succeeding to engage people and get them to join a new platform on its early days is one of the main strategic dilemmas of platforms. While all platforms may struggle with this, this dilemma is especially associated with e-marketplace platforms as their value creation is more heavily dependent on multiparty engagement that seems to be the most difficult to execute. This is what the literature calls a chicken-and-egg problem (Brunn, Jensen & Skovgaard, 2002; Evans & Schmalensee, 2010; Hagiu, 2014; Parker, Van Alstyne & Choudary, 2016). The dilemma derives from the platform's need to get early joiners, while no one wants to be the early bird joining the platform. Since the cost are higher in terms of time and resources invested to become a member, than what the value the platform can offer at the time. (Edelman, 2015) This is why many companies fail in their attempts to build an e-marketplaces (Evans & Schmalensee, 2010; Hagiu, 2014; Edelman, 2015). As a response to this problem authors like Brunn, Jensen and Skovgaard (2002), Edelman (2015) and Parker, Van Alstyne and Choudary (2016) have built strategies on how companies might attempt to avoid this dilemma. The following four suggestions can be applied to any platform seeking to engage new parties to join. However, these decisions on onboarding and attracting traffic should be further combined with supporting decisions on monetization, design, technological compatibility and business strategies to get ideal outcome (Edelman, 2015; Parker, Van Alstyne & Choudary, 2016).

The first solution is 1) to utilize existing platform where needed participants are already at (Edelman, 2015; Parker, Van Alstyne & Choudary, 2016). This could mean 1.1) that the needed parties are on the platform owner's existing marketplace (Parker, Van Alstyne & Choudary, 2016) or 1.2) that needed user data is publicly available or 1.3) that parties needed are in another platform, but these people can be attracted from the existing platform (Edelman, 2015) or 1.4) that a platform seeks to connect with another platform and become part of it to utilize its engaged parties (Parker, Van Alstyne & Choudary, 2016).

A Second suggestion is 2) to build value for a small set of users that others wish to connect, and the network will grow based on others' wishes to connect with the current userbase. This could refer to 2.1) people that are already engaging with one another. The difficulty is that users move to a new social network only if the new platform offers something remarkably different. As the value is built by social interactions the platform relies on the networks critical mass is even more important. This strategy benefits from dense physical area but doesn't require it if a single niche is well covered.

(Edelman, 2015; Parker, Van Alstyne & Choudary, 2016) Alternatively, the platform could 2.2) rely on key users that are believed to determine whether the platform will become successful in other user groups due to key users' participation. The incentive offered for these key users may vary between monetary reward to a social benefit or attractive partnership deal. These may include exclusive deals or secure compatibility. However, engaging in this strategy may become rather expensive depending on the deal made. (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016)

Third strategy is 3) to build a non-competitive ecosystem around the platform by 3.1) targeting producers that wish to drag their customers to the platform with them. These are players that have an incentive to boost the platform themselves in hopes to target their customers better. To succeed you need to be a trusted platform, protecting other parties' intellectual property rights and to have a compelling future vision to onboard producers. Alternatively, the focus could 3.2) evolve around products or services that benefit a single set of users forming an industry niche. Both strategies here might benefit from only charging the supplier once they gain value from the platform as this will lower their entry barrier. (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016)

Fourth alternative is 4) to trigger simultaneous on-boarding rapidly growing the userbase of the platform by using one or more traditional push marketing strategies. This is often done by marketing efforts in a specific event or location with a dense area of target group. (Parker, Van Alstyne & Choudary, 2016)

While the literature does identify some tactics that can help platform businesses direct their efforts and identify areas where to focus as well as what to consider, it doesn't connect these to specific platform types nor conclusive platform strategies. Similarly, the key strategic variables identified for platforms as *user acquisition*, *standalone value*, *credibility*, *profitability*, *design* and *openness*, stay disconnected in many areas to these tactics' describer. Moreover, the discussion around key strategic variables don't give clear guidance on how to implement or prioritize these variables according the platform type, but rather describe the optimal state after implementing these successfully. It is clear, that the current understanding of strategic differences and how to combine tactics towards each platform type is yet forming as well as how to classify and separate platform types from each other as majority of papers focus on a single platform type. Therefore, there is clear need for this study in the platform field to better understand *what strategies platforms apply as they go in business and how they attempt to grow?*

3. METHODOLOGY

This section lays out the methods used for studying platform strategies. It explains what, when, how and why the data was collected and analyzed to answer the research question set for this study, *what strategies platforms apply as they go in business and how they attempt to grow?*

3.1 Applied research method

The most relevant past studies in relation to the research question are listed in table 5. As seen, the predominant research method used in this subject matter is analyzing multi case studies. Although most of the work seems to rely on consulting work done for case companies, several papers have also utilized secondary data such as literature or public records by exploring company websites and annual reports. Since understanding of platform strategies is still developing acquiring new primary data should be for the benefit of the platform field. Hence, the methodology of this thesis follows qualitative research practice. The goal of this research is to build a theoretical framework that enhances the current understanding of the phenomenon (Eisenhardt, 1989; Eisenhardt, 1991; Fox-Wolfgramm, 1997; Woodside & Wilson, 2003). Thus, this thesis will follow the example set by the field by first acquiring knowledge from past papers discussing the topic prior moving to interview platform companies about their strategies applying in-depth multi case study structure. After analyzing 14 interview results, additional knowledge acquired by testing and using 70 platforms will be applied to the proposed theoretical framework by this thesis to validate and potentially improve the framework.

Table 4, Key contributing papers on platform strategy at launch

Study	Research problem	Data source	Platform type
Brunn, Jensen & Skovgaard (2002)	The most important, the least understood and the unique strategic issues inherent in the setup of the e-marketplace business model.	An in-depth case study of an e-marketplace	E-marketplace
Gawer & Cusumano (2002)	How to become a platform leader?	Multiple case studies	Platform leadership
Gawer & Cusumano (2008)	How companies become platform leaders?	6 in-depth case studies	Platform leadership
Lee et al. (2010)	To investigate the critical success factors of platform leadership in the web 2.0 based service business environment.	Multiple investigators examined 3 firms using secondary data	Platform leadership
Hagiu (2014)	What are some of the strategic issues that multisided platforms (MSPs) face?	Over 10 in-depth case studies	Multisided platforms
Edelman (2015)	How to launch a digital platform?	Multiple corporate cases	Digital platform
Parker, Van Alstyne & Choudary (2016)	How to launch a multisided platform business without running into a chicken-or-egg dilemma?	Multiple case studies	Multisided platforms
Wan et al. (2017)	To identify the essential tensions regarding platform strategies and analyze how to balance them within platform ecosystems.	Literature review of 109 papers published between 2000 and 2016	Multisided platforms

Own creation

3.2 Interview sample selection

The main reason why interviews were chosen as the primary source of data was because the secondary information available online or through research papers aren't necessarily extensive

enough, nor comparable. Given this, having an opportunity to hear firsthand experiences, decisions and views was extremely helpful in gaining better understanding of platform strategies. Moreover, the examples used in past literature would have been too limiting for this study. Moreover, some of the past literature rely on online resources, when the data set is very limited as very few platform companies openly disclose their business model including monetization models, financial status, learnings and driving forces to the public. Thus, collecting primary data and securing anonymity were essential to gain useful insights into platform strategies.

Since the primary data was obtained via case studies a random sample was ruled out to be inappropriate in a small sample. Instead, theoretical sampling was used to ensure that the sample size would contain enough both variety and similarities between the cases (Eisenhardt, 1989). To increasing similarity selected cases were businesses running established platform business operations. This was also the prerequisite to be eligible for the sample. The variables increasing variation were business model, business size, industry and maturity. To increase level playing field and feasibility all the interviewed people were Finns with companies that had a contact point to Finland. Moreover, the persons interviewed were targeted as capable persons to discuss the companies they represented from a platform perspective.

To identify appropriate organizations the researcher read through technology news, App Store application listings and blog post about platforms. The potential list of companies emerged through reading annual reports, organization's web pages, previous interviews and LinkedIn. A list of 31 platform companies and startups was made and additional list of 10 incumbents.

After the companies had been identified the second part was to identify best possible interviewees within the organization and to gain their contact detail. For this mainly CEOs, founders and other members of leadership were considered and contacted. These members were selected for their insights of the company, its strategy and operational choices. Founders and co-founders were prioritized in startups as they had the longest experience with the company and could provide wide perspective to the case study. For separate units within multinationals mainly CEO's were considered as they had the best perspective on how their operations linked to the multinational, how this ownership shaped the decision making and what the current direction was. It was understood that these people might lack the time perspective, as they might have been rather recently chosen for the position. For incumbents a different criterion was applied as there the heads of platform business units or operations were under different job titles. None of the incumbents applied similar titles for the heads of these operations or units and the people targeted had to be handpicked and identified separately that was more time consuming and difficult in comparison to startups and

separate units within multinationals. However, most of the people were Head of partnerships, innovation, ecosystem or digital strategy. It was understood that these people might lack the time perspective, as they might have been rather recently chosen for the position.

When doing the final changes to the list of appropriate interviewees access and feasibility were taken into consideration. Hence, potential organizations were limited to ones having operations in the capital region of Finland, with CEOs, founders and heads of the organization living or working in the capital region to be able to set up face to face meeting flexibly. Approximately one third of the contacted companies were personal acquaintances of the researcher, that might have led towards a more positive reaction from the interviewees since the interview acceptance rate was great as 20 organization were approached and 16 of them were open for an interview. Later the information gathered during this period was used as complementary information to confirm and specify company details.

3.3 Interview sample

The different variables to increase variation among the interviewed sample were business model, business size, industry and maturity. These were chosen based on the believe that these variables might influence the platform strategy adopted or shape it along the way. A more detailed description of the chosen case companies can be seen in Table 5. As maturity was one of the variables, both mature and infant businesses were included in the interviews. This was justified as mature businesses have experienced the most when it comes to business life cycle, but their memories might not be as vivid from the early stages. Moreover, the key personnel might have changed, and the experiences wouldn't be primary information. People that don't have firsthand experience can't describe what the company has gone through in such detail and accuracy that would provide best results. Thus, the study chose to select organizations from all life cycle stages. Admittedly, the sample is far from perfect in this respect as the maturity of businesses are in their growth stage and other areas were underrepresented. Taking this into consideration, it is possible that greater differences would arise between maturity if the sample had been different. This could have provided insights into how to grow a platform business and the strategies applied. Regardless, there are clear difficulties in trying to include more matured businesses. Many platform companies are rather new. If we seek knowledge from businesses beyond 20+ years, the answers might reflect more what used to be relevant in platform business or direct the sample more towards successful businesses. If the sample would focus on new startups it could mean that the business models studied here would be potentially too radical to become viable. Thus, a combination of different maturity levels among sample organizations were targeted.

Table 5, Background information of the case companies

BACKGROUND INFORMATION						
Code	Industry	Business type	Employees	Maturity	Operating years	Platform business
Case 1	Communications	Startup	1-10	Decline	>10	Main business
Case 2	Real Estate	Startup	1-10	Growth	<5	Main business
Case 3	Information Technology	Startup	11-50	Growth	<5	Main business
Case 4	Communications	Startup	1-10	Launch	5-10	Main business
Case 5	Healthcare	Startup	1-10	Early Growth	5-10	Main business
Case 6	Renting	Startup	11-50	Growth	5-10	Main business
Case 7	Payments	Unit of multinational	11-50	Growth	5-10	Main business
Case 8	Banking	Unit of multinational	>50	Growth	5-10	Main business
Case 9	Banking	Incumbent	>50	Mature	>10	Additional stream of business
Case 10	Retail	Unit of multinational	>50	Mature	5-10	Main business
Case 11	Conference	Incumbent	>50	Mature	>10	Additional stream of business
Case 12	Healthcare	Startup	1-10	Early Growth	<5	Main business
Case 13	Sales	Startup	11-50	Growth	<5	Main business
Case 14	Accounting	Startup	11-50	Growth	5-10	Main business

Own creation.

Business size and its format were considered in sample as platform, business units and incumbents might approach platform strategies differently based on the capital and resources at their disposal. Startups formed most of the sample. In many ways this was good as they can be reviewed as the most restricted form of platform business as they tend to have the least resources and capital at their disposal. Thus, the group gave good understanding of the MVP and strategic focus of each platform. Moreover, the platform strategies attempted by startups weren't as risky or capital intensive as the strategies attempted by multinational units or incumbents. This suggest that startups have tendency to be more careful and more committed than other forms explored in this study. These differences are simultaneously clear indicates why many incumbents rather acquire or partner up with platform startups than starting platform businesses themselves.

3.4 Interview sample gathering

14 interviews were conducted, 12 by face-to-face meetings and two via email. In the email interviews interview questions were send to the interviewees and they replied by sending a voice recording or written reply to the questions. The face-to-face meetings were the preferred choice as the researcher gained a better sense of the situation, when observing interviewee's body language and other non-linguistic signs of communication as well as being able to ask additional questions, clarifications and ensure shared understanding. Most of the interviews were extremely insightful, relaxed and good experiences. However, two of the interviews were clearly not as successful as the others. Since these responses lacked richness in detail and these two interviewees seemed reluctant

or uncomfortable in revealing company specific information beyond what had been previously published online.

All the interviewees were first contacted via private chat or email depending on the relationship between the researcher and the interviewee as personal contacts received a private message instead of slightly more formal email. Examples of these messages can be seen in Appendix 11. Potential interview times and places were later exchanged in these conversations. All the interviewees received the interview guide shown in Appendix 12 prior the interview. Most of the interviewees were met in their own office buildings and the interviews were held behind closed doors. Key terminologies were explained when needed in the context of the question if immediate response wasn't made or the interviewee seemed to hesitate at the question at hand. Most of the interviews included around five to ten clarifications about terms used. This illustrates potentially bad formation of the interview questions and or how confident the interviewees were with platform terminology or how relevant the concepts are in their work. Good and simple questions were at times difficult to form, without including specific platform terminology while avoiding leading questions thus explaining usage of explanations within the interviews.

All the interview material was gathered during November 2018. In total 12 interviews lasted together for 14 hours and 7 minutes. After each meeting the researcher wrote instant notes about the interview content, how it compared with other interviews, what interesting or unexpected insights had risen, what classifications might work for reviewing the data and any adjustments, that might improve the interview guide. The first three interviews shaped the interview guide as some topics became evidently more fruitful in terms of the interviewee contributions as well as enhancing the current knowledge of the topic. In the following interviews the priority was put on these topics. After each interview, interview guide was reviewed and refined few times changing wording, order of the questions or time spend on each topic. However, these changes were minimal and are little likely to interfere with the comparability of the data.

Since all interviewees were Finns together with the interviewer, the cultural and linguistic barriers were minimal in the interview setting. Although, most of the interviews were completed mainly in English. The reason why English was preferred was to mitigate potential flaws in translations that could have changed the meanings. Moreover, English recordings enabled machine pre-transcribed interviews that made the workload more manageable. However, all the interviewees had the possibility to choose Finnish as the interview language as well as to switch back and forth during the interview. This linguistic flexibility seemed to work well as the individuals were freely

describing their thoughts and experiences. Moreover, the interviewed group spoke rather fluently English, explaining only few parts in their native language. Thus, only few parts were translated.

The interviews were recorded with two separate devices, a phone and laptop in mitigation of losing interview data. Some of the recordings were little disturbed with background noise, but this was temporary problem and mainly resulted in slower transcribing proses but might have also affected interpretations of individual sentences when writing the interviews. One interview had few unclear parts that were later confirmed with the interviewee and adjusted accordingly. However, 12 recordings were mainly extremely clear and easy to transcribe and in the respect of the findings this couldn't have affected them. The interviews were uploaded to a program called Cielo24 at www.cielo24.com. The service machine transcribed the interviews. However, the transcriptions were only partially useful as the program wasn't very sophisticated and the interviews included a lot of pronunciation and grammar mistakes. The shortest face-to-face interview of 49 minutes took an additional 12 hours to transcribe and edit. An average transcribed interview was 10 pages long with around 5900 words in it when accounting for all the 14 interviews. The average of 12 face-to-face interviews were 14 pages long with around 7700 words in it. A more detailed information of the interviews can be seen from Table 7.

Table 6, Interview details of the case companies

INTERVIEW DETAILS				
Code	Interview date	Interview length	Interview method	Title of the interviewee
Case 1	11/15/2018	130min	Face-to-face meeting	CEO, Co-founder
Case 2	11/7/2018	53min	Face-to-face meeting	CEO, Co-founder
Case 3	11/8/2018	62min	Face-to-face meeting	COO, Co-founder, Chairman of the Board
Case 4	11/9/2018	70min	Face-to-face meeting	CEO, Co-founder
Case 5	11/12/2018	65min	Face-to-face meeting	CEO, Co-founder
Case 6	11/12/2018	82min	Face-to-face meeting	Co-founder, Chairman of the Board
Case 7	11/15/2018	74min	Face-to-face meeting	CEO
Case 8	11/5/2018	66min	Face-to-face meeting	CEO
Case 9	11/15/2018	49min	Face-to-face meeting	Head of Innovation
Case 10	11/16/2018	57min	Face-to-face meeting	CEO
Case 11	11/16/2018	92min	Face-to-face meeting	Head of Digital
Case 12	12/3/2018	25min	Email, voice recording	COO, Co-founder
Case 13	11/9/2018	non-applicable	Email, written reply	Lead Designer, Co-founder
Case 14	11/8/2018	57min	Face-to-face meeting	Group CEO, Co-founder, Member of the Board

Own creation.

3.5 Interview data analysis

Analyzing the data was a long and complicated process. The data was analyzed thematically multiple times. First by following the interview guide themes, then surprising insights from the interviews, then organizing along and against literature review. While trying to build the cases and orders of coding many less fruitful combinations were attempted before the final form of interpretation of data started to appear. As more interviews were done some of them emerged as more fruitful than others and at times more weight was given on them instead of mutual weight on all cases. One of the applied coding was done by applying a simplified B2B business model to give the data its structure. Later this structure evolved into two-layered theoretical framework representing the main coding of 14 interviews illustrated in figure 8.

Figure 8, Research sample and its link towards building the framework

Research sample										Findings			
Interviewing 14 platform	E-marketplace				Software as a Service				Social Networking Sites				Two-layered theoretical framework
	Consumer driven		Business driven		Independent users		Socially dependent users		Information driven		People driven		
	Case 2, Case 10		Case 3 B2C, Case 6, Case 11 marketplace, Case 13		Case 3 B2B side, Case 5 B2B side, Case 8, Case 12, Case 14		Case 4 B2B side, Case 7		Case 4 B2C, Case 5 B2C		Case 1		
Testing 70 platforms	Product offering	Service offering	Product offering	Service offering	Personalized offering	Standard offering	User's network	Any user	Primary data	Secondary data	Existing network	Expanding network	Improved three-layered theoretical framework
	Facebook Marketplace, Zadaa, Videdressing	AirBnB, Lyft, Uber	Amazon, Alibaba, Boozt, eBay, Etsy, Zalando	App Store, Expedia, Foodora, Groupon, HomeAway, Hotels.com, Momondo, Skyscanner, Trivago, Wolt	Chrome, HBO, Internet Explorer, Netflix, Safari	Adblock, Acrobat, Box, Creative Cloud, Dropbox, Illustrator, Office, PayPal, Photoshop, Yahoo!	Gmail, Outlook, SharePoint, Skype, Slack, Teams	Bitcoin, LinkedIn, Trustpilot	Flickr, Google+, Reddit, Tumblr, Twitter, Vivino YouTube	IMDB, Pinterest, WikiLeaks, Wikipedia	Facebook, Snapchat, Telegram, WeChat, WhatsApp	Couchsurfing, Happn, HappyPancake, Instagram, OkCupid, Plenty of Fish, Tinder	

Own creation.

3.6 Planning complementary sample gathering

Since there was one clear weakness in the interview sample as theoretical saturation wasn't gained for Social Networking Sites through the 14 case samples, a need for additional data was identified. The companies identified as potential interview case companies for the study couldn't close this knowledge gap as the companies left didn't fit the SNS type. Hence, new primary data gathering was planned. As the focus of understanding business model had been identified with the first

sample, this knowledge was utilized in choosing a different data gathering setup as more appropriate. When conducting the interviews, it became evident that comparing these cases towards each other would be difficult due to the subjective experiences described by the interviewees. Moreover, gaining detailed and precise comments was challenging as the platform topic was relatively little known amongst the interviewed people. Thus, interviews were ruled out as the most appropriate data gathering method for the new data collection. The past literature classifying and grouping platforms were solely reliant on researcher's judgement of the platform business model or understanding how it had evolved (Hagiu & Spulber, 2013; Parker, Van Alstyne & Choudary, 2016; Strowel & Vergote, 2016). Hence, the researcher decided to follow this method as well relying on own understanding of variety of platforms and their operating models to tap into more business cases of platform strategy.

3.7 Testing platforms as a complimentary research method

The selected method for new sample was based upon testing each platform's user experiences by testing consumer version or free trial of each product. Before selecting suitable platforms for the sample, the researcher used some secondary data to assess the platform's fit for the study. The secondary data utilized came from each platform's website, LinkedIn profile and App Store profile. At times the researcher utilized some additional sources of secondary information, these are specified in the tables 7-9.

While the focus of the new sample was to increase sample saturation with SNS, all the three platform types were kept in the scope of new primary data to see if deeper understanding could be gained. Simultaneously, the researcher aimed to address some additional weaknesses of the study by expanding the 1) cultural and geographical applicability of the sample by looking at the country of origin 2) the time horizon by looking at the initial release of the platform 3) the industry it operated in and the platform's more 4) targeted focus area within the field. As a result, 70 platforms were tested and analyzed according to the two-layered theoretical framework. The selected platforms for the testing and their background information is displayed in the following three tables 7,8 and 9.

The testing of each platform was performed minimum of 3 hours with an average testing being 193 hours. After the testing period the platform would be categorized according what value was offered and produced and how the user was able to tap into it and utilize it. This method would help the researcher to compare and classify platforms better from the same level playing field. As a result of this new sample gathering theoretical saturation was reached within all areas of the two-layered theoretical framework while confirming it to hold true. Moreover, settle differences were noted

among 70 platforms when they were grouped along the two-layered theoretical framework, thus forming a new third layer of differentiating factors among both the tested 70 platforms as well as previous 14 interviews confirming the new third layer as indicated in the analysis and findings chapter. Saturation was also reached within all 12 areas of this new improved three-layered theoretical framework. Simultaneously, improving the applicability of the model across industries, cultures and time horizon. Given this, the new improved three-layered theoretical framework seems to be accurate at least within the western world.

Table 7, E-marketplace information and testing

Platform	Owner	Industry	Focus	Release	Origin	Testing	Secondary source
Airbnb	Airbnb, Inc.	Lodging	Vacation rental online marketplace	2008	USA	<10 hours	(Parker, Van Alstyne & Choudary, 2016)
Alibaba	Alibaba Group	E-commerce	E-commerce, retail, Internet, and technology	1999	China	<10 hours	(Parker, Van Alstyne & Choudary, 2016)
Amazon	Amazon.com, Inc.	E-commerce	E-commerce, cloud computing, digital streaming, and artificial intelligence	1994	USA	<10 hours	(Parker, Van Alstyne & Choudary, 2016)
App Store	Apple Inc.	Digital distribution	A digital distribution platform	2008	USA	10-49 hours	(Parker, Van Alstyne & Choudary, 2016)
Boozt	Boozt	Online retailing	Fashion and lifestyle products	2007	Sweden	50-100 hours	
eBay	eBay Inc.	E-commerce	E-commerce	1995	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
Etsy	Etsy	E-commerce	Handmade, vintage and custom items	2005	USA	<10 hours	(Parker, Van Alstyne & Choudary, 2016)
Expedia	Expedia Group	Travelling service	Online travel shopping	1996	USA	10-49 hours	(Lang, 2015)
Foodora	Foodora	Food Delivery	Online food delivery	2014	Germany	<10 hours	
Groupon	Groupon Inc.	Online deal marketplace	Connecting subscribers with local merchants	2008	USA	<10 hours	
HomeAway	Expedia Group	Travelling service	A vacation rental marketplace	2004	USA	<10 hours	
Hotels.com	Expedia Group	Travelling accommodation service	Booking hotel rooms online	1991	USA	<10 hours	
Lyft	Lyft Inc.	Transportation	Ridesharing company	2012	USA	<10 hours	(Edelman, 2015)
Momondo	Booking Holdings Inc.	Travelling service	Travel fare aggregator	2006	Denmark	10-49 hours	
Skyscanner	Skyscanner Holdings	Travelling service	Travel agency and metasearch engine	2001	UK	10-49 hours	
Trivago	Expedia Group	Travelling service	Hotel, lodging and metasearch fields	2005	Germany	<10 hours	
Uber	Uber Technologies,	Transportation	Ride-hailing	2009	USA	<10 hours	(Parker, Van Alstyne & Choudary, 2016)
Videdressing	Leboncoin groupe	Reselling fashion	Fashion community	2009	France	10-49 hours	(Varza, 2012)
Wolt	Wolt Enterprises Oy	Food Delivery	Food-delivery platform	2014	Finland	<10 hours	(Kauppalehti, 2019)
Zadaa	Digital Fabric Oy	Reselling fashion	Helps people to buy and sell quality clothes	2015	Finland	>100 hours	(Kauppalehti, 2015)
Zalando	Zalando SE	Online retailing	Fashion and lifestyle products	2008	Germany	50-100 hours	

Own creation.

Table 8, SaaS information and testing

Platform	Owner	Industry	Focus	Release	Origin	Testing	Secondary source
Acrobat	Adobe Inc.	Computer software	A PDF tool	1993	USA	>100 hours	(Jeday and Adobe Systems Inc., 1993; Parker, Van Alstyne & Choudary, 2016)
Adblock	Eyeo GmbH	Internet	Browser extension for content-filtering and ad blocking	2006	Germany	<10 hours	
Bitcoin	Bitcoin Inc.	Payment solution	Electronic cash	2009	Japan	<10 hours	(Parker, Van Alstyne & Choudary, 2016; Bernard, 2018)
Box	Box	Cloud storage	Cloud content management	2005	USA	10-49 hours	(Mazarakis and Shontell, 2017)
Chrome	Google LLC	Internet	Web browser	2008	USA	>100 hours	
Creative Cloud	Adobe Inc.	Computer software	Creative services	2011	USA	<10 hours	(Parker, Van Alstyne & Choudary, 2016; Smith, 2020)
Dropbox	Dropbox, Inc.	Online backup service	Smart workspace	2008	USA	50-100 hours	(Gannes, 2009; Parker, Van Alstyne & Choudary, 2016)
Drive	Google LLC	Cloud computing	File hosting service	2012	USA	>100 hours	
Gmail	Google LLC	Webmail	Email service	2004	USA	>100 hours	
HBO	WarnerMedia Entertainment	Entertainment	Pay television network	1972	USA	>100 hours	
Illustrator	Adobe Inc.	Computer software	A vector graphics editor	1987	USA	50-100 hours	(Adobe Creative Cloud, 2014; Parker, Van Alstyne & Choudary, 2016)
Internet Explorer	Microsoft Corporation	Internet	Web browser	1995	USA	>100 hours	
LinkedIn	Microsoft Corporation	Internet	Employment-oriented online service	2002	USA	>100 hours	
Netflix	Netflix Inc.	Tech & Entertainment	Streaming media and video on demand	1997	USA	>100 hours	
Office	Microsoft Corporation	Software development	Computer tools	1990	USA	>100 hours	(Microsoft, 1990)
Outlook	Microsoft Corporation	Software development	A personal information manager	2006	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
PayPal	PayPal Holdings, Inc.	Financial services	Online payments system	1998	USA	<10 hours	
Photoshop	Adobe Inc.	Computer software	Graphics editor	1988	USA	10-49 hours	(Parker, Van Alstyne & Choudary, 2016; Shustek, 2019)
Safari	Apple Inc.	Internet	Web browser	2003	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
SharePoint	Microsoft Corporation	Software development	Document management and storage system	2001	USA	>100 hours	(Pilothouse Consulting, 2018)
Skype	Microsoft Corporation	Software development	Videoconferencing tool	2003	Sweden	>100 hours	(BBC NEWS, 2005; Parker, Van Alstyne & Choudary, 2016)
Slack	Slack Technologies, Inc.	Internet	Business communication platform	2013	USA	10-49 hours	
Spotify	Spotify Technology S.A.	Internet content and information	Music streaming	2006	Sweden	>100 hours	(Yahoo! Finance, 2019)
Teams	Microsoft Corporation	Software development	Chat-based workspace	2017	USA	>100 hours	(Microsoft, 2017)
Trustpilot	Trustpilot Inc.	Internet	Consumer review website	2007	Denmark	<10 hours	
Yahoo!	Verizon Media	Media	A Web portal, search engine	1994	USA	10-49 hours	(Parker, Van Alstyne & Choudary, 2016)

Own creation.

Table 9, SNS information and testing

Platform	Owner	Industry	Focus	Release	Origin	Testing	Secondary source
CouchSurfing	Couchsurfing International Inc.	Internet	Homestay and social networking service	2003	USA	10-49 hours	(New Hampshire Department of State, 2010)
Facebook	Facebook Inc.	Social media	Social networking service	2004	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
Flickr	SmugMug, Inc.	Social media	Hosting high resolution photos	2004	Canada	<10 hours	
Google+	Google LLC	Social media	Social networking service	2011	USA	<10 hours	
Happn	Happn	Internet	Geo-localized and real time dating app	2014	France	>100 hours	(LinkedIn, 2019a)
HappyPancake	HappyPancake	Internet	Online dating service	2007	Sweden	<10 hours	(LinkedIn, 2019b)
IMDB	Amazon.com, Inc.	Internet	Online database for movies, television and video games	1990	UK	50-100 hours	(Chmielewski, 2013)
Instagram	Facebook Inc.	Social media	Photo and video sharing social networking service	2010	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
OkCupid	Match Group, Inc.	Internet	Online dating service	2004	USA	10-49 hours	
Pinterest	Pinterest Inc.	Internet	Image sharing and social media service	2009	USA	>100 hours	
Plenty of Fish	Match Group, Inc.	Internet	Online dating service	2003	Canada	<10 hours	
Reddit	Advance Publications	Mass media	Social news aggregation	2005	USA	<10 hours	
Snapchat	Snap Inc.	Social media	Person-to-person photo sharing	2011	USA	50-100 hours	
Telegram	Telegram	Software	A cloud-based instant messaging and voice over IP service	2013	Russia	10-49 hours	
Tinder	Match Group, Inc.	Internet	Geosocial networking and online dating application	2012	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
Tumblr	Automattic Inc.	Internet	Microblogging, social networking service	2007	USA	<10 hours	
Twitter	Twitter Inc.	Internet	Microblogging and social networking	2006	USA	50-100 hours	(Parker, Van Alstyne & Choudary, 2016)
WeChat	Tencent Holdings Ltd.	Instant messaging	Instant messaging client	2011	China	50-100 hours	(Parker, Van Alstyne & Choudary, 2016)
WhatsApp	Facebook Inc.	Internet	Cross-platform messaging and Voice over IP	2009	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
WikiLeaks	Sunshine Press	Online media	Publishes news leaks and classified media provided by anonymous sources	2006	Iceland	<10 hours	(Al Jazeera, 2010)
Wikipedia	Wikimedia Foundation	Internet	Online encyclopedia	2001	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)
Vivino	Vivino	Internet	Online wine marketplace and wine app	2010	Denmark	50-100 hours	
YouTube	Google LLC	Internet	Online video-sharing platform	2005	USA	>100 hours	(Parker, Van Alstyne & Choudary, 2016)

Own creation.

4. ANALYSIS AND FINDINGS

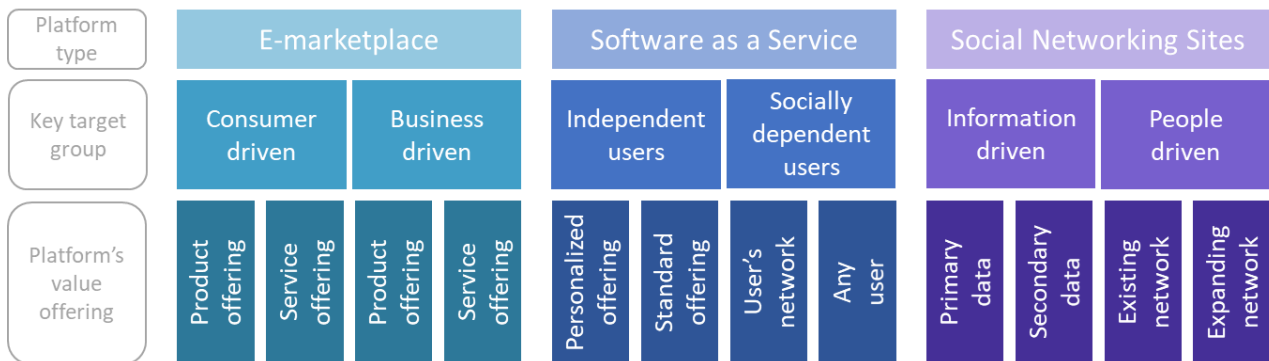
This section presents findings regarding research question set for this study: *what strategies platforms apply as they go in business and how they attempt to grow?* The findings are heavily based on the interviews involving 14 representatives all from different companies. This data set has been accompanied by additional analysis of other well-known platform companies to test the model presented. Thus, this thesis proposes a theoretical framework to be applied when discussing platform strategies as illustrated in figure 9. While figure 9 captures the essence of the framework it is further elaborated in more details throughout the chapter of findings and analysis.

4.1 Theoretical framework

The theoretical framework introduced here, represents the key finding of the thesis describing what platform strategies companies use and how those can be clustered and separated from each other. The more detailed discussion of the different strategies and factors linked to each platform type are elaborated more in the following three chapters while the focus here is kept on introducing the framework on a higher level. Thus answering 1) what strategies platforms use in the launch and 2) what strategies platforms use when growing.

Based on the analysis it is clear, that platform businesses do follow different strategies across their life cycle based on the platform type, their key target group as well as platform's value offering. Based on the cases, there seem to be at least three mutually exclusive strategic focus areas platforms could utilize for their benefit when launching and growing their business and becoming e-marketplace, software as a service or social networking site type platform. These platform types build their business models around six different distinguishable strategies that are 1) consumer driven e-marketplace, 2) business driven e-marketplace 3) independent software as a service users 4) socially dependent software as a service users 5) information driven social networking site and 6) people driven social networking site. These categories are illustrated in figure 9.

Figure 9, Platform business strategies divided into three main categories and 12 subcategories



Own creation.

However, when moving beyond the interview analysis a more precise and profound strategy grouping was found, building yet another layer of depth to the analysis. This offers 12 unique platform strategies, based on the value offered by the minimum viable product (MVP) towards the platform's key target group within three separate platform types. While e-marketplace platforms form their value closely tied to service or product offering and optimizing that, the other platform types have more nuanced value offering.

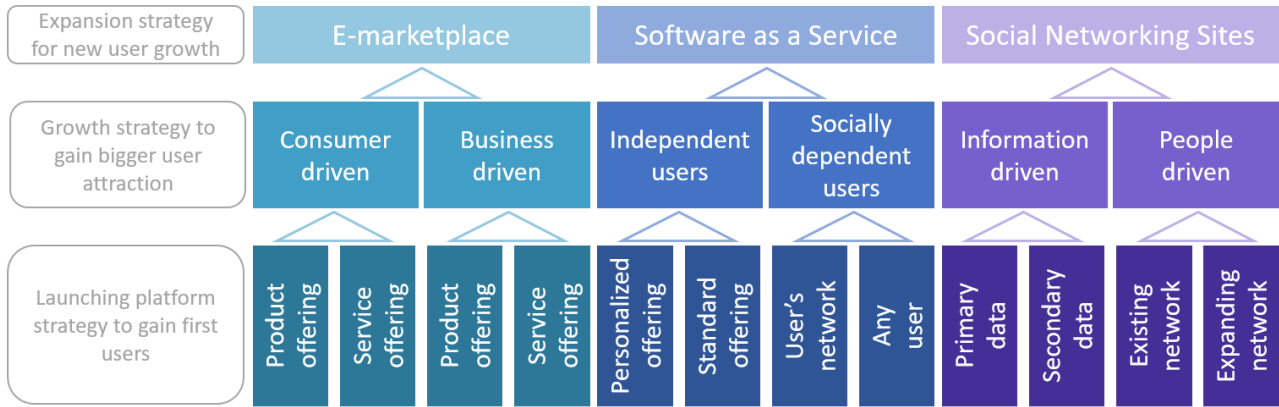
Independent software as a service -users are catered value through standard or personalized offering. The latter might learn user preferences during its use or have different setups to adjust it according the need or the company might make the alterations for the individual while standard offering is the same for all. Socially dependent software as a service -users gain value by being connected to their personal social network or by being connected to any other users of the SaaS.

Information driven social networking site creates value by creating primary data on its own, allowing its users to publish and produce content. Alternatively, the value is created by gathering secondary data in useful and helpful set up that serves platform users' needs. People driven social networking site can provide value by connecting its users more efficiently with their existing social networks or by helping them to expand their social networks with new connections.

Once the platform moves beyond building a minimum viable product and realizing more of its potential it expands its value proposition, often moving beyond its original key target group when seeking to scale. Thus, the platform's strategic scope becomes wider. As the platforms move to bigger scope, they tend to expand horizontally focusing on the same value offering or vertically to expand how they create value. Simultaneously platforms' need to consider do they need to drive engagement level with existing participants or to target new participants to engage with or both. Vertical expansion often means product and or service family, referred here as an offer family, having a variety of one or the other of both available to the customer. When this is the case a platform expands its value creation from 1/12 strategic areas into 2/12 strategic areas when seeking to engage more with old users as well as target new additional users to its platform as illustrated in figure 10. Hence representing one of the six platform strategies found based on the interviewed companies. Meaning gradual expansion of the initial strategy that the platform started with while being in line with the original one. Thus, the platform is able to offer more coherent value produced for the user and a set products or services that are tightly in lined with one another further producing positive network effects and hedging against current or potential competition by seeking to secure customers satisfaction with the platform. Although the company can expand its platform towards

any area expanding gradually tends to be less risky, more cost efficient and easiest to accomplish given the resources at the platform company's disposal.

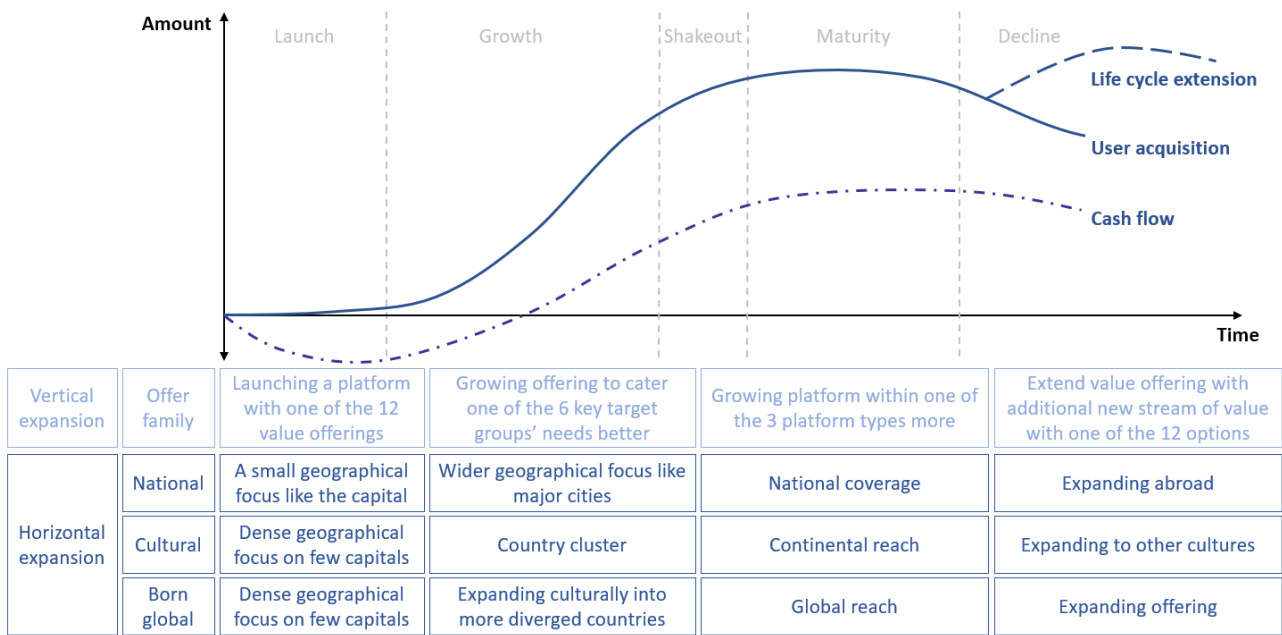
Figure 10, Vertical expansion towards an offer family



Own creation.

As the company matures more and has been able to acquire more resources it might move on to the third state, seeking new growth by expansion as shown in figure 11. Here the company might seek to build a wider offer family by applying internal and external means. Partners and third parties can be very beneficial in expanding the offering without needing much more resources, capital or additional risk. However, as discussed in literature review these do challenge the company with other means and successful expansion with external parties is by no means easy. Despite this, network clustering and bridging might be worth the trouble as they can help the company towards a natural monopoly that is ultimately the goal for most platforms as it is most secure and profitable spot within the extremely competitive and difficult landscape as noted by Zhu and lansiti (2019) and Wan et al. (2017). While platforms mature and might seek new growth against their decline, they tend to stick with one of the six key target group covering 2/12 value offering areas. Even then, they rarely expand successfully outside their strategic umbrella being an e-marketplace, software as a service or social networking sites strategy, but stay within the limit of 4/12 value offerings.

Figure 11, Horizontal expansion as an alternative to vertical expansion strategy



Own creation altered from Finance Institute (n.d.)

Horizontal expansion tends to be more concerned with gaining new participants to the platform than vertically oriented ones that might have more room to engage existing participants to greater extent and capture new value there. This is true as horizontally expanding platforms seek to find new venues to gain added value from their current offering without expanding or changing it. Thus, they need to serve more users or customers via their platform. Meaning that platforms can grow their business also without expanding the offering as they can expand their own market. Market expansion can be done through many means as figure 11 illustrates three different plans for horizontal expansion focusing on single offer versus vertical expansion explained above. What the three horizontal expansion alternatives have in common is that they grow by acquiring more users whereas growing the offer family might just as easily mean growing the value served to the end-user often translating to more engagements within the platform or more cash flow for the provider. Now obviously none of these things are exclusive. Companies can provide more value, increase their profits and expand both the time users spend on their platform and the number of users. While this thesis offers 12 vertical and three horizontal expansion strategies, platforms should always consider what gives them the best opportunity for growth prior making these decisions.

4.2 E-marketplace

The findings presented here in figures 12 and 13 rely heavily on the interviews of four organizations: Case 2, Case 6, Case 10 and Case 13. However, additional support is provided by some famous companies that also follow the described e-marketplace strategy: Airbnb, Alibaba,

Amazon, App Store, Boozt, eBay, Etsy, Expedia, Foodora, Groupon, HomeAway, Hotels.com, Lyft, Momondo, Skyscanner, Trivago, Uber, Videdressing, Wolt, Zadaa and Zalando.

4.2.1 Offering

The key differentiating feature between e-marketplace platforms and other platforms types is its focus on connecting supply and demand in an efficient way to make discovering, finding, comparing and trading both physical goods and services as simple and enjoyable as possible as illustrated in figure 12. Thus, these companies emphasize succeeding to reinforce positive network effects and connectivity as means to bring the different parties together.

Figure 12, E-marketplace platform business strategies

E-marketplace		
Offering	Client and user	Monetization model
<ul style="list-style-type: none"> • Focus on discovering, finding and trading a physical product or service • Supply and demand meeting efficiently • Building trust between strangers: reviews, stars, authentication • Payment systems • Special deals • Rules and guidelines on usage, IPR and division of capital gain • Clear service logic and readily provided tools • Search engine optimization 	<ul style="list-style-type: none"> • Focus on both B2C and B2B • Multisided market • Attracting masses • National vs global target market • Loyalty towards the provider or fans might be difficult to establish • Delivering products and services ties marketplace into geographical areas • Expanding from city to city or nation to nation • Supporting multiple languages 	<ul style="list-style-type: none"> • Subsidizing involvement • Payment by purchase • Transparent costs • Platform operator fee in lump sum or % of sales • Platform entry fee for suppliers to enter the platform • Free for B2C • Requires heavy investments prior proven business concept • Capital intense business model • Late braking even, requires patient risky investors • Potential for natural monopoly
Famous examples		
Airbnb, Alibaba, Amazon, App Store, Boozt, eBay, Etsy, Expedia, Foodora, Groupon, HomeAway, Hotels.com, Lyft, Momondo, Skyscanner, Trivago, Uber, Videdressing, Wolt, Zadaa, Zalando		
Interview examples		
Case 2, Case 3 B2C, Case 6, Case 10, Case 11 marketplace, Case 13		

Own creation.

Depending on the offering, e-marketplaces can be further divided into consumer or business driven models. These platforms seek to provide efficient way to find and search through multiple options by enhancing browsing experience through search engine optimization to offer faster, easier and more accurate results. Therefore, user experience is emphasized when designing and developing the e-marketplace. Moreover, as the e-marketplace grows the platform is likely to establish stricter rules and guidelines to promote trust and level of quality. Both the driving force of the e-marketplace as

well as the search engine optimization come together when designing the user experience. The platform owner tends to consider the entire journey from searching to purchasing and to delivering and follow-up. Completing this journey will give insight on how the experience is perceived and how it could be enhanced still. However, the key value this thesis offers for understanding further e-marketplace concept is in its internal focus points and strategies dividing e-marketplaces to consumer and business driven ones explained in figure 13 and the following two chapters.

Figure 13, E-marketplace division between consumer and business driven platforms

E-marketplace			
The initial driving force of the platform			
Consumer driven		Business driven	
<ul style="list-style-type: none"> • Consumers drive the growth of the platform • B2C attracts B2B side to engage • MVP evolves around exchanging simple goods and services that almost anyone can offer 		<ul style="list-style-type: none"> • Businesses drive the growth of the platform • B2B attracts B2C side to engage • MVP evolves around offering specialized goods that only professionals or semi-professionals can offer • Goods and services engaged require prior investing 	
Product offering	Service offering	Product offering	Service offering
Focus on product based offerings. Are loosely tied to a geographical location	Focus on service based offerings. Are closely tied to a geographical location	Focus on product based offerings. Are loosely tied to a geographical location	Focus on service based offerings. Might be closely tied to a geographical location
Famous examples			
Facebook Marketplace, Videdressing, Zadaa	AirBnB, Lyft, Uber	Amazon, Alibaba, Boozt, eBay, Etsy, Zalando	App Store, Expedia, Foodora, Groupon, HomeAway, Hotels.com, Momondo, Skyscanner, Trivago, Wolt
Interview examples			
Case 2, Case 10			Case 3 B2C, Case 6, Case 11 marketplace, Case 13

Own creation.

4.2.1.1 Consumer driven e-marketplace

The consumer driven e-marketplaces tend to enable exchange between consumers. Meaning that exchanged goods and services are easily delivered, the ownership can change, providing these services and products don't require a lot of rare knowledge and engagement in this market isn't capital intensive. Thus, the market is easily reachable by many consumers and able to tap into their

offerings. While these markets start from the B2C side, they can later attract also B2B side to offer alternative services or products for the existing users. However, this development is linked to growing the market and it isn't linked to the MVP of the e-marketplace. Examples of B2C side MVP services are carpooling, renting an apartment or selling used goods. One of the keys in attracting masses is embedded in the fact that anyone can benefit and become part of the exchange as supplying or receiving these goods don't seem to acquire a specialization and can be offered by most of the population. The early adopters tend to be consumers and small business owners that might use the e-marketplace as alternative sales channel for their offering. Some of the e-marketplaces that have used this operating model are businesses like AirBnB, Facebook Marketplace, Zadaa, Videdressing and case examples of Case 2 and Case 10. The consumer-driven market might be able to use social networks for their benefit as they may offer incentives for individuals to attract their own networks to join as well. Zadaa has done this via subsidizing. They gave free credits for users who were able to attract new users to use their platform and gave simultaneous discount to the new joiner in free credits. This way they stimulated both usage and gaining new attraction to the platform.

Case 2 is an example of consumer-driven e-marketplace. It has been able to successfully gain market share and attract sellers to their e-marketplace by utilizing existing channels to access buyers. Their sales items are further posted to existing and competing online aggregator websites, that compile data on offered items. Thus, the company don't need to attract demand on their own but can focus on attracting suppliers. While the potential buyer might find the product from a third-party website it has been posted on, the sale happens on the company's website, that the customer has been redirected to. The company attracts new suppliers via friend referrals, Facebook, Google and other paid adds like the once on TV and busses. This is essential as new suppliers are key to their business model as they are in business with little reoccurrence.

4.2.1.2 Business driven e-marketplace

The business-driven e-marketplace tends to provide an alternative sales channel for the companies involved to better reach their customers. The rationale is same as for brick and mortar stores that locate themselves in close distance from their competitors to enable convenient comparison for potential buyers of the competing offerings and prices in shopping centers and industrial areas etc. Similarly, consumers are drawn to business-driven e-marketplaces as they have a need they wish to be fulfilled with as good, conveniently and effortlessly as possible. As the offerings are mainly served by businesses, they tend to be more sophisticated, specialized or complex goods requiring specialization in the industry and front investments for being able to offer the good or service. This explains why they are almost solely offered by B2B providers. Examples could be made from multiple industries like aviation, hotels, beauty services or fine dining provided by companies like

Amazon, Skyscanner, Momondo, Expedia and Groupon as well as case examples of Case 13, Case 3, Case 6 and Case 11.

The business-driven market might be able to draw data from other providers within the field and aggregate it in a meaningful way that creates value for the consumer. This can mean that the e-marketplace appears to have a lot of suppliers when in fact they are operating as a middleman only showing offerings from other webstores making orders or redirecting clients in case of a purchase is made. This kind of model may be applied before the e-marketplace gains the actual interest and attention of the suppliers. When done well these platforms might grow fast, however there is a real risk of gaining bad reputation if done poorly. Ottega is one of many cases where the company has received negative reputation for operating in this way. They offer cheap jewelry products originally sold in Alibaba and other webstores. However, the real reason for dissatisfied clients might be behind insufficient communication, little transparency of the operations and pricing as well as difficulties in delivering the goods fast and reliably. Case 6 is a company, that started by attracting B2B side before moving to B2C. Their business model is shortly explained below.

Case 6 is an example of business-driven e-marketplace. It is a company that is based upon discovering new things on a niche area. Hence, their target audience covers everyone within the niche and doesn't separate between B2B and B2C sides. Due to the limited offering, their key customers are small players with little reoccurrence making new customer essential for survival in their selected business model. While the company focuses on dense areas like cities, they are keen to cover all areas viable for business.

4.2.1.3 Balanced e-marketplace

While e-marketplaces tend to cater both B2B and B2C user groups. The business might start as a consumer- or business-driven e-marketplace but grow overtime to become a more balanced e-marketplace, where it's harder to differentiate the original focus. Meaning, that the supplier side is compiled of both B2B and B2C users as might the demand side be a mixture of consumer and businesses. Some of the companies, that are currently more balanced e-marketplaces are Amazon, Alibaba, eBay, AirBnB and case examples of Case 6 and Case 10. However, if the e-marketplace attempts to cater a balanced e-marketplace from the day one, it is more complicated and often require heavy subsidizing on both sides to succeed as Edelman (2015) described earlier with a Lyft case.

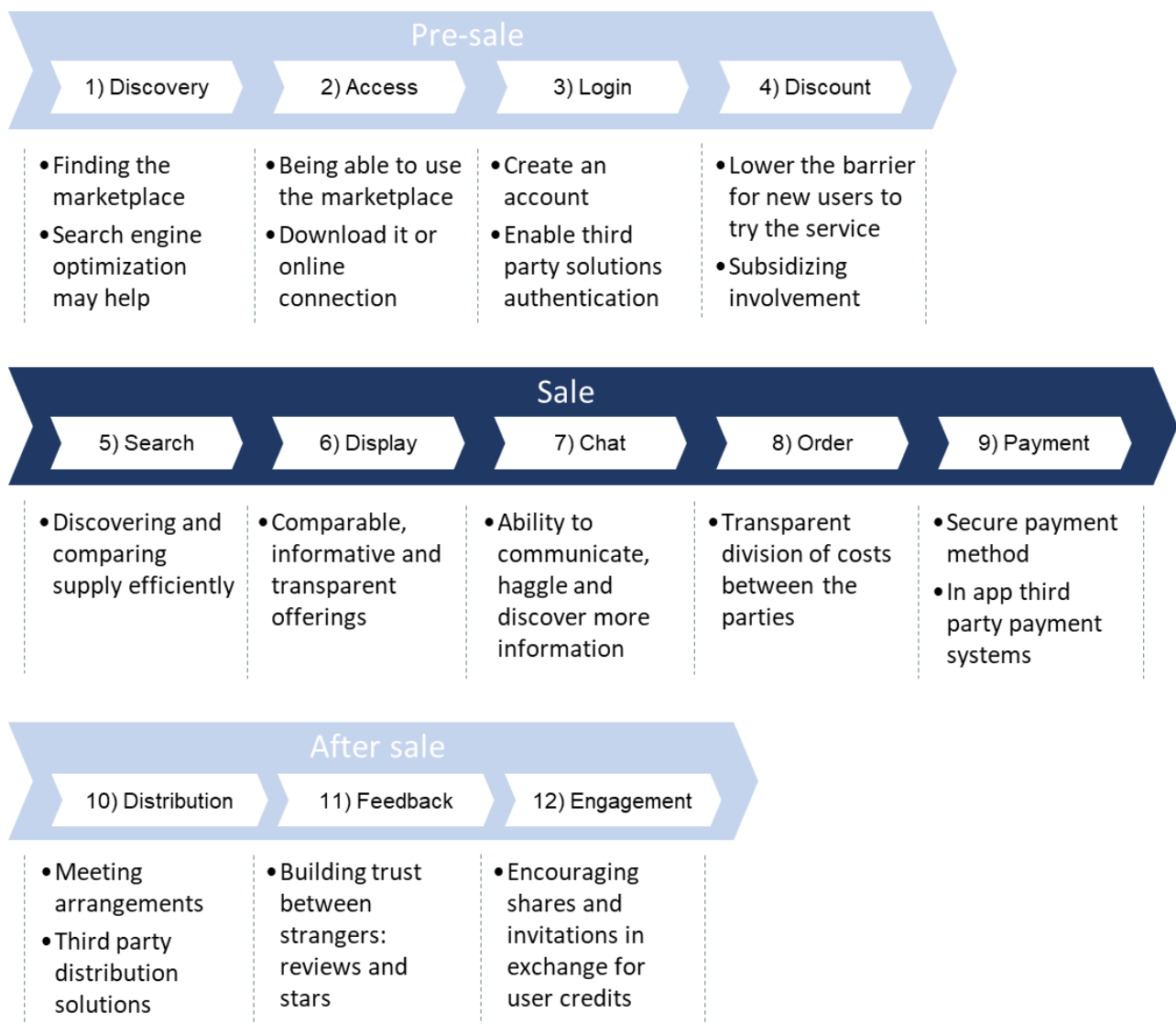
The more balanced between multiple parties an e-marketplace is, the more difficult balancing interest between groups become. If the platform has only one key target group, the decision making is simpler as there are no colliding interests among target groups. Also, multiple sides don't need to be equally satisfied to sustain an e-marketplace. Whereas a balanced e-marketplace should always

aim for a win-win solution, benefiting all parties equally. Thus, succeeding in a balanced e-marketplace platform strategy requires extreme insight into different parties' preferences and needs as the platform evolves. Balancing between decisions on which side of the market will be served better when developing or resolving incidents and understanding which party can be compromised more on each occasion is an essential skill for an e-marketplace provider. While solving a single decision a platform owner should have clear focus on the holistic outcome by creating value for all sides to sustain all parties interest to stay on a balanced e-marketplace strategy.

4.2.1.4 Orchestrating sales through e-marketplaces

Building a great user experience includes multiple steps. Within e-marketplaces these can be divided between pre-sale, sale and after sale activities. Pre-sales include 1) discovery, 2) access, 3) login and 4) discount. Sales include 5) search, 6) display, 7) chat, 8) order and 9) payment. Lastly, after sales include 10) distribution, 11) feedback and 12) engagement. These 12 steps serve a specific function that aims to optimize the usage and user experience of the e-marketplace while encouraging its usage. Companies may use only some of the steps along the process or even change the order. However, these are rather usual steps, displayed in a common order of engaging experience. These steps are further discussed below as well as illustrated within figure 14.

Figure 14, E-marketplace user experiences



Own creation.

Pre-sale starts with 1) discovery, that refers for users need to be aware of the service. To enhance the awareness the company may invest into search engine optimization (SEO) that will increase its visibility when searching through the topic on a search engine with a browser like Explorer, Chrome, Firefox and Safari. This will help the service gain new visitors that might convert into users. Then users need to be able to 2) access it easily. Meaning enabling convenient usage via virtual application, online service, access by downloading the service or similar fast and remote access to the platform. Easy access may improve the conversion of new visitors towards users just like difficulty in accessing the service is likely to hinder usage. Many of the providers have noted the importance of focusing on mobile experience as smartphone application usage might be more convenient or desirable for some service types. Due to this development some e-marketplace

providers start from building the mobile version and may expand the usage later towards desktop experience while the traditional way has been the opposite. The provider needs to ensure the users will start using the service after accessing it. Some decide not to require immediate 3) login and creating an account, as they want to lower the barrier for new users to join and see first if the service provides enough value for them to create an account. Some have chosen to enable third party identification through Facebook, Google or similar to make joining the service faster, potentially more appealing and removing the need to create a new profile. As part of the login and creating an account many e-marketplaces enable connecting the account to a 4) discount code. The platform might suggest inviting friends to join the e-marketplace in exchange for discount for both the user and new joiner or for one of them. These discounts are made to encourage new users to try the service for free or with a discount.

All e-marketplaces need an effective 5) search engine, filters or groups to scroll through the offering. Building this is both extremely difficult and demanding but also a major part of the value offered by the e-marketplace. Most companies seem to use a combination of filters and or groups and a search bar. Additionally, many have turned into machine learning in terms of trying to predict and suggest offerings for the user based on user's previous behavior. Hence making the usage of the e-marketplace ever more effortless to the user.

While discovering the offering is important the way it is 6) displayed is at least as important. Thus, building good minimum requirements for providers on how to display and describe the offerings is recommended. This will ease comparing offerings, build transparency, trust and improve the value of the offerings as enough information is shared easily. The e-marketplace provider has an incentive to do this as their offering is only as valuable as the offerings served through them. Many companies build rather in-detailed profile formats with specific questions, photo slots, categories to be selected as well as delivery and price details. The format helps the provider to build appealing and informative offerings with the intention to minimize additional information requests and other complications that might slow the buying process. These facilitate the immediate buying option, allowing the consumer to make a fast decision whether to buy.

Even if good rules and enforcement of display information are in place many want to offer additional communication channel that facilitates communication between the seller and potential buyers connecting them in 7) chat. This might allow the potential buyer to gather additional detail about the product, haggle and negotiate terms of the deal. The e-marketplace platform may provide both public and or private discussion forums to facilitate these needs. Moreover, contact information might be shared on these chats to enabling the actual meetup, purchase, review or

return of good between the parties. While a chat may bring added trust towards the platform and towards its users, it can also create a risk of disintermediation (Zhu & lansiti, 2019) for the platform owner. This happens, if the chat is not monitored or executed well and the parties can bypass the e-marketplace to avoid paying the platform fees or to connect by other means.

The most important face of e-marketplace is 8) ordering. As it defines whether the marketplace can deliver its minimum value. Thus, most e-marketplaces have an instant purchase option available, that enables fast instant closing of a deal without a single interaction with the seller. Next comes 9) payment, that is the last step of closing the sale. As people tend to be careful with payments, many platforms have selected a reputable third-party solution and integrated it instead of creating their own payment solution. Some common options are e-payment solutions like PayPal, credit card providers like Visa, Mastercard or a Mobile payment provider. Moreover, some of these e-marketplaces don't simply transfer the money once order is made but hold onto it until the buyer has collected the good and confirmed a successful delivery. This builds trust towards the platform, instead of the individual players, and can be better controlled by the platform. Alternatively, some e-marketplaces partner up with multiple players to offer many payment solution options to make the experience more convenient and seamless for the users.

After payment starts the last part, after-sales. This includes 10) distribution, that either brings parties together to exchange goods, to deliver the service or brings the product or service to the buyer. At times the buyer and the seller meet in real life, but often another third-party solution has been utilized to deliver ordered goods. This can be a global or local player that delivers packages or a postal office. E-marketplaces seldom offer their own solution, but rather might partner up with one or multiple players to make the experience more enjoyable and seamless for the users.

Once the buyer has received the good, 11) feedback is gathered. Usually feedback is gathered from the buyer, but often also from the seller. As both parties rate, star and comment each other, the feedback is sent to the system for internal improvement purposes as well as to give visibility for other platform actors on the reliability of these actors. Some platforms let the users choose whether to share the reviews publicly and others are predefined. Additionally, some e-marketplaces are more persistent on collecting the feedback from all interactions than others. While enabling feedback seems to build trust within a platform and among its users, depending on its execution, it can make the results look extremely skewed. For instance, Facebook only enables rating users through its official E-marketplace, although a major part of deals they facilitate are exchanged on its groups and chats. Moreover, it shows individuals how they have been reviewed by the other party before giving a feedback to them. This kind of lack of confidentiality is likely to turn feedback between

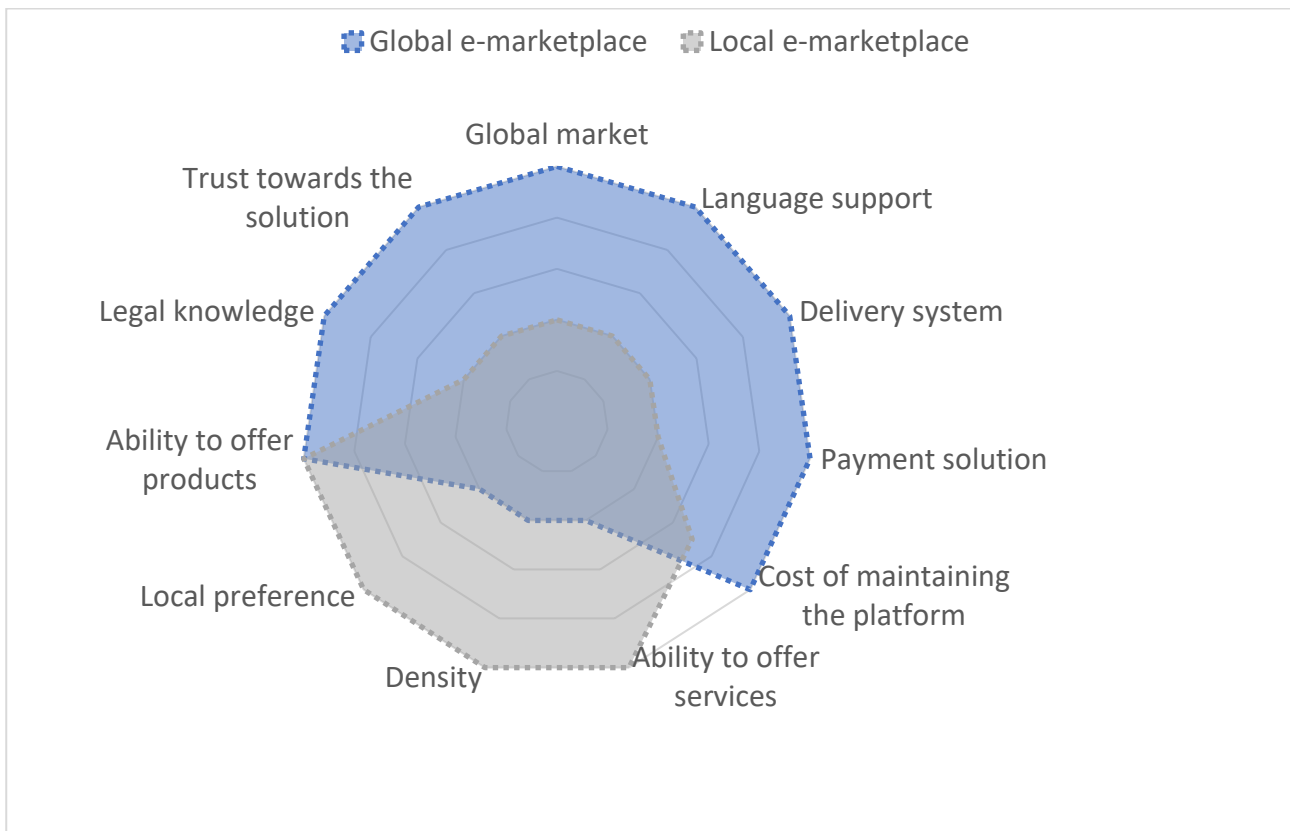
parties more alike with one another. Zadaa is another example that skews the feedback results by denying any feedback when an item has been cancelled, returned, lost or given additional discount after the original purchase. Hence, only satisfied or rather satisfied users can contribute to the platform's public feedback system on other users.

The last step is 12) engagement. It seeks to ensure reoccurring usage of the e-marketplace by engaging the users. This can be similar to the fourth step offering a discount in exchange of engagement. Many e-marketplaces have connected user accounts to a discount code that will be enabled in exchange of inviting friends to the e-marketplace. These discounts might be connected to newly joined friends, or purchases they make within the e-marketplace. Some offer benefits only the user, others for both the user and new joiner. These discounts are made to encourage new users to try the service for free or with a discount by spreading it via trusted network connection. Additionally, these might help to lock-in the current users as they gain benefits when being more involved with it.

4.2.2 Client and user

When it comes to user and client engagement, the e-marketplace platforms put more emphasis on few additional factors that might help or hinder the adaptation and growth of the platform among its users. One of these is catering needs within a local or global market. Some e-marketplaces expand their market offering while others keep a more limited focus and expand through locations. As most e-marketplaces are tied to physical limits on the location through their offering, they often need to have a delivery system in place to support their business, which can further distinguish them as local or global e-marketplaces. These and other differentiating factors are further highlighted in figure 15.

Figure 15, Global and local e-marketplace focus points



Own creation.

4.2.2.1 Local e-marketplace

Local services, that are physically consumed don't require similar in-build e-marketplace reassurance of reliability and trust due to physical contact to the place and ease of communication and ability to complain if needed. Even if the e-marketplace sells products, the local ones have the benefit of operating under common language, law and region. These realities alone enable these e-marketplaces to put their efforts on different factors. These focus points for local e-marketplaces are likely to evolve around density, facilitating local preference and ability to offer both services and products. Hence, e-marketplaces with a local focus can't transport their business model as easily to a new location. Because of it, they tend to innovate on how to expand the product and service family to cover new areas with additional partners instead of moving across countries and continents.

Case 10's target users in B2C side are people who have a surplus or a good they wish to sell or users who wish to purchase a good or a good and service via their platform. The company identifies their users to be hybrid consumers that might or might not engage with their services depending on a variety of things. Over the B2B side the target customers include companies varying between anyone who wants to sell, buy, advertise or provide services and solutions in combination with the platform provider. This said the company targets all businesses from small to big corporations who are interested in being involved or wants to be part of exchanging of good and present when people buy goods. The

company operates solely in a local market and plans to expand via products and service offering instead of global reach.

When making these e-marketplaces efficient they tend to focus their service offerings within bigger cities to have enough density among providers and consumers of a particular location. When density is crucial factor, an e-marketplace tends to expand from city to city selecting dense areas for it to flourish. While density can be a useful factor for many to consider, it is crucial for some of the service offerings like carpooling, restaurants and beauty salons since their offerings make only sense if the users can access these easily. Examples of companies offering these are Case 13 and Case 3. While density can be beneficial to local e-marketplaces there are sets of services that don't require similar geographical proximity with the users such as spas, holiday offerings, concerts and other cultural activities that aren't necessarily consumed on a regular basis, but might be tied to an event, holiday or special treat. Example on a company offering this is Case 6.

Case 6's target audience covers both B2B and B2C sides. Whether, or not the buyer is B2B or B2C the company targets anyone seeking for a new space. As the company doesn't handle any other event producing services this tends to limit the userbase into smaller players and non-reoccurring events mainly. However, the company supports all segments of space renting business. Although, the segment of discovering new spaces is rather small the company targets masses within that segment. Afterall, most people wish to rent out a space few times in their life for birthdays, weddings, sauna evenings and other social gatherings. This said the company's target group is people who organize gatherings in new places and especially in cities. Within the space provider side, B2B the company targets all spaces nationally again targeting bigger cities more. The size of the provider or the type of the offered location doesn't matter. The company hasn't limited the offering further, as the market for discovering new spaces would be too small if only focused on single segment of the business, like weddings.

4.2.2.2 Global e-marketplace

Globally oriented e-marketplaces tend to put more emphasis on building a trusted solution, having global reach, supporting multiple languages, having a good delivery system and its network, having reliable payment solution, having support of legal knowledge and ability to offer products. While global orientation might support local languages, laws and culture they need more organizing efforts to do so. The more the platform involves consumers the more important language support might be, meaning translating the service to each country the e-marketplace operates in.

Similarly, it is important to build trust and goodwill with the local authorities and not to ignore the local legislation when it relates to their operations. Both AirBnB and Uber have faced consequences of their acts violating the local law. While some of the industries have more legal boundaries guiding their industry, it's good to be aware what legislation requires from operating in that particular field. Additionally, some platforms might have to adjust their operations of offering for local preferences instead of copying them per se. Thus, involving both local suppliers and buyers

might be important for optimal outcome when accounting and adjusting according to local preferences.

Consequently, having more focus points can also become more costly. Thus, global e-marketplace's operating cost might become high, unless they can push their costs to other players or dominate the market. A user develops perceptions of both the provider as well as suppliers and clients on the platform. Since globally oriented e-marketplaces cater variety of goods, they tend to play with price and variety and win customers with these variables. Thus, this can lead to lower level of loyalty between the actual seller and buyer shown as one- or few-time interactions instead of reoccurring purchases. When this is true, new buyers and investing into attracting them becomes more essential, which tends to be also more difficult and time consuming than creating reoccurring sales.

When an e-marketplace expands, it becomes even more important to have well established service logic, development tools, rules, guidelines and monetization logic, that covers all the parties involved providing a clear and transparent distribution of cashflow as well as other legal matters like IPRs. Unless the platform provider takes care of these, the platform will face increasingly negative network effects as they grow. More importantly, the reliability and user experience might turn worse. For instance, Apple's App Store is trying to mitigate unreliable applications by facilitating user ratings, comments, reviewing apps themselves and applying more restricted rules and guidelines towards the suppliers. Additionally, they choose to promote some of the reliable apps they have identified themselves. The quality aspect is essential for the platform provider as their service is only as good as the offerings they cater. Meaning that each profile matters, whether the profile is good it will shape the user experience just as if there are unreliable partners the perception of the entire e-marketplace and its provider can change radically fast. While securing good quality throughout the service is tricky it is also essential piece of building trust as good quality and standards build trust towards the e-marketplace as well as towards individuals in the platform. Trust plays an even bigger role, when the buyer takes a risk, like ordering a product across globe and paying a delivery fee even if the product will be returned.

4.2.3 Monetization model

Most of the e-marketplace monetization models evolve around taking a small percentage of sold goods the rest of the money goes to the provider. Additional small amounts might go to the payment system provider, a delivery provider or the e-marketplace might have an additional fee for suppliers to be able to take part in it. The percentage of sold goods seem to vary depending on the amount spend, the smaller amount each purchase is the likelier the percentage fee is bigger. However, this depends also on the power the platform provider has within the market. A strong

player with a natural monopoly is more likely to ask for bigger percentage for itself or to have additional payments like setup fees of monthly subscription for being able to provide its offering via the e-marketplace. An example of this is provided by Case 6. When the e-marketplace wasn't as established it didn't charge for the setup, but now as the e-marketplace has attracted more supply and demand suppliers are willing to pay for the involvement.

Case 6 has multiple revenue streams and revenue channels. The main income comes through the e-marketplace as people purchase good via the platform. That is the commission revenue coming from B2C users ultimately. That is the commission they take from every sale that goes through the e-marketplace. That's around 10 per cent of the cost of the space for the buyer. However, they offer the event organizers a free service to help them find and select a potential space. The organizers can access the service via chat. On the B2B side, the company takes a small set up fee, when a new venue wants to get listed into the platform. At the beginning they offered a free trial version, but now they always charge a setup fee, that's around few hundred euros. That includes, consultation and helping the client to set up the profile and to help them to improve the profile. A second stream of separate income comes from B2B side only as the company offers advertising space. This is extra visibility from newsletter or the landing page. So, it's kind of premium version for the suppliers, extra visibility for a limited time or the whole year that few clients buy.

One of the distinctive features of platform tend to be that they operate a freemium model in a way meaning that B2C side doesn't pay for the involvement unless they purchase a good via the platform. Even then the platform might be completely free for the B2C user, however in those cases the platform operator is most likely not involved in the transaction, handling any of the payments or delivery system via the e-marketplace. An example of this kind of operating model in illustrated by Case 10.

Case 10 monetization model is divided into three main categories depending on the target audience. They offer a freemium model for B2C experience. Alternatively, B2C users can purchase better visibility for their offerings via single payments accessing a premium version of the service. These solutions cost few euros. The second group being on the B2B side is served via subscription-based model. The company offers different bundled offerings for advertising credits via monthly fee. These target the small and local business owners. Lastly for big corporations they have a variety of different solutions that can be extremely customized like co-operating with a mobile payment solution to build better payment experiences for the e-marketplace users or better delivery system with purchase tracking. However, the company offers also simple advertising space from its web site. This may cost as little as 0,1€.

E-marketplaces tend to be rather capital intense business models as they seek to target masses, subsidize involvement and take long to showcase a sustainable business model. Subsidizing involvement is often used to lower the cost of joining a platform, it might also indicate an early phase of the business as new users are providers are subsidized most heavily in the beginning when there are only little users. This subsidizing is often linked to trying the service for the first time or inviting other to the platform via social channels. Companies like Uber, Foodora, Wolt and Zadaa use these methods. Other companies seek the same effect by offering special discounted deals,

lower prices or cheaper options for traditional goods. Case 3's e-marketplace offers discounted prices if bought through the e-marketplace. Similarly, Momondo, Skyscanner, Expedia, Groupon and Boozt have provided lower prices to drive their business. Amazon, eBay, Alibaba, Uber and AirBnB try to offer cheaper alternatives for the goods. This model is also used by Case 2, Case 10 and Case 13 that have found alternative ways to satisfy the same need with potentially cheaper production cost. Case 13 sells food waste, Case 10 used goods and Case 2 has been able to produce the original service through modern techniques at a much lower cost. As the cost of good is lower, the market tends to expand as some of the previously unsatisfied needs are now met.

Case 2's key benefit is tied to the price of their service as they are around 5 to 6 times cheaper than a traditional realtor. Investing into a technology that can optimize and automate things has enabled them to offer the service extremely cost effectively. However, it also creates pressure as they need to be at least 6 times more efficient to afford smaller cut. The company takes 0,75% commission of all the sold flats. The company doesn't take any fee from payment or other payments attached to the service. This approach has also helped them to attract users as there aren't financial risks involved. On the hindsight, they believe that the commission could have been little higher, having a price point at 0,95% or so, that would help them reach profitability little earlier.

4.3 Software as a Service

The key differentiating feature between Software as a Service (SaaS) and other platforms types is its focus on improving efficiency and automating back-office functions on cloud services as illustrated in figure 16.

Figure 16, Software as a Service platform strategies

Software as a Service		
Offering	Client and user	Monetization model
<ul style="list-style-type: none"> • Focus on technology and software when supplying SaaS • Improving back-office functions: cost cutting, optimizing, automation, cloud solutions • Additional customer service • Technology based innovation • Restricted and intended user experience • Potential for customized services • Compatibility with other technology and switching cost need to be considered 	<ul style="list-style-type: none"> • Focus on B2B, secondary offering on B2C • Professional and semi-professional usage • Attracting masses or industry niche • Local or global solution • National vs global target market • Potential to turn users into fans • Brand awareness • Buyer and user might be different actors or the same • Building and maintaining client relationships ties SaaS provider into geographical areas 	<ul style="list-style-type: none"> • Freemium model • Packaging products into bundled offering • Premium model • In-app purchases • Front payment • Licensing model • Fixed pricing • Cost per user accounts • Cost per devices supported • MVP and proven business concept established early • Early cashflow lowers need for external investors • May brake even and turn profitable early
Famous examples		
Acrobat, Adblock, Bitcoin, Box, Chrome, Creative Cloud, Dropbox, Drive, Gmail, HBO, Illustrator, Internet Explorer, LinkedIn, Netflix, Office, Outlook, PayPal, Photoshop, Safari, SharePoint, Skype, Slack, Spotify, Teams, Trustpilot, Yahoo!		
Interview examples		
Case 3 B2B side, Case 4 B2B side, Case 5 B2B side, Case 7, Case 8, Case 12, Case 14		

Own creation.

The findings presented here in figures 16 and 17 rely heavily on the interviews of six organizations: Case 3, Case 4 B2B side, Case 5 B2B side, Case 7, Case 8, Case 12. However, additional support is provided by some famous companies that also follow the described SaaS strategy: Acrobat, Adblock, Bitcoin, Box, Chrome, Creative Cloud, Dropbox, Drive, Gmail, HBO, Illustrator, Internet Explorer, LinkedIn, Netflix, Office, Outlook, PayPal, Photoshop, Safari, SharePoint, Skype, Slack, Spotify, Teams, Trustpilot and Yahoo!

4.3.1 Offering

Software as a Service (SaaS) refers to a platform model, where the platform focuses on improving efficiency and automating back-office functions. These are often sold as a technical solution that modernized old ways of doing things, such as digitizing and automating functions through a cloud service. These enable easy access regardless of the user’s device and location. However, the key value this thesis offers for understanding further SaaS concept is in its internal focus points and

strategies dividing SaaS to independent users and socially dependent users based on the initial driving force of the platform as explained in figure 17 and the following chapters.

Figure 17, SaaS division between independent user and socially dependent user platforms

Software as a Service			
The initial driving force of the platform			
Independent users		Socially dependent users	
<ul style="list-style-type: none"> Individual sales drive the growth of the platform The value of the offering isn't linked to the amount of users Individual sales are loosely linked to one another via public references, reviews and ratings that are linked to the company's reputation and image MVP enhances doing something better or more efficiently Tendency for free trial 		<ul style="list-style-type: none"> New users, monthly unique visitors, accounts and amount of usage drive the growth of the platform The more users the more valuable the service becomes Userbase enables alternative means of income within B2B markets MVP enhances co-working and sharing abilities Tendency for freemium model 	
Personalized offering	Standard offering	User's network	Any user
SaaS learns the user behavior and predicts future needs shaping the content accordingly	The offering and how its displayed are the same for each user and don't adapt behavior	SaaS becomes more useful as the user's own network joins. Service spreads through networks	SaaS becomes more useful as any user joins in. Spreads through interests
Famous examples			
Chrome, HBO, Internet Explorer, Netflix, Safari	Adblock, Acrobat, Box, Creative Cloud, Dropbox, Illustrator, Office, PayPal, Photoshop, Yahoo!	Gmail, Outlook, SharePoint, Skype, Slack, Teams	Bitcoin, LinkedIn, Trustpilot
Interview examples			
Case 5 B2B side	Case 3 B2B side, Case 8, Case 12, Case 14	Case 7	Case 4 B2B side

Own creation.

4.3.1.1 Socially network dependent SaaS

When SaaS provides access for multiple users simultaneously improving its users experience and value tied to the SaaS service its key target group can be described as socially dependent user group. What this can mean is that the services seek to improve coworking possibilities and supporting virtual teams as the SaaS added value to its users. These are essential functions when sharing within one's own network provides the offered value. Services like Skype, Slack, Google Gmail, Outlook, Microsoft Teams and SharePoint follow this service logic. This changes both how the platform is used but also how the service spreads around. When new users are socially

dependent on their networks they tend to engage and convince others to join the SaaS. This can be great from the platform owner's perspective as the users have intrinsic motivation to grow the user network.

A SaaS company typically seeks to offer stand-alone value, that is its most effective way of gaining new users without attachments to other users or parties involved. When seeking stand-alone value, the company tends to focus on a key problem and seeks to build as minimalistic solution as possible following an MVP (Minimum Viable Product) model. Traditionally SaaS platforms seek to build a fast-proven MVP and business concept first to a carefully selected industry niche. MVP is the basis of the SaaS, a simple solution. The biggest part of the offering is however often built on top of the MVP. These are complementary offerings that make the MVP solution even better. They may provide extensions, more functionality and allow more personalized services according to the needs. These complementary services are often the more sophisticated parts of the offering that bring a lot of additional value for the user. The company might expand the services provided by building a network of partners that can further improve and extend the original service or to enhance the sales of the innovation. The importance of partner network expands as the innovation matures. This expansion might also happen under a different business logic or expand the current platform strategy. A great example of this is Case 7 as the company has a very clear MVP by sending mobile payments but has been able to build massive amount of value on top of that by innovative solution within its network of clients and partners. This has been rather difficult as socially dependent SaaS are more complex and difficult to organize than independent SaaS services. This is mainly due the fact that network effects are essential in this model as the value of the service is tied to user's own network being connected to the service.

Case 7 is a mobile payment solution targeting masses on its B2C market across different Nordic countries offering as convenient, easy and good solution as possible. The original goal was to make mobile payments as easy as sending a text message, which it has reached. Unlike many SaaS the company's primary focus is to succeed in B2C market having B2B efforts as secondary. The company believes this to require heavy from investments but drawing B2B side towards itself once they have gained enough users. The company's B2B focus is within merchants to negotiate their payment solution as a new acceptable instore payment solution. The company promises their clients in B2B side, to offer better customer experience for the merchants' customers. The third focus is to build partner network that will enable smooth and easy payments for B2C, for this the company has been cooperating with banks to make them accept its payment solution and to support it. Although, the business model has been established as well as the MVP, the company is constantly innovating and trying new solutions as facilitating their own clients' needs the company needs to be rather agile and innovative. They have built multiple different solutions around merchants' instore payment applications as well as how to connect all the needed parties with another to form as simple, convenient and good payment solution for the end-user.

4.3.1.2 Socially dependent SaaS on any user

Alternatively, some SaaS are dependent on any users. These are services, where people engage based on activity like searching for a job or reviewing a product. Companies that follow this model are LinkedIn, Trustpilot, Bitcoin and Case 4 B2B side.

The more complex and unique blue ocean or technology spearhead the SaaS is the more resources teaching the customer is likely to require as well as to hinder the spread and adaptation of the service. Being a first mover isn't necessarily an advantage and markets might not be ready. This explains why most of the innovation tends to recombine old and new exploiting temporary advantages in the market to improve onboarding and selling the service instead seeking to provide completely radical blue ocean innovation. This doesn't mean that the companies wouldn't be disrupting the markets, but rather highlighting the mixture of old and new technologies combined in the solution. (Hackling, 2013) Case 4 B2B side is an example of how simply recombining old technology and offering it to an industry niche a company may find its value. The company's solutions operate on top of public and private chat systems, something that has been around for long. However, they want to build a very simple, easy to use and great application for mobile users specifically. The company is dependent on users willing to engage in the platform in order to provide value for the buyer. Interestingly, the buyer of the service has always internal stake to enhance communicating and engaging with others making them invest into finding enough people to use the service. This has released the case company 4 from the potentially difficult situation of providing multisided engagement.

Case 4 has created a communication service that is used by B2B and B2C side. The company started from B2C, but has now moved more and more towards B2B, as the market is more lucrative there. The B2B side is still rather new business side for the company and they are still testing and developing the business model. However, their MVP that is the light social forum has been tested. Currently the company makes small adjustments and additional functions on the B2B side the company operates a SaaS business model that builds forums inside their client's networks and operating systems selling for all kinds of organizations that wish to connect with internal or external groups. The offering in the B2B side is to make best possible discussion forum for smartphone usage that enable long-term engagement and support long discussions. The focus is to be light, easy to use and fast to implement, but also to easy to exit the deal. As they want organizations to have very low barrier to try and use their service. The company measures their success on B2B side by following how many people are contacted and turned into meetings and further convert into clients. On the B2C side the company connect anonymous profiles with each other and with mentors. The goal is to enable uses to get help easily and without any fear of social stigma. The key is how well the users find the service, how well can the service connect and help the users to find mentors to help them and how easy it is to pay inside the service. The company collects data on what kind of groups people are involved in and who's paying for what services. The company measures the conversion rate for payable customers and has set the target between 2,5% and 5%. The current difficulties lie within how well the company could facilitate and improve network effects as well as to find reliable partners for the operations in Asia. The company believes that B2B platform is easier in the beginning and doesn't require as much investments.

However, the B2C side takes longer and more investments to brake trough, but if it does it and starts to scale it will be much more valuable business.

4.3.1.3 Independent personalized SaaS offering

A more traditional branch or SaaS is independent users that aren't reliant on network effects providing value. Rather they need to simply gain access and learn how to use the program, making it more simple business model whether the offering is standard or personalized. Personalized SaaS offers include companies like HBO, Netflix, Chrome, Internet Explorer, Safari. These learn the indivial preferences of the user and can potentially differentiate multiple users from each other. They tend to make the service experience smoother for the end-user in comparison to standard offerings.

All of the SaaS offerings are typically built through modularity, meaning independent modules that can be combined in different ways to produce different services. This enables the company to offer differently packaged goods for different target groups expanding offering, customer groups and price points supported. Different readily made packages combine the offerings into valuable bundles for potential customers to make the solutions more approachable, customized, convenient and easy to sell. Bundles are done through minimal efforts as combining modules is effective way to support different customer groups and even to provide customization. These packages can be offered solely by the company or in combination with partners or third-party providers. Great examples of modularity are Case 8, Case 4 B2B side and Case 5 B2B side. All of these three companies offer more customized products via modularity. This is especially valuable for Case 5 B2B side as the buyer and the user are far apart mitigating for the potential of misunderstanding and enabling the user to shape the service experience a lot on their own. Simultaneously, it's the only interviewed SaaS offering that is personalized and sold independently, meaning that it diversifies its offer little like Netflix or Chrome based on the behavioral pattern the service has learned during earlier encounters.

Case 5 helps people go from knowledge learning to behavioral change and forming lasting habits. "The value proposition is to offer knowledge workers coaching at scale. The focus is to build new routines around stress reduction and smart work habits and high performance." The company provides programs and coaching for both individuals and companies. Essentially all the users access the same platform and programs. However, the experiences are different and the focus in heavily in the B2B side. All the B2B customers enter the service through a different way first having a kick-off webinar or seminar and then going to a separate landing page completing a survey before accessing any programs. After they have started the journey the company takes responsibility of engaging them for the two-month period that the coaching lasts and help the users to form and make lasting positive micro-changes around 1 to 3 topics of their own choosing. The B2B customers have more personalized view and access for coaching that isn't available for B2C users. These coaches monitor the progress and can comment and intervene the programs in real-time. The B2C experience highlights peer-support, sharing, content creation, collective empowerment and innovation. The users don't simply do programs, but they can share their

experience along the program and talk to one another. In many cities these people have formed actual communities that meet in real life as well. The company measures their success mainly through how well they reduce users stress and improve their wellbeing. Another metrics that they follow include how many people enter programs, what kind of products are chosen and how many complete these programs. These are collected mainly through surveys and usage data.

4.3.1.4 Independent standard SaaS offering

Standard SaaS offerings are offerings that appear always the same for everyone. Meaning, that the value it produces to its users won't become greater if they personalize it or they gain more attraction to the service via other users or the added value is moderate. Companies that belong to this group are Microsoft Office, Adobe, Salesforce, PayPal, Shopify and Adblock. A clear example of this kind of IT focused service is Case 8 that belongs to independent and standardized SaaS services as indicated in figure 16.

Case 8 is a company that provides a separate business account targeting entrepreneurs and micro business owners. However, they offer all kinds of accounting related extensions related to invoicing and keeping an online store. The end goal is to provide efficiency and automatization for back-end business functions available for small businesses in affordable, convenient and easy manner. In the future the company may partner up with other providers to expand on the services they provide for the target group. If that happens, the operating model will expand towards an e-marketplace model, where third parties can expand and extend the value of original offering for the end-user.

Technology compatibility and switching cost are something that all the SaaS providers need to consider. If the company provides little to none technology compatibility, it's very difficult for the clients to engage with their service as the switching costs are high and maybe the technological solution is unknown or difficult to access for the new users enabling them to change over. Case 3 that belongs to independent and standardized SaaS services faced this issue, as they were trying to change a rather traditional field operating mainly or solely offline into its e-marketplace.

Understandably the step moving over to online from offline is a big and potentially demanding one. The company discovered that the main hindering reason was a lack of simple and easy software that would make the client's current operations more efficient and easier, but also to allow them to gain effective sales channel to boost their utilization. In their experience selling their offering to new clients wasn't very difficult as their business doesn't rely on network effects nor personalized offering to create value.

Some of the SaaS services might be rather complicated and restricted in the way they are to be operated. Standardized SaaS offerings represent the biggest subcategory concerned about this. They plan prior to usage the service path and don't include personalized flexibility or machine learning making the service appear more intuitive and personalized for the user. Microsoft Office, Salesforce and Adobe are good examples of these as people train to learn how to use them. Within SaaS

services it isn't that uncommon that individuals using the SaaS might require more specialization or training. The providing company may need to spend time educating potential and current customers on how to use the software as well as to provide customer help. Additionally, many wish to secure positive customer experience and realization of the promised business benefits and help the customers with onboarding and later in adjust, modify and further develop the system based on the insights by the users to make the experience even better. However, these services tend to be connected with the maturity of the business and the deal size. As, building customer understanding in the early stages and supporting major clients tend to be top priorities when dividing resources. Case 5 B2B side offers free consulting and helps the users on onboarding to ease their success with the client. Case 12 has taken a step further, by charging the client only based on their ability to fulfil the promised business value.

Case 12 is a mental healthcare provider that operates virally, builds real time progress on the wellbeing and provides access to the healthcare professionals on that data. They operate a two-month treatment plan with weekly exercises that are shared in real time to the therapist via dashboard that enables them to treat more patients with less time while improving results due to the real-time communication based on the progress. The company evaluates its successes based on two main barometers: patient flow and clinical treatment success. The company started as a preventive healthcare provider in the area of psychological wellbeing but moved into treatment as that is more lucrative business than prevention. Tradition treatment models for therapy are very expensive, treatment is difficult to get and there are side effects of the current medicine used by the patients. There is more demand than supply for accessing treatment. For that reason they build a scalable and easily accessible business that could work as the first step for getting help in mental issues. This could replace many drug prescriptions that tend to offer the first help now, although half of the patients suffer from side effects.

4.3.2 Client and user

Typical clients of SaaS include both B2B and B2C sides, but B2B tends to be the primary focus as companies often seem to provide a more lucrative and stable client base. Regardless, many if not most companies seem to offer something for both sides. Having B2C side as their secondary client base, providing additional source of income and a valuable trial group to test new products, services and features with. However, some companies choose to focus solely on one of the sides.

As many SaaS might be rather technical solutions, most of the users are professional or semi-professional in using that kind of service or product. This means that the provider of SaaS needs to be ready to educate the users or facilitate such user-friendly design or customer support that these users are helped to grow into professional users with that piece of software. Alternatively, the SaaS provider can rely on other similar companies to educate the users, like the industry leader or first mover in the space. Many of the SaaS seek to enable digitizing to foster digitalization, helping the company to transform its operations in a more efficient and modern way. One of these tech focused examples is Case 8.

Case 8's clients are entrepreneurs, freelancers and micro-business owners, mostly the user and buyer are the same person or works in close relation with the buyer. Given the target group the company doesn't need to differentiate much between the decision maker and the end-user of the service that makes the business model slightly less complex. However, the company finds legislation in its operating space rather heavy with the ability to hinder new competitors from entering the market, but also enabling the company to expand comparatively easy within European Union where the company plans to expand

Interestingly with SaaS the buyer of the product might be a different person than the actual user of the SaaS. The bigger and more hierarchical the organization is in B2B the more likely this is. This can be difficult from the sales perspective, as there might be many decision makers between the user and the decider on whether to make the purchase in the first place and what features are included to the deal. The idea between what is needed or how the job should be done can vary a lot depending who's asked. A good SaaS provider understands this controversy and seeks to mitigate the difficulties that might rise from it. Two clear examples of these are both Case 12 and Case 5 B2B side. Both of the companies sell their goods for organizations, enabling the employees' access for the service. However, the offering and deal are done in complete separation with the end-user. However, both services are monitored and developed based on the usage. This however doesn't affect the client's employees service experience as there isn't means for involvement as the users are always protected by complete anonymity.

Case 12 targets big corporations to become clients. They focus on the B2B businesses providing client companies employees access for their treatment plan. Employees that use the service are seen as users only. They can access their treatment plan and share it in the peer-support group anonymously. The client company, B2B side, has different access, they see aggregated data on their employees' progress and wellbeing that's anonymous. The client companies provide the service as a healthcare benefit for the employees. The company sales the solution in two different continents and the biggest differentiating factor is in the buyer side, as they are insurance companies in the US, but organizations and healthcare providers in Finland. In this way accessing clients and users are rather wide apart.

This problem doesn't exist as much in the B2C services as there tends to be less difference between the decision maker and the user if any. For the ones that do have separate actors, the applications tend to facilitate multiple user accounts or different service viewpoints. For instance, Netflix and Spotify have separate family deals that provide different access to the service based on the user. This separates the accounts which also allow the provider to keep providing more accurately differentiated services for each user improving the user experience, help the user to fall in love with the product and develop extremely loyal and committed users into fans. Although, fans tend to be associated mainly with B2C side, it isn't unheard of to develop such affectionate users also in the B2B side. Fans, clients and marquees can play an important role in the success of a company. They can advocate the company by recommending, rating and offering a public reference that can help the company to build credibility and positive expectations among future clients for its future success

and spread the knowledge. This is especially valuable if the service includes front payment, heavy investments or switching costs associated to the service. (Edelman, 2015)

Many of the famous SaaS target masses, meaning that these services are super acceptable, useful and convenient and provide value for most users. Examples of these are storing files on cloud and being able to access them from any location and device with Dropbox, Box or Google Drive. Being able to communicate online with others via Skype, Gmail and Outlook. Enabling fast co-working in online space via Microsoft Teams and Slack. Providing secure online payment systems via PayPal and Bitcoin. Both Case 7 and Case 3 are SaaS that target mass consumption. Case 3's business model isn't as risky, investment heavy nor complex as Case 7's.

Case 7's B2C side the first adopters tend to be urban, male around their thirties. However, they target all individuals and have been able to target the population well from multiple user groups, especially the younger. The company targets all smartphone users among iOS and Android users, supporting all the banks. The acquisition cost per each new user tends to be rather high as the company has spent a lot for marketing efforts to gain the userbase it has. The focus is to support the B2C experience and make it as good as possible. As the B2C side has grown the company has been able to attract more B2B clients and partners that provide the cash flow for the company. The network effect is rather clear on the business model as the receiver or a payment can't receive it unless they have or download the application. This has helped the company to grow on both B2B and B2C markets as more users draw also clients and partner to the network. As the company passed 5 million users, the company was reviewed as big by other players on the market and gain attraction. On the B2B side the early movers have been big brands associated with low single payment sales targeting younger population. Legislation is one of the hindering elements of mass SaaS solutions. Due to local legislation the company hasn't been able to support different nationalities across users, but instead have established sister companies under the same brand to each location. In addition, they don't support end-user engagement across borders, but limit them to national exchanges. However, these companies do benefit from the organization wide reputation that isn't limited into a single country unit. Moreover, some of the partnerships might be convertible to multiple geographical locations.

Case 3's target audience of B2C is the entire population within major cities. The company hopes to gain all of the salon users to its platform. However, the biggest user group is women between 18 to 40-year-old that combine around 80% of their current users. The target within B2B clients are all salons from cities, mainly within Finland, but also other Nordic cities. A limiting factor for covering the entire market in each country is mainly value added. If a village has only a single service provider, the company can't necessarily improve its efficiency nor help in gaining additional clients. However, the more providers are, the more value it brings for the end-user while also adding value for the service provider. This also explains why the company focuses in big cities within a wider geographical location.

Unlike extremely famous SaaS providers that operate globally, most SaaS target an industry niche. Providing a particular value for a specific group. A niche might later grow into a local mass or a global niche, but it tends to keep the focus on providing solutions for a more specific need and or group. Depending on the focus of local or global niche the company is likely to develop and expand its offering accordingly. A company that solely wants to offer goods in a particular geographical location is likely to expand its offering covering more and more services and products as they

expand. This offering can be expanded together with partners and third-party providers or by reshaping the business model to facilitate an e-marketplace. Whereas a company with global niche focus is more likely to keep the offering more limited but expand geographically between nations. These country expansions might be done via licensing deals, greenfield operations or acquiring local competitors. Many of the national expansions tend to start from few clients in bigger cities slowly covering most of the relevant national players in the market if successful. When establishing operations abroad supporting the local cultural adaptation and marketing might help ease the way with both B2B and B2C.

However, more important than the geographical area tends to be connections to clients. In fact, SaaS businesses are only loosely tied into geographical area. This is one of the advantages of the SaaS model, as expansion is less tied to nation nor cultural or language support. However, this also means that SaaS providers tend to compete under global markets. Whoever can provide the service in best, most convenient and price competitive manner with good references is likely to win. Some of the local constrains tend to deal with legal manners, where the provider might have to support rather heavy operations to comply with the local legislation. The constrains coming from legislation vary much between the field of operations and even between businesses.

Another important factor of SaaS is customer references, signing famous, important and well-known references often provide the company with means to expand, gain more name and access bigger potential client base. In fact, after signing few well-known organizations the company is more likely to be approached by potential clients themselves instead having to cold call potential buyers to the same extent. Some refer to this kind of expansion strategy as marquee (Edelman, 2015; Parker, Van Alstyne & Choudary, 2016; Church, 2017), where the company builds its credibility and trustworthiness partially relying of industry and market leaders globally and locally targeting them as their clients to draw attention and wider interest on the market. At times SaaS companies might sign less profitable, unprofitable or even pay for the client to close the deal with marquees. Marquee deals may be exclusive, in which case they tend to be costlier, but also effective in drawing new clients. These might be more visible among B2C than B2B markets. Few examples include HBO and Netflix that both offer exclusive series and films that are only available through their channels. Similarly, many gaming companies like Sony's PlayStation and Microsoft's Xbox have exclusive games. The marquee doesn't necessarily need to be an organization, but can also be a person (Church, 2017). Therefore, marquee strategies are often seen via social networks as they provide means of communication for a lot of influencers and celebrities that have signed promotional deals with brands. Case 5 has been able to get global attention by signing a deal with

an extremely well-known chef and celebrity. Moreover, the company got promoted by Apple on its App Store that has helped the company to grow within B2C side. Now as the company has moved over to B2B they have attracted some extremely well-known global brands to become their references that is likely to help them gaining future clients.

Case 5's focus is to grow B2B side and gain more big employees within the knowledge working space. The target clients are in the fields of IT, consulting and law. Whereas the target users are knowledge workers that need help with stress reduction and smart working habits. Big healthcare providers and corporations represent the company's B2B side. However, the healthcare providers are mainly a distribution channel for accessing clients. The company has few clients around the globe, some due their own approach without any marketing efforts in that particular location. On the B2C side the target is everyone and the platform seeks any growth they can get without separate efforts in B2B. The B2B communities operating via social network model have become rather established on their own in few big cities around the globe. They were established by the users and have grown naturally without company interference. It's a manifestation of the innovative usage, user centricity and the kind of passion and commitment that these individuals have felt towards the app as they have built a reflecting community in real life.

Case 5, Case 8, Case 12 and Case 4 are companies that provide services for their niche target group, a specific segment of the population tied to a cultural and geographical location. All of these companies could however expand rather easily abroad in comparison to e-marketplaces and social networks as both the language and cultural boundaries don't seem to be as restrictive as in the B2C applications where localizing in order to engage masses seems to be more often needed. This might have something to do with the fact that less people tend to be engaged with SaaS services, the relations where SaaS is used is more limited than in other platform types or that people have been more acquainted to handle operations in English in IT related environments and English is found more acceptable than in other platform forms. As many SaaS seek to produce efficiency and automate things humans need to operate less with them and the positions that do interact with SaaS are often specialized workers that might have training for operating the system at hand. Case 4 is a company that supports three languages Finnish, English and Japanese. Although, Finnish and English support are more than adequate in covering the company's B2B operations that are limited to Finland the company wants to expand the language support within Asia among its B2C SNS side, that tends to be more sensitive towards localization.

Case 4 B2C and B2B models are very different from one another when it comes to clients and users. On the B2C side the company operates under SNS logic mainly in the South-East-Asia and Japan where they have both mentors and users. The market area wasn't intended, but the focus came from the fast adaptation in the region. The hindering factors are language barriers, access to local mentors and business partners to help the company succeed in the geographical area. On the B2B side the business operates under SaaS in Finland. The location reflects the owners' ties with potential and current clients as they feel they can best support growth in the area. On B2B side the company don't operate under its own brand, but rather adopt the client's brand and makes their service seamless with the client's website making little customizing for each client.

4.3.3 Monetization model

The most common way to monetize these models is to sell services readily packaged in different price points, from which the user may choose the best option and change it later if needed. These packages vary often from free beginner package to more advanced professional version and even more extensive premium version many of them offer between two to five different versions with each of them having own price point, functionality and service limits.

Some of the services choose to include a free option, operating a freemium model where the free service can be used, while others have a limited free time period to try out the service and some have a cheaper option for trying the service. Freemium models are most often applied for B2C customers while the offerings for B2B might have a free or cheaper trial period tied to time, gigabytes transferred or relying another measurable unit.

Freemium models are like SNS models in the sense that they both often rely on advertising revenue to cover the costs. However, free SaaS services tend to try harder to extend B2C customers to pay for the service rather than SNS, where it's rather rare that the platform offers any extension in exchange for payment for its users. More importantly, the idea behind these services are rather different. Free SaaS service mostly wish to showcase its reliability, functionality and innovation in order to convince and convert users to try and finally to pay for its service. Whereas SNS expect advertising to cover the costs and more after the network is established enough.

Case 8 operates under a freemium model. The free version allows the user to get a business account free of charge in less than 5 minutes. That is the MVP. The extensions have been bundled into three alternative offerings, if the user wishes to expand the usage of the free model. The four models offered are: "1) a starter offer [freemium] which is at 0€/month, 2) a grower offer, which includes invoicing which is 9€/month and then there is something that we call 3) complete, which is 18€/month and then we have something we call 4) unlimited which is 98€/month and that's a sort of a package that we then tailored to certain particular customer groups so it's more like, you can't purchase it right away, but you can actually contact us and then we will deliver."

Case 5 monetization model is derived from B2B and B2C markets that operate under different monetization models. The majority of the income comes from B2B side, where the employer pays by the usage, meaning by activated programs. This means that the employee needs to create a program, finish a starting survey, choose a program and start the program in order for the company to charge the client from that particular individual. On B2C the company operates with a freemium model in combination with in-app purchases on single payments depending what features the users wants to unlock. Once the payment has been done the user can access that content without any limits. However, "individuals can start most of the programs for free. But if they wish to dig deeper in the topic, they can purchase additional programs that cost between 2-10€" and they can run the program as many times as they like. purchase different programs with additional single payment fee.

Case 4 operates separate B2C and B2B SaaS business models. The majority of the income comes via B2B where the company seeks to be a low-cost operator of discussion forums designs for smartphone usage. On the B2B side the client company pays 100€/ month for using the service under their own

brand and their own domain. The company is still testing different price points and monetization models especially for the B2B side. The price points they have considered are 95, 500 and 1000 €/month. The income from the consumer side is really small. The B2C version is more established and follows a freemium model, where the user can tap into public discussions for free and engage in them, but for private mentor discussions they need to pay a monthly fee to unlock a private chat. That is 24€/month and with that the users can engage in with as many private mentor discussions as they like. From that payment the mentor gets 80% and the company gets 20% minus all the cost relating to payment system that they cover. Mentors make content marketing in open communities and talk about issues that then draw potential buyers to engage with them on paid one on one private chats. Some mentors use the platform to extend their connection with current clients being able to have short daily chats on top of the weekly visits. Before the company settled with the monthly fee, they had tried single payments from each conversation, but consumers preferred a monthly fee. The company also compared the price point with other online services like Spotify.

However, the tendency of SaaS service monetization models to rely on B2B income is noticeable. Some of the companies like Google tend to offer free services for B2C users but sell almost the same ones for B2B customers. This has helped them to gain popularity among people, test and develop the services with free model. Gain some revenue via advertising while developing and testing the good and release it to the B2B market and gain additional revenue stream from it. Case 7 and Case 3 are two examples of companies that offer their solution free for its B2C users but rely on its B2B sales to turn the business profitable.

Case 7's monetization model is focused on charging every transaction from each merchant purchased by the consumer via the solution, merchant paying a small fee for the payment solution provider. Banks that join supporting the SaaS will pay a development and distribution fee for the provider but will also gain a small fee from the payments made from these accounts. Different solutions operate with different pricing logic. However, fixed fees are around few cents and percentage-based payments are always less than 1,0%. Developing this solution hasn't been cheap or easy, which is why the customers in B2B side are likely to join instead of trying to develop their own solution. This is true especially since the barrier to entry is rather high since the legislation in the industry, but also due to the complexity or the scattered players the company needs to support in order to provide a solution as well as the high costs of acquiring new users via marketing and building that userbase the monetization model relies on. The company has developed its business model and is at its growth phase. However, as the company has and is investing a lot towards acquiring big enough user base they are still in the 'Death Valley', seeking to break even in few years. However, the focus isn't in becoming profitable, but to grow among new users. The company monitors a lot of different data points to determine their success. The main key interest areas are within the number of active users and their amount of usage. After it, secondary interest is around user location and the number of merchants they have acquired as clients. The company believes strongly on its value proposition as well as their capabilities in realizing it. They estimate themselves to be extremely efficient and believes to be ten times more efficient than an average organization.

Case 3 has two streams of income one from selling the SaaS and another from the e-marketplace as they get a cut from all the sales done through it. The SaaS solution has a monthly subscription based on the number of users and some addition cost depending on the customized service package. All of the SaaS users gain free access for the e-marketplace, however not all of them try or use it. The e-marketplace monetization logic is based on the sales. The company takes a 10% commission from each sale made in the e-marketplace. Around half of the company's profits come from the e-marketplace.

Another monetization model, that is quite rare is simply based on actualized value for the client. It could also be described as charging based on how well the company was able to keep its promised value proposition in delivering the service while monitoring for the quality standards. If the company is doing something rather new that the market isn't used to or the value proposition seems too good to be true, this monetization model might help the organization to gain clients to try the service for themselves with little risk of being scammed.

Case 12 charges based on the clinical evidence of the treatment the participant has gained, so unless the company can provide clinically valid metrics of the treatment for a single patient no payment is requested. This model has lowered the entry barrier and does seem very attractive business model for parties seeking for a health solution around mental health. The monetization model currently operates under B2B income, selling the service for corporations. However, the future vision is to get additional income from the government bodies like KELA subsidizing the service in Finland. In the US the plan is to attract insurance companies to become clients. The company measures its success based on the actual effectiveness of the treatment and seeks to develop it even better within clinically approved metrics.

4.4 Social Networking Sites

The key differentiating feature between Social Networking Sites (SNS) and other platforms types is its focus on arranging and categorizing information or its ability to support interacting with people as illustrated in figure 18. The findings presented here rely heavily on the interviews of three organizations: Case 1, Case 4 B2C side, Case 5 B2C side. However, additional support is provided by some famous companies that also follow the described Social Networking Sites strategy: CouchSurfing, Facebook, Flickr, Google+, Happn, HappyPancake, IMDB, Instagram, OkCupid, Pinterest, Plenty of Fish, Reddit, Snapchat, Telegram, Tinder, Tumblr, Twitter, WeChat, WhatsApp, WikiLeaks, Wikipedia, Vivino and YouTube.

Figure 18, Social Networking Sites platform strategies

Social Networking Sites		
Offering	Client and user	Monetization model
<ul style="list-style-type: none"> • Focus on social aspects by strengthening current social networks and building new • Enabling innovative and creative usage • User-lead development • Content creation, comments, likes, shares • Discovering and connecting people • Discussion forums • Mixture of shared knowledge and individual opinions and experiences • Evolve around leisure activities and news • Relies on users contributing 	<ul style="list-style-type: none"> • Focus on B2C, secondary focus on B2B • Attracting masses or global niche • Supporting multiple languages • Belonging to a community • Social hierarchy within groups • Loyalty, engagement and volunteers • Passionate and driven individuals • Leaders, influencers and followers • Physical social events strengthen networks and ties them into geographical areas 	<ul style="list-style-type: none"> • Free for B2C • Advertising income • In-app purchases • Front payment • Monthly fee • 3rd party extensions that operate under front payment or monthly fee logic • Volunteers • May requires heavy investments prior proven business concept • Can be capital intense business model • Late braking even, requires patient risky investors • Potential for natural monopoly
Famous examples		
CouchSurfing, Facebook, Flickr, Google+, Happn, HappyPancake, IMDB, Instagram, OkCupid, Pinterest, Plenty of Fish, Reddit, Snapchat, Telegram, Tinder, Tumblr, Twitter, WeChat, WhatsApp, WikiLeaks, Wikipedia, Vivino, YouTube		
Interview examples		
Case 1, Case 4 B2C side, Case 5 B2C side		

Own creation.

4.3.1 SNS strategies

Social Networking Sites refer to a platform model, where the platform focuses on building connectivity, networks and enabling people to find social groups. While many of these focus on connecting friends with each other, many of them also help to expand users' network by connecting the person with likeminded people or otherwise expand their current network. These groups often evolve around established Social Networking Sites, local communities, events, hobbies or other interest groups. These also provide good starting grounds for niche Social Networking Sites, attracting a smaller segment first and expanding further after a successful start. There are several tactics how a smaller niche can first be attracted. However, the two most common are by starting with a platform that organizes valuable information smartly by creating an information driven SNS and another one is by providing a technical frame supporting small groups exchanges by creating a people driven SNS. This division is the key insight this thesis offers for understanding SNS better thus illustrating it in figure 19 and discussing the topic in more detail below.

Figure 19, SNS division between information and people driven platforms

Social Networking Sites			
The initial driving force of the platform			
Information driven		People driven	
<ul style="list-style-type: none"> Start by creating information or rearranging it in a unique or valuable way Grows by engaging people to submit and produce additional information and help to better categorize and rank it MVP evolves around creating, arranging and categorizing information Importance is put on the topic of information instead the individuals exchanging knowledge Tendency for well disguised ads 		<ul style="list-style-type: none"> Start by engaging small target group of people that others wish to interact with Grows by users inviting their own networks to join in MVP evolves around a technology frame to support interacting with people Importance is put on people and who they are engaging with instead of having primary focus on what is been exchanged Tendency for clear promotions 	
Primary data	Secondary data	Existing network	Expanding network
Relies heavily or solely on primary data. Users build data within the system	Relies heavily or solely on secondary data. Users connect sources of information	More convenient and alternative ways to keep in touch with your network	Tapping into new networks of people via common interest
Famous examples			
Flickr, Google+, Reddit, Tumblr, Twitter, Vivino, YouTube	IMDB, Pinterest, WikiLeaks, Wikipedia	Facebook, Snapchat, Telegram, WeChat, WhatsApp	Couchsurfing, Happn, HappyPancake, Instagram, OkCupid, Plenty of Fish, Tinder
Interview examples			
Case 4 B2C, Case 5 B2C			Case 1

Own creation.

4.4.1.1 SNS creating primary data

The first platform strategy is focused on information, gaining and sharing it. These are application that are used to find information, something that all the users can build on by adding their descriptions, reviews and starring. Additionally, these SNS may sell different advertising solution that place adds among the search results or suggestions. However, these tend to be rather well disguised blending into the rest of the content. This model can be further divided into platforms that mainly generate primary data or mainly organize secondary data.

Example SNS companies that create primary data include companies like Vivino, YouTube, Tumblr, Flickr, Google+ and Twitter. Additionally, interviewed Case 4 B2C side and Case 5 B2C side belong to these strategies. These are platforms that rely heavily on new unique data generated by the users. For instance, Vivino gathers data and ratings around wines, grouping them into different wine profiles and subcategories. The user may look suggestion on what wine to buy or

how to serve it best. Later the user can rate and comment on his or her experience on the wine that everyone can see. When the user searches for merlot wines under 15€ the adds appear discretely as a preferred order displaying the wine higher in the list than it might otherwise be in. This way the platform targets all wine lovers that wish to remember own experiences, share them and gain views from others.

4.4.1.2 SNS organizing secondary data

The latter group of information driven Social Networking Sites that emphasize or solely build on top of secondary data are companies like IMDB, Pinterest, Wikipedia and WikiLeaks. Wikipedia is a good example, as the company builds profiles simply based on existing information. All the information that cannot be cited and so verified correct by other websites are removed. Moreover, the company relies on enthusiast individuals who have an interest and knowledge and are willing to share it with others.

4.4.1.3 SNS connecting with user's network

The latter platform strategy starts by building a technical frame supporting group exchanges. Instead of prioritizing on providing information it provides a medium to connect and share with others. So, the starting point isn't what but with who, having a keen focus on people, individuals and the social factor. This group can be further divided into platforms that focus on enhancing existing networks or alternatively focus on expanding user's personal network.

The first category's technical frame helps the user to stay in touch with the current network and provides alternative channels to communicate with. Examples of this strategy are provided by Facebook, WhatsApp, Telegram and WeChat. Facebook's initial targeted group was Harvard University students to connect with each other. This rather specific target group grew rapidly covering other university students that wanted to connect with the original group. Later Facebook became national, expanded abroad and became the global service it is today.

4.4.1.4 SNS expanding user's network

The latter group of social people driven networks that expand the user's network are companies like Tinder, Instagram and Couchsurfing as well as the interviewed Case 1. Tinder is an example of global niche strategy where the company was striving to gain single people to join first from limited number of bigger cities and later anywhere. Instagram started as a platform for photo sharing. Users displaying their shoots. The platform grew by existing networks as well as attracting niche groups. Among these professionals and hobbyist like photographers, models, influencers, makeup artist and

fashion brands soon adopted the platform. By then the platform had caught the public's attention and the masses joined in.

4.4.2 Offering

The simplest examples of Social Networking Sites are different discussion forums that enable commenting and chatting with others. Many providers have made these to serve a rather particular need. However, great Social Networking Sites enable innovation and creativity around usage. In fact, the original plan may vary with the user's usage quite much. As the users are very much in the center of the platform, it tends to be developed with a more user-lead development, where the way users have adopted the platform may alter it even more on how it's further developed and adjusted. To enhance user's creative usage most Social Networking Sites have built constructs and functions that are loosely predetermined. It may be an ability to create a new discussion forum, a group, conversation starter, claim, piece of information or another sharable thing. This is one of the key functions on how it varies from both e-marketplaces and especially SaaS as they are rather predetermined on how those platforms are meant to be used whereas with Social Networking Sites majority of the value is provided by individual users. In fact, the platform provider doesn't provide any content, but the content is the users interactions with one another that are facilitated.

It seems that most Social Networking Sites focus on facilitating public, private or combined network channels. Companies like Twitter, Wikipedia, WikiLeaks and Vivino are some of the rare ones that are completely public. Meaning that all the conversations held are completely open for anyone to read. The difficulty with this is, its constraining factor being totally public having little privacy within discussions. A similar niche group is compiled of companies that are completely private and thus cannot be read or joined by anyone online. These are companies like Telegram and WhatsApp. The difficulty with these is to gain new users as they rely heavily on friend referrals and existing networks. By far most Social Networking Sites platforms are a combination between the two former groups combining both public and private features. Often the user can modify the privacy settings self to determine how comfortable they are sharing the things with world wide web. Facebook, YouTube, WeChat, Snapchat, Pinterest, Google+ and Instagram are all services where the user may choose to keep something only for oneself, share with friends or with everyone. Although the combined solution could be as simple as enabling both public chat forum with ability to start a private chat many have more sophisticated solutions and varieties. Consequently, it's no surprise that all the three organizations interviewed fall under the last combined Social Networking Sites form: Case 1, Case 4 B2C side, Case 5 B2C side.

As part of the application's key value is tied into its user-base, the more users the company has the more valuable the Social Networking Sites becomes for each user. Therefore, users' trust towards company's future success and ability to drive user base growth is essential. This is especially true as building a social profile and engaging in a network is time consuming and switching cost tends to be high as there are little means to copy your data and transfer it to another social platform in most cases. This means that new users need to believe that it's worth to build a profile and engage in that platform to become a user. It helps if there are interesting people or topics that the individual wishes to engage with prior joining. It also helps if the user believes in the future of the platform as there is no guarantee of a success as platforms can fail much faster than they were established. This means that the public's perception of the platform matters. If there are competing platforms the user is likely to join the most popular as it gives them access to the biggest network unless the smaller one is more relevant in terms of the topics or people involved. Moreover, failing fast is always an option as past success doesn't secure future success.

Although negative press can be fatal for all platforms, it seems to have biggest impact on social platforms and a mistake might turn into a scandal or even fatal misfortune. Some examples of social platforms that run into bad press image and resulted into mass migrating users to competing platforms. Such migrations have happened with Facebook, WhatsApp, Instagram, Snapchat and Twitter. WhatsApp has had rumors about changing the application into payable version as well as collecting private data and messages. Both news has helped its competitors grow, as users have changed into alternative applications as means to retaliate against bad policies and negative public image. The company has also hit the news as illegal content has spread around its platforms like circulating sex tapes. Facebook has had multiple negative press attacks especially around data privacy as well as transparency and online harassment. Some users have been convicted based on the things they wrote within Facebook groups. Instagram has been accused of violation content ownership and IPR. Snapchat has been accused of distorting concept of beauty by advocating usage of heavy filters that augment the reality reflecting poorly towards self-image especially among young girls. Twitter has had issues with hate speech. Many of these Social Networking Sites do have trouble with online harassment as well as deleting inappropriate content such as pornographic, fake or violent content. One example of people driven SNS that focused on expanding users' networks was Case 1, a Social Networking Sites platform that experienced a massive user disappearance and decline due to internal difficulties along with changing market conditions and poor allocation of resources.

Case 1 is an extremely interesting example company of Social Networking Sites as they were a national leader within their space for years. They offer a social platform for people to connect and share content with in private and public chat rooms little like Facebook. They offer different chat and sharing platforms for B2C side. A lot of the activity happens within profiles and chatrooms. The company was able to engage a lot of users to its platform. Some of the developments followed consumers own innovations on how to further customize profiles or what kind of discussions and activities people wanted to engage in. The B2B offering includes 1) brand exposure to enhance their brand recognition, 2) tactical marketing direct consumers to another website and 3) influence marketing seeking to influence public opinion on a matter. These offerings may manifest oneself as games, lotteries and fun ads at the host's website. The company has undergone a lot of changes during their nearly 20 years of operations. They have seen a huge growth, success, global competition, disengagement and migration of users to other channels, decline from mass to niche player within the field and regrouping. It seems that there were multiple attributes that in combination resulted the negative outcome for the SNS.

Case 1's downward spiral started as the company was sold to a new party in the attempt to grow global. It invested heavily on expanding abroad by rebuilding the brand at each local market from the scathes with local employees. However, none of the expansions paid off and the service remained as a niche player in each new location. The company hadn't been able to utilize its existing brand or users in gaining popularity elsewhere nor had enough expertise or budget to pull off its expansion attempts. While the investments had drained into localization and marketing the development of the platform had frozen. This investment plan, globalization focus, and the vision are the most likely explaining factors of the fatal miscalculation that followed in the home market. The company had enjoyed the perks of being the leader within its national market. While it was focused on succeeding globally and relocated its resources into market entry strategies elsewhere it failed to sense the bigger transformation of the industry and the immediate threat of its global rivals both within advertising industry and social media channels. The company had placed its trust into the new owners' hands into believing that they had the knowledge to turn the platform into a global player. It is possible that the company may have had better chances with expansion within the national market facilitating larger variety of needs. However, the biggest single failure was probably in realizing the depth and importance of a new growing trend of mobile usage. The failure to support migration from desk devices into mobile interface was simultaneous with competitor's ability in utilizing it to their advantage and increased spread of smart phones and time spend on them. The prolonged failure to meet this new need that grew into an expected standard by the consumers may have sealed the faith of falling back into a niche player. Simultaneously, new entrants were competing from the attention of this new market. That further tightened the competition of now much more crowded industry of people driven SNS. The growing problems in the mother company later paralyzed both the expansion plans and resources floating towards the service spinoff that the company had started as they were bought. Now the owner was keen on selling the company and seeking to rescue its most praised service that was facing furious media turmoil staining its reputation as a responsible player, quickly withdrawing investors and plummeting user engagement as trust was evaporating. As a result, these companies went separate ways, both having new owners and a sinking ship waiting to be rescued. Neither one of the companies were able to regain consumers interest to become what they once were. Instead, they are nearly forgotten companies of the past. Now they facilitate small niches with their services seeking profitability elsewhere.

4.4.2 Client and user

Most Social Networking Sites aim towards attracting big enough mass, this might mean masses or a global niche. Given the social need to attract big enough population the target is most cases B2C instead of B2B. However, as the platform grows a B2B side may be able to improve the user experience by widening the service offering or provide the platform owner a secondary focus group and potentially additional income stream. Depending on the national or global focus the company

will need to support its expansion towards wider offering potentially done with partners within the network or expanding abroad and supporting local languages and marketing efforts. Although the example companies operate mainly under global focus and have users around the globe, there are a lot of smaller Social Networking Sites that have a more local focus and tend to operate in local languages. In Finland suomi24.fi, vauva.fi, kaksplus.fi and Case 1 are some examples of more local oriented platforms. Their focus groups may vary between Finnish speakers to Finland or main cities within Finland. Part of the reason why Facebook has been so successful in capturing users around the world may lie within its heavy support on local areas. They support local languages in all of their main functions, and they have built a heavy support system for local networks. Moreover, they have combined it with global network support that enable rather unique experience. It allows users to connect simultaneously with multiple communities around the globe. Connecting the user to his or her unique network of people, events, places, communities and more.

Although, Social Networking Sites are online they tend to be tied into local phenomenon, cultures, news, physical places and established networks. These are factors that both tend to root the Social Networking Sites and help them become more relevant and established, but also limit them into physical world as strong Social Networking Sites have both elements online and offline. This combination seems to help the individuals to establish stronger sense of community and belonging to it. Moreover, these seem to spark more loyalty, engagement and volunteering amongst the users. The users of these communities tend to have a kind of loose hierarchy amongst them based on knowledge, sharing, leadership and involvement. The most evident divisions seem to be between with influencers and followers. Influencers are people that others follow and listen. They might be leaders, celebrities or very keen spoke persons on a specific topic. They seek for spotlight or are given it. They tend to engage more than average people and the area of interest might be closely related to their passion or job. Followers are people that might be less engaged or draw attention less towards themselves but might be keen to following, support or occasionally show more interest and engagement towards topics and people. Followers tend to be leisure users or professionals seeking for information about a topic or people to engage with.

Case 1's B2C users are people who want to get to know new people and expand their network or date. Often these individuals are at cross paths or changing their life one way or another that results them wanting to connect with new people. These might be people that move to a new city, end school or get married. New connections often start online before moving to offline sparked by an interesting profile or conversation and optimally resulting in new real-life friendships. The majority of the users, 70-80%, are from Helsinki and other big cities. The target audience is between 18 to 30-year-old. The target clients in B2B side are big local brands and local media houses who do outsourced marketing for brands in Finland. Ultimately clients are anyone who wish to connect, influence or promote things for young adults in the major cities within Finland. The focus used to be media houses, but as the

company's available efforts to connect and sell have been significantly downgraded, they have shifted the focus for direct selling to big brands focusing on bigger deals.

4.4.3 Monetization model

Social Networking Sites tend to operate via advertising revenue, where the platform is free for users and the operations are funded via selling advertising space within their platform. Famous examples of these are Facebook, WhatsApp, Snapchat and Instagram. However, these platforms may attempt to gain revenues from B2B users by offering business account or additional services like better reach within the network and more exposure to the target audience. Alternatively, they may gain revenues from B2C users by offering a premium version without adds or an extension that allows new usage. However, any monetary gains from the B2C tend to be rather marginal in comparison to other revenue streams. Moreover, extensions are mainly provided by third parties if they include B2C costs like in-app purchases, monthly fee or front payment. The platform owner gets a cut from third party revenues that might include a fixed fee and or some percentage of the price of the paid good. Lastly a few Social Networking Sites are nonprofits operating by volunteers or relying partially on volunteers. An example of this is Wikipedia, world's largest encyclopedia where the content is provided and altered by volunteers. For non-profits like these the income may accumulate from donations and or selling fan products.

Due to the social value creation of these networks they tend to require a long investment that might pay back. Just like e-marketplaces that also need to attract a rather large critical mass to become successful so does Social Networking Sites. Meaning that investors should count on high risk as well as long investment period prior payback or profitability. Proving the MVP might also take a long while and the monetization logic might change overtime together with maturity. The cashflow might be volatile resembling the unique visits within the network. However, Social Networking Sites aren't usually as capital intense as e-marketplaces or at least they can survive with less. Although, investments into requiring new users and visibility from media might be costly, but also worth while to gain attraction by masses. Like all other platforms, Social Networking Sites are also highly scalable. This means they may expand extremely fast and cover a wide reach. If they succeed in that, the platform is likely to become extremely profitable as well as reach a natural monopoly status that is hard but not impossible to compete against.

Case 1 is a typical example of a social platform as they make all the revenue based on advertisings on its service. Meaning that B2C side doesn't contribute directly for revenue growth but is essential to make businesses interested in using their marketing and advertising channel in B2B. The majority of the income comes from direct sales to big brands. The target deal size is between 10000 to 20000 euros. However, deals around 5000 euros are easier to close. The much smaller, but steady ad revenue comes from media houses. They buy an amount worth ad space that they might fill with different brands. This is the case as majority of the digital marketing money go through the media houses as they are mass

buyers. They sell their own marketing and advertising solutions in bundles on their own websites for the initial buyer whose ad might be displayed at the case company's website as a result of this deal. As the company's website started to face stronger competition and losing its users on its B2C side that had a drastic effect on its income stream. When the company did well it got a lot of revenue via media houses selling their advertising space. Now they can't rely on the income it results. This balance shift happened in the last 10 years. Regardless of the difficulties the company has overgone in the past decade, might not simply explain the entire picture. The competition and new rivalry in the industry could have resulted in a similar situation. As mobile usage has grown, and the leisure time spent on different platforms have diversified the company would have been likely to lose some of its revenue simply based on it. What made the situation more fatal was the lack of smartphone usage support and slipping user engagement and plummeting monthly unique visitors on the website. All of these factors would have been notified by the media houses and the deals sizes would reflect the status of the platform's popularity. The company was sold for the first time at its peak, the monthly unique visitors were highest, the company was supposed to become a part of bigger offering of Social Networking Sites globally and the mother company was expected to make its initial public offering (IPO) soon after. However, the IPO was delayed multiple times and then the mother company started to face bigger problems with their main offering, bad publicity, plummeting users and escaping investors. The failure was sealed with the chain of the events for both companies. Even after new ownership neither have been able to regain lost trust.

Although, speculations have been made whether platforms can fail. It seems evident that they can. No platform is too big to fail. Even if the switching cost might be high or the company might even be a natural monopoly, disappointed and angry users should not be taken lightly. Users can find a way to substitute the service or live without it.

4.5 Exception of the framework

Two clear exceptions were found from the theoretical framework identified as dual- or multi-business model platform strategies followed by incumbents or early phased startups. These two exceptions are elaborated below. E-marketplace, SaaS and Social Networking Sites business models are mutually exclusive models. However, these can be combined into supporting platform strategies. In these cases, each project has a separate goal and strategies. They may operate under same platform or brand but should be treated rather independently although dependencies may exist. Moreover, as resources are always limited, most companies are cautious on how many simultaneous projects they can support and what gains are expected within a time frame. Thus, most companies start from very narrow platform strategy, as described in figure 10, by adopting one of 12 strategies and potentially gradually growing and expanding it further within a limited strategy framework to benefit from the proximity of the existing target group, offering and monetization model. Regardless, two groups were identified that might deviate from this model: incumbents and startups in a launching phase.

However, as both dual- and multi-business models are rare with other than early stage startups and incumbents, it seems to speak for the fact that most startups that succeed into later growth phases

have chosen to focus and build their business case solely on one of the subcategories within platform business models. As the company matures more and has more resources at their disposal, usually after success, acquisition or long existence the company might move into multi-business model phase as a way to gain new growth or market power just like the incumbents pursuing this plan.

4.5.1 Incumbents

Many established companies have built internal platform business units, that seek to engage the business with new opportunities within the area via partnerships, startup engagement, incubation and accelerator programs, acquisitions and industry co-operation. Some famous examples of these are Apple, IBM, Accenture, Nestle, Microsoft and Google. In Finland companies like OP, Neste, Wärtsilä, Varma, Nokia, Sonera, Reaktor, HUS and Tieto are some of the companies engaged in these activities. Two incumbents interviewed reveal what platform engagements they have tried and how they paid off.

The rationale for incumbents to adopt this strategy is rather straight forward. Big existing companies allocate resources to test and try new business opportunities. Exploring with platforms possibilities is a valuable attempt especially as the companies believe in the scalable possibilities one might have if a successful model is found. The companies see the difficulties they might face when attempting to engage with new areas, being one of the reasons why many incumbents seem to find it important to partner up, share and co-operate. As these companies run multiple platform projects, they tend to engage with multiple platform strategies, each chosen based on the project at hand. Case 9 highlights the importance of partnerships that's one common way for incumbents to grow and renew. Moreover, the company has gained attention also abroad from the innovative trials it has had. However, these won't be discussed below, as better examples of platform strategies have been provided within chapter 4.1. Case 11 on the other hand has had interesting trials as well, although not as successful. These will be discussed below as well as why these might have failed. Interestingly, the business case company 11 is in, represents offline platform in a traditional sense. Now the company has attempted to combine its offering to an online world through e-marketplace while exploring other plausible options.

Case 9 is an incumbent that has surprised the other incumbent players within the field with its trials and platform engagements. The company has well acknowledged that most platform engagements don't seem to go anywhere and mainly feel like waste of time and efforts, but that is mainly true as it is difficult to know what will pay off in the future, understand how to do it and being able to envision and realize the idea. Moreover, it takes time to prove that platform is successful and becomes profitable. Convincing people to invest into things that aren't within the core capabilities is difficult, ensuring that the investments won't be dried up too early and having a long-term vision are essential here. However,

the company is even more convinced that winning with others is how they have and will succeed. They are extremely keen to host discussions and share experiences within the industry, as they believe that real efforts and trials can guide them. In addition, they have mainly joined forces with other startups and companies that are keen on trying new business models. The key in attracting great partnerships has been good brand image, as many know the company to be very keen on trying, learning and doing unexpected and non-traditional moves.

Case 11 is an incumbent that operates two main streams of business focusing on serving B2B clients. The two business streams evolve around events and renting spaces. The main value the company provides through renting spaces is to facilitate different event from small meetings to bigger workshops and other social gatherings. These services are targeted towards its B2B clients. The main value the company provides towards its B2B clients within its event space is to enhance and grow their sales by connecting them with the industry professionals and consumers. As the operations evolve around a multisided business model B2C side offering additional value for B2B clients the company has B2C as their secondary customer group. The main offering for B2C is to provide a snapshot of the variety of the market offerings in a one place conveniently and to provide information and interesting speakers. The network effects tied to the company's success evolve around the big clients in B2B. Unless the company successfully closes the deal with the market leaders, they risk losing also the smaller clients within the market. Therefore, the company follows a marquee strategy, first securing the market leaders. The strategy has been rather effective as the big players devote a small amount of their marketing budget to advertise the event, they are part of. This media exposure has further drawn both the smaller players, but also individuals to the event. The key metrics within its event sales that the company follows are the total number of visitors and B2B sales about how much of the floor space has been sold. As well as how many of the tickets are sold. However, the last one is difficult as predicting the sales aren't simple. Around 30% of the ticket sales happen within the last day. Moreover, predicting income and sales isn't simple as the IT infrastructure doesn't support interpreting current data. This is partially why the company is planning to renew its IT infrastructure.

Case 11 has tested three separate efforts to build digital solutions around their core business. These are a mobile app, AR app and the web shop. However, none of these have been successful yet. In the future the company considers involving its sales personnel within its innovation projects instead of the current focus of simply involving IT and marketing to enhance the outcomes. The company tried building an application to enhance their visitor experience through a mobile app on 2014. The application received only around 5000 sessions during 2018 while in comparison they had hundreds of thousand visitors. This illustrates how marginal the usage has been. They have now decided to give up the mobile app. They expect the failure to be in relation with how little resources or marketing efforts was put towards the application. In addition, the company feels that they didn't know what they were going for or how to connect the solution to its business. This is likely reflected on its poor performance. Regardless of the past attempt the company got involved with other development projects as well. The company experimented with an AR application, building an application around augmented reality of the visitor experience. The application was built around 2017 enabling additional stream of information, advertisement space and thrill with new kind of experience and feel for the events. The AR app operates as a SaaS, however like the company said, due to lack of clarity and a target the application hasn't been able to bring any added value rather destroyed it in its development. Like many other incumbents the company also engaged itself with hackathon, establishing one for itself. As a result, the current web shop was discovered. The idea with the web shop is to redirect part of its sales channel to improve efficiency. That online store operates with an e-marketplace logic. Although, the company hasn't been able to realize its goals within the web shop the company is keen to keep on trying and seeking to solve current difficulties around it. They believe that they need to keep on innovating and co-creating with outsiders. Although, they feel that working with the startups is rather slow as they are discovering and seeking an operating model and might shape their business rather radically along the way.

Case 11's both user and client sides cover both B2C and B2B. When it comes to targeting the public, the company is after the masses, meaning the entire population. However, each event has a more specific target group, seeking for the most relevant consumers to each event hold. Similarly, the variety of B2B clients is large, but each event is scoped to cover a certain industry niche instead of all. In many ways the company offerings are for absolutely everyone when tied to the national market, but simultaneously for quite a bit narrower group as there are always certain target groups. Currently the company engages with each user and client base only few times a year, but in the future the company considers having more continuing engagements with each of them.

Case 11 monetization model is complex. The company operates two main streams of business that both have scattered sources of income. The business streams evolve around events and renting spaces. The event side of the business is more mature, experiencing slow decline, while renting spaces are growing quite rapidly. Both services are targeted for B2B clients and most of the income comes from B2B side. When it comes to selling events the company's main source of income is gathered via selling square meters for B2B clients to take part in the event. The B2B visitors access the events for free. Since the company subsidize heavily the events to secure enough potential consumers for their B2B clients most of the B2C tickets are distributed for free and only a small segment of B2C tickets are sold. Meaning that the majority of B2C users are operated under a freemium model. The pricing model of the business is extremely complex. There are multiple variables that change the price point. In the future the company seek to build readily made packages to make the sales more effortless, convenient and transparent in terms of both service and pricing. The current online store sales around 18-20% of all the event sales via its online store. The main reason why it hasn't been more successful is due to internal conflict. The sales personnel feel threatened and don't direct the small clients towards the online store as planned since they fear being unemployed resulting in the increase of self-services provided for clients in the online store. The managements' idea was to release sales personnel's time more to focus on the big clients and facilitating their needs better. However, these changes haven't been realized. Despite of the difficulties the company will more forward changing its processes and slowly transforming more towards digital solutions and trying to redirect a growing part of its sales. As part of this strategy the company is now about to renew its IT infrastructure. In addition, the company has some exclusive events operating under a different model where they pay for the speakers to come and all the attendees do pay for the ticket to access the event.

4.5.2 New businesses

Second group that's rather actively associated with dual- and multi-business model approach is new businesses in their early stages, where they test and build the business model traditionally. This is applicable if the startup fails to find the right business model with the first attempt. While many companies do stick with the same plan from the get-go, many also test and fail few times, before they settle down with a business plan. Of course, changing a business plan per se don't mean that the company is following a dual- or multi- business model, but it might suggest it.

As new businesses are formed and build, they tend to go through business model discovery, formation and building as the startup tests and builds the business. Traditionally these happen during launch and early growth phases. When the company pivots to a new direction in its early stage it might build the new model partially on top of the old business to maximize results with minimal efforts. This explains why some companies might try, test and support multiple business models simultaneously. Three companies interviewed are examples of these dual- and multi-

business models. Below are described their discovery and early growth phases and why they changed directions or support multiple platform models.

Case 3 started as a marketplace business but ran into difficulties as they discovered that their target clients didn't have a software that would support their journey to cloud and to join their e-marketplace. After the discovery the company pivoted its strategy to follow a SaaS strategy to provide enabling software for digital transformation. Now they sell the SaaS solution for the clients that enable them to join the marketplace. As the company expanded its offering, they have now two streams of income one from selling the SaaS and another from the e-marketplace as they get a cut from all the sales done there. Since this strategic change the company has gained a monopoly like situation in its market space in Finland.

Case 4 is still in its launch period, testing and building a business model and its business case. The company started with its focus on building a Social Networking Sites mainly for B2C users. But it had an e-marketplace function where users could buy professional help and professionals could showcase their work with lower entry barrier. Unlike traditional e-marketplaces that focus on efficiency, search functions and displaying alternatives and prices the company hasn't supported these but provided an e-marketplace function with a traditional SaaS monetization model. Moreover, they have embedded commercials and professional services into their Social Networking Sites tools again not following any typical platform model like the Social Networking Sites where ads would be clearly indicated but blurring the line between a discussion and ad. The main function is anonymous chat groups, where people can talk freely about problematic things and situations. A user can find and expand a conversation into a private format with a professional. This said, the e-marketplace isn't easy and efficient, but it enables low entry barrier. However, now the company has moved towards a SaaS model focusing on B2B markets as the market seems more lucrative and requires less capital than a e-marketplace model. The company hasn't given up any of their earlier functionalities, but still supports all of them. Moving to B2B markets and providing internal SaaS solutions for organizations have helped the company to improve its cash flow that the company has further used to developing the service and maintaining the current business. The company has secured some big deals but is still in a launch phase testing its business model especially in the B2B side. Although, the platform has rather complex business model, it might get even more complex as they consider licensing deals to expand on other markets within Asia.

Case 5 started as a SaaS with a freemium model targeting B2C market globally in 2014. However, they pivoted in 2017 towards B2B as the market seems more lucrative and due to the sensitive nature of their SaaS service which is also why they haven't benefited much from word of mouth. "One of the biggest successes of the company has also been one of the biggest hurdles in growth, around users experiencing shared humanity. This happened in B2C side as people shared very personal hardships, difficulties and learnings. As these public posts are semi-anonymous, most people didn't want their friends necessarily to find about them. As people don't tend to share their struggles around selflove in Facebook for instance. Still for most users the service is their personal secret, that they don't want to share with their social groups' as users explore and share about their vulnerable side. This Social Networking Sites model was too difficult to pull off to reach masses and make the business model work. The company changed into complete anonymity with B2B side. As the programs were completely anonymous and no company leader could track what individuals were choosing nor compare the progress. This has most likely reflected positively on the experiences. Employees engaged with far more softer topics than the client leadership had expected to. The company is happy with the new direction as almost 100% of the current revenue comes from B2B side. Moreover, the leadership first treated the business as a Social Networking Sites and tried to encourage public sharing and content creation that is typical for a Social Networking Sites which it was able to do in most part. The main surprise came from the fact that they weren't able to benefit from word of mouth and tap into user's personal networks and expand through them. As the company realized this, they changed the business model into a SaaS. The company still supports Social Networking Sites engagements but have moved more towards a typical SaaS business

model and is currently seeking to find more growth through B2B sales. The B2B experience has been built on top of the B2C platform, however that isn't optimal for the growth, cashflow and future, so the company is currently undergoing a huge reshaping around UX (user design) in its attempt to move more towards B2B and SaaS model.

5. DISCUSSION

This section discusses findings in the light of current literature highlighting how they support and agree as well as contradict and disagree on platform strategies with one another. The focus is kept in the proposed theoretical framework by this thesis illustrated in figure 9, that represents the key finding of the thesis introduced in the opening of findings and analysis chapter. Thus, answering to the research question set for this study: *what strategies platforms apply as they go in business and how they attempt to grow?*

5.1 Framework's contribution to platform strategy

The key problem with platform related strategy literature is that it often doesn't involve a lot of context around the suggestions it gives. Meaning that models and guides are either very specific and detailed without context or the discussion stays only on a high level. While the discussion might be beneficial on a scope of single factor or limited area, they tend to be difficult to connect with rest of the literature, concept and give both broad and more specified framework of the topic. Thus, the framework of this thesis is valuable as it has combined both high level concept of platform strategies and more specific tactics that companies can apply to execute them.

Although, there is little literature that has tried to answer the question set for this thesis, there is a lot of literature on platforms. Platform literature has been widely used to understand the concept and to be able to provide added value on the topic. Thus, the 12 strategies of the framework are heavily leaning on current literature on the concepts of e-marketplace (Oliver, 1990; Brunn, Jensen & Skovgaard, 2002; Eng, 2004; Scott & Scott, 2004; Standing et al., 2006; Tao, Chen & Chang, 2007; Evans & Schmalensee, 2010; Lee et al., 2010; Cusumano, 2011b; Hagiú & Spulber, 2013; Hagiú, 2014; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016; Strowel and Vergote, 2016; Wan et al., 2017; Thakur, 2019), software as a service (Focacci et al., 2003; Concha et al., 2010; Bibi, Katsaros, & Bozaniš, 2012; Lee, Park & Lim, 2013; Shuying, Shuai & Sun, 2013) and social networking sites (Gawer & Cusumano, 2008; Bergman et al., 2011; Cusumano, 2011a; Carpenter, 2012; Liu et al., 2012; Ullman, 2012; Hagiú & Spulber, 2013; Kwon, Stefanone & Barnett, 2014; Li, Liu & Li, 2014; Lee, 2014; Stefanone & Barnett, 2014; Park, Jun & Lee, 2015; Strowel and Vergote, 2016; Lim & Choi, 2017; Pornsakulvanich, 2017; Gao et al., 2018; Yang & Robinson, 2018). Consequently, the platform framework has firm grounds to build new knowledge on top of it.

While some authors have tried to further group platforms in a meaningful manner, the concepts haven't been much improved due to inconsistent and shallow targets. For instance, Hagiú and Spulber (2013) classified two-sided platform providers based on the free service, which they

offered. They coined six different subgroups in their model, but in comparison to this thesis' framework their model only covers 5/12 categories with much less consistency as described below in further detail.

Furthermore, their idea of e-marketplace platform is limited to only cover business driven platforms by "E-commerce sites (Amazon, eBay, Alibaba) provide market information and customer ratings" as well as "smart phone and tablet original equipment manufactureres provide first-party applications and e-commerce information (e.g., Apple's iPhone and iPad apps and App Store)" (Hagiu & Spulber, 2013). This classification disregards all consumer driven e-marketplaces that have grown to represent a definite part of our society. Furthermore, it groups together both online marketplaces as well as technology, that enables connecting to a marketplace, conceptually mixing the outcome and the mean together in an unfortunate manner.

Similarly, they cover SaaS only by focusing on platforms that are directed for independent users, where the value isn't produced in social context. While they further group these into three different kind groups, they never acknowledge their link to SaaS as they cover "video game console manufacturers provide first-party games (Microsoft's Xbox 360 game Halo, Sony's Playstation 3 game Gran Turismo, Nintendo's Wii Sports)" and "operating system vendors provide first-party software applications (Microsoft's Windows includes Internet Explorer and Windows Media Player and Google's Android includes apps such as Sky Map, Finance, and Places Directory)" and "search engines and Internet portals (Google, Bing, Yahoo!) provide search results (website links, maps, news, weather, entertainment, books, articles, images, video)" (Hagiu & Spulber, 2013).

Although, the authors have done a decent job in covering the first two categories the last is left so vague that it rather creates confusion than improves knowledge. However, a kind interpretation would be that they refer to people driven SNS that rely on existing networks "social networks such as Facebook provide network information (news feeds, games, digital gifts, email notifications, friend suggestions, information sharing, ability to comment, notifications from fan sites, and virtual currency such as Facebook Credits)" (Hagiu & Spulber, 2013), in which case they have only covered ¼ categories of the phenomenon. This ignores the authors reference towards "virtual currency", that arguably doesn't belong to SNS, but represents a socially dependent SaaS where any other user provides additional value to all users and this isn't dependent on Social Networking Sites.

Another subgrouping of platform business is introduced by Strowel and Vergote (2016) who created five subgroups of digital platforms based on the type of resources they grant access to. Their

logic only focuses on what is offered, disregarding how it is offered or the structure behind the offering. Given this it is no wonder, their subgroups provide little use for discussing platform strategies. While 2/5 of their groups are useful and support a more holistic view, perhaps by accident 3/5 of their groups create confusion rather than consistency to the platform discussion. While their method and outcome are little to praise for, they were able to cover 8/12 groupings vaguely, while 5/12 were somewhat useful and 3/12 could have been populated more meaningfully. Despite their grouping, it ignores the current importance of SNS in the platform discussion.

Consequently, their first group mixes $\frac{3}{4}$ subgroups of SaaS together with $\frac{1}{4}$ subgroups of SNS. While they named the groups as a) “**access to information** (or content) such as general search engines (e. g. Google, Bing) or specialised search engines (e. g. TripAdvisor, Yelp, Google Shopping, Kelkoo, Twenga); this category also includes other services granting access to a great variety of content, for instance maps (e. g. Google Maps, Bing Maps) or more creative content such as news aggregators (e. g. Google News, Twitter) or video platforms (e. g. YouTube, Dailymotion)” (Strowel & Vergote, 2016).

Their second group is b) “**access to personal data** and other ‘private’ content such as the social networks (e. g. Facebook, LinkedIn)” (Strowel & Vergote, 2016). This group combines socially dependent SaaS together with people driven SNS. Meaning that they combine extremely different business logic together since they share a single variable “access to personal data”. If this logic is applied, publishing listings of new graduates online could also be grouped here as well as many intra pages that give access to a company’s workers information such as OurWorkDay. While these kind of listings around a single parameter can be made, they fail to move the conversation on and to indicate something valuable. This is the main flaw of the authors here. Their third grouping is just as vague being c) “**access to a workforce or to the expertise or intellectual capabilities** of people (TaskRabbit, Upwork); the ‘task platforms’ raise specific issues with regard to labor” (Strowel & Vergote, 2016).

The two more accurate groupings are d) “**access to money or capital** such as crowdfunding sites (e. g. Kickstarter, Gofundme) or payment systems (e. g. PayPal, Mastercard, Bitcoin)” (Strowel & Vergote, 2016). That combine 2/4 SaaS groups into one discussing both independent and socially dependent groups. Next the authors combine 3/4 subgroups of e-marketplace, combining both business driven sides together and then indicating that they are same as service offering-based consumer driven e-marketplace. As indicated by them e) “**access to goods and/or services** offered by third parties such as online markets (e. g. Amazon, eBay, Alibaba, Allegro, Booking.com) or ‘sharing economy’ platforms (e. g. Airbnb, Uber, BlaBlaCar); here, a great variety of goods and/or

services is offered. It is not completely clear whether the new ‘sharing economy’ platforms should be treated differently from the already known online markets” (Strowel & Vergote, 2016).

Although, the two models by Hagiu and Spulber (2013) and Strowel and Vergote (2016) aren’t in line with the framework proposed by this thesis. It shows, similarity in thinking that platform strategies and groupings are understood too little and that it is difficult to try to capture it and fill this knowledge gap. Even when the two frameworks fail to address multiple critical business decisions to help create specific, measurable, achievable, relevant and time-bound goal achievement by platforms. They also lack consistency and provide little answers for business decision makers when discussing how to start or grow a platform business. Hence, this thesis answers these questions much more effectively with its 12 categories by the suggested framework. However, the strength of the framework relies within three well known concepts on the literature, that seem to be mutually exclusive being (1) e-marketplace, (2) software as a service and (3) social networking sites as well as on top of authors that pursue the difficult questions and suggest frameworks, even if they are proven incorrect in the future.

5.2 Framework’s contribution to platform types

Since the recent success of e-marketplace platforms, the topic has received more attention and is covered within the platform literature much more than many other topics. Given this, the new insights that this thesis can bring precisely towards understanding e-marketplaces is much more limited than towards building knowledge within the other concept areas such as SaaS, SNS and platform strategies. However, including e-marketplaces within the scope of this thesis has been a must as the aim has been to contribute on the topic meaningfully. If e-marketplace platforms had been left out due to the small contribution that can be made in this specific domain, the potential relevance when answering the research question, *what strategies platforms apply as they go in business and how they attempt to grow*, had also been less significant. Building a holistic understanding of what strategies these companies use demand, that the most topical part is included to the discussion. Although, the strategies and subcategories of e-marketplaces aren’t exactly new, but rather well confirmed and supported by the literature it gives a positive indication that the topic might be rather accurately reflecting the reality. Similarly, if this is a good way to form and indicate strategies to one platform area it might work also for other areas of the concept. While, the framework isn’t groundbreaking around e-marketplace platforms it is able to foster and support current thinking as well as create structure around the topic that benefits the community. Since e-marketplaces are firmly covered in the literature, this has also helped and guided the work, helping to understand relevant topics and building structure to the work with regards of less established

SaaS and SNS. In addition, this thesis has expanded the typical discussions points from e-marketplace platforms to include SaaS and SNS and taken stand on whether those are relevant and helpful also when researching the other platform types.

Although it is evident that SaaS solution play a clear part in platform business (Gawer & Cusumano, 2008; Cusumano, 2011b; Hagi, 2014; Edelman, 2015) there isn't much literature on how SaaS platform strategies ought to be managed. Rather the literature focuses on platform leadership or multisided platforms (Gawer & Cusumano, 2008; Cusumano, 2011b; Hagi, 2014; Edelman, 2015) or to discuss SaaS from a non-strategic angle (Focacci et al., 2003; Concha et al., 2010; Bibi, Katsaros, & Bozaris, 2012; Lee, Park & Lim, 2013; Shuying, Shuai & Sun, 2013). The areas where these literatures overlap are rather limited. Thus, this thesis has been able to contribute a lot to this area. Offering a framework where SaaS business models have been divided into four strategies help the businesses to direct their resources into building meaningful efforts in making the platform succeed. The framework has especially increased the understanding of socially dependent SaaS as these have been previously very little understood. Similarly, the division between four sub-categories of SaaS is unique for this thesis and has improved the understanding of SaaS significantly. Furthermore, as social factors are relevant in many platform models, this 12 point strategic division of the theoretical framework has helped to highlight what social factors play a crucial role in each platform type or whether social factors are insignificant to them. This has been a significant improvement to the whole platform discussion. Especially since authors like Hagi and Spulber (2013) and Strowel and Vergote (2016) have simply grouped platforms, that create social value into one. Disregarding the fact, that these platforms might not have anything else in common.

Consequently, one of the greatest values of this thesis might be directed into how to understand SNS. Since SNS literature doesn't cover much of the SNS as being a platform business model (Cusumano, 2011a; Edelman, 2015) this thesis has advanced the idea on the topic by analyzing platform businesses as part of the platform phenomenon. As well as to define and separate unique features of SNS as well as to bring clarity on SNS strategies as previous literature has dependent on few cases on the matter. Especially the information driven side of SNS has not been discussed and even the people driven parts have been discussed as one. Meaning, that the four sub-categories of SNS within this theoretical framework is unique for this thesis and has improved the understanding of SNS significantly. More importantly, SNS hasn't always been distinguished as a separate concept, worthy of being discussed on its own. Rather it has been covered as one with e-marketplace or SaaS or under yet another definition or as undefined platform topic. Thus, it is high

time to show that SNS is worthy of its own discussion, the phenomenon is evident in business and academia should improve how the topic is captured and discussed in the future.

Therefore, this thesis suggests that both SNS and SaaS should be treated as separate concepts. Thus, grouping SNS and SaaS as a single group is problematic as it tends to dismiss both, not recognizing their unique features while misleading the reader. Furthermore, it creates confusion and bad concepts within all platform literature if the theories over simplify all uniqueness into one category, something that has happened a lot in multisided platform literature. Instead of each platform type having a clear focus on themselves, many have been mixed together with e-marketplace type. If the aim is to produce precise and highly accurate knowledge, this kind of conceptual mixing cannot take place. Instead clear boundaries between the platform types need to be put in place and suitable terms to be utilized to discuss the matters. This is where this thesis builds value, as it has built clear boundaries, structures and both named and captured the unique features each platform type represents and how they act in the market. For the sake of good research and business decision making these three platform types and the 12 strategies they represent need to be separated and respected as similar, but different platform strategies. While the thesis doesn't elaborate on all possible angles on each 12 strategies, they are well formed and the mere fact that those have been separated and identified is valuable on its own as it strengthens each concept and their standalone value to the field. Moreover, the insights of the higher level six strategies developed by the two-layered theoretical framework are already meaningful and new on how both SNS and SaaS strategies can be meaningfully discussed and developed. Furthermore, this kind of separation of the three platform models as well as their 12 strategies within the improved three-layered theoretical framework will allow future researchers to go deeper into these individual concepts and strategies highlighting their unique features more accurately.

5.3 Framework's contribution to chicken or egg dilemma

Just like many authors have suggested strategies for platforms on how to avoid a chicken-and-egg problem (Brunn, Jensen & Skovgaard, 2002; Evans & Schmalensee, 2010; Hagi, 2014; Parker, Van Alstyne & Choudary, 2016), the suggested framework by this thesis is also contributing to that discussion. While the 12 strategies seek to offer specific focus points on what value to create and for what audience it also describes a more limited platform frame under which each platform should focus within. Thus, the framework provides both focus areas and limits where platforms should focus their efforts and resources towards.

While the existing literature has been eager to hint how to avoid a chicken-and-egg problem (Brunn, Jensen & Skovgaard, 2002; Edelman, 2015; Parker, Van Alstyne & Choudary, 2016), the

suggestions offered have included little context around where, how and why something might work. Similarly, they have dismissed what other factors might be tied to the same concept as well as to illustrate how those decisions might influence the platform more conceptually. While the suggestions seem to be legitimate and reasonable, they provide little help to business decision makers while being loosely understood and tied to one another. Thus, the framework offered here adds a lot value both to academia and businesses as it ties the concepts more closely to one another and elaborates on where to focus depending on the platform type and business case.

Although, opening the chicken-and-egg problem is valuable, the fact that it is done in wider context is the greatest addition this thesis provides to this discussion. Furthermore, the fact that the topic is discussed in platform level, instead of e-marketplace (Brunn, Jensen & Skovgaard, 2002), platform leadership (Gawer & Cusumano, 2002; Gawer & Cusumano, 2008; Lee et al., 2010), multisided platform (Hagiu, 2014; Parker, Van Alstyne & Choudary, 2016; Wan et al., 2017) or digital platform (Edelman, 2015) is new in itself. This more inclusive approach to the topic highlights the importance of gaining first users in all platform types and to help platform companies to identify themselves as platforms and further to think about the kind of platform model they belong to. As these weren't self-evident factors with the interviewed companies nor with all of the 70 platforms tested as they didn't necessarily identify themselves as a platform. Moreover, it seems that when there has been internal confusion about these matters, they have hindered the platform from realizing its full potential as resources have been allocated without a clear purpose and strategy.

Thus, a strong advice by this thesis, is to choose a key target group and seek to satisfy this group's needs before seeking to facilitate other needs. This will simplify the difficult decision-making equation. Simultaneously, this is likely to be more cost-efficient strategy. Hence this thesis argues, that although authors like Edelman (2015) and Parker, Van Alstyne and Choudary (2016) have been suggesting, that chicken or egg dilemma is a great challenge for many platforms it seems to overcomplicate things. Afterall, the question should nearly be who is the key customer for the platform, rather than seeking to answer how to facilitate multisided market and who to onboard first? While the questions might look merely the same the former is much simpler than the latter. A shopping center's main concern when attracting clients shouldn't be how to attract businesses, consumers, maintenance supply, public transportation and other services. Rather they should be focused on how to attract businesses to their location. Once the businesses have been attracted consumers will follow that will further attract maintenance supply, public transportation and other services to the area. Similarly, platforms need to understand the business they are in and who is their key customer. A single group may drive none, few or many to join the platform as of

consequence. Thus, it is vital for businesses to understand where they belong and what social factors might play towards their platform. The thesis contributes to this by giving six clear options on who the key user might be while complimenting this information with 12 value offerings for their key consumer, two for each group. As well as discussing the social factor that is likely to influence people to join their platform.

6. CONCLUSIONS

This section summarizes main findings discussed in the analysis and findings chapter. After which it discusses contributions of the thesis, limitations of this study and future research topics that could further improve the understanding of platform strategies.

6.1 Main Findings

The purpose of this study was to build clarity and identify platform businesses strategies. Thus, answering to the research question set for this study: *what strategies platforms apply as they go in business and how they attempt to grow?* In order to answer this, understanding of the following areas was first acquired 1) what platform strategies companies have adopted and 2) what might differentiate them from others? Consequently, the theoretical framework deriving from the analysis of this thesis proposes key components that form a platform strategy building a three-layered theoretical framework separating and suggesting 12 unique platform strategies for launch and multiple vertical and horizontal expansion strategies that can be applied for attracting further growth towards the platform. Thus, the theoretical framework of this thesis illustrates the answer towards the research question set for this study.

Based on the findings of this study, it is clear, that companies adopt different platform strategies. While many of the strategies have clear similarities, they are also unique at a factor level. The 14 interviews enabled identifying three main groupings of strategic decision forming three mutually exclusive platform types as e-marketplace, Software as a Service and Social Networking Sites. Thus, forming the base for the theoretical framework representing the key finding of this thesis. The platform type explains the high-level business model, that the groups represent and the key boundaries under which these platforms must operate in. These three groups were further split into six more specific categories explaining to greater detail the key target groups each model could follow forming a two-layered theoretical framework. As the new theory of six platform strategies were further tested with 70 existing platforms an even further layer of differentiating factors was discovered. Leading to a discovery of 12 unique platform strategies that further created boundaries and opportunities when pursuing one of the 12 value offerings strategies. This value offering strategy would be utilized when forming platform's MVP at launch as well as to understand differences on how complimenting decisions might influence their platform strategy. These acknowledgements and guiding factors represent the improved three-layered theoretical framework created by this thesis.

E-marketplace platforms focus on connecting supply and demand in an efficient way to make discovering, finding, comparing and trading both physical goods and services as simple and

enjoyable as possible. Thus, the companies emphasize succeeding to reinforce positive network effects and connectivity as means to bring the different parties together more cost efficiently and conveniently. Depending on the offering, marketplaces can be further divided into consumer- and business-driven models dependent on the key target group they serve. While the consumer driven e-marketplace tends to focus on selling goods and services, that majority of population can supply and demand. In contrast the business driven focuses on more specialized goods and services or capital-intensive businesses models, serving needs that most cannot supply. Both groups are further divided based on product- or service-based value offering to unveil the niche these companies tend to focus in their early days when creating an MVP. While e-marketplaces focused on service offering often have an advantage when they operate locally as they can meet with potential buyers, discuss details and often operate under the same cultural and linguistic frame making the customer often feel more secure. On the contrary, e-marketplaces focused on product offering often have an advantage when they operate globally as they tend to have an advantage over price and variety of offering. However, the cost related to globally operating e-marketplace can be more difficult to manage. On top of these strategic decisions a common complication these companies have faced is how to successfully build a user-friendly design, powerful search functions and other means for the user to find the most accurate option for them while putting the least effort in discovering it. Since the design is an integral part of how well value is enabled the platform owner tends to consider the entire user journey from searching to purchasing to delivering and follow-up. While this is true for all e-marketplaces it is more so for product oriented once and perhaps even more essential for globally operating e-marketplaces.

Software as a Service (SaaS) refers to a platform model, where the platform focuses on improving efficiency and automating back-office functions. These are often sold as a technical solution that modernized old ways of doing things, such as digitizing and automating functions through a cloud service. These enable easy access regardless of the user's device and location, but also may provide access for multiple users simultaneously improving coworking possibilities and supporting virtual teams. Based on the social and networking effects SaaS was further split into socially dependent and independent key user target groups that determine how much the platform is enabled to benefit from positive network effects in user acquisition. When new users are socially dependent on others using the service, they are more likely to spread it through their own network. This leads to the last splitting factor of SaaS strategic decisions, being the value offered by an MVP. The MVP considers whether or not the user is dependent on his or her network being part of the SaaS or simply any user being connected to the network. The second stream of SaaS strategies follow independent pattern,

meaning that there is no link or a vague link among the popularity between the SaaS and the value experienced by its key users. The user needs to simply gain access and learn how to use the service. These tend to be more technology focused platforms. These are further divided into standard and personalized platforms value offered by an MVP. Personalized SaaS might be shaped prior delivery by the creator, or the service might learn the individual preferences of the user during usage changing the service based on the user's needs. In comparison standard offerings appear always the same for all the customers and cannot create significant added value via personalized value offering to the customer.

Social Networking Sites (SNS) refer to a platform model, where the platform focuses on building connectivity, networks and enabling innovative usage by the users. This platform type enhances individual contributions and connecting both people and things. The group is further divided into information and people driven SNS based on the key target group the SNS has. People driven networks grow from initial social group that others wish to connect to enabling positive network effects in user acquisition. These groups often evolve around established Social Networking Sites, local communities, events, hobbies or other interest groups. They can be further divided into SNS offering value to its users by connecting them with their current networks or alternatively seeking to expand the network of the user, thus being the MVP of the SNS. If the latter is the MVP the SNS might connect people based on their common interests along other factors. The alternative key target group for SNS is information driven. These SNS are built around information, knowledge and personal experiences. They can be further divided into two groups of primary- or secondary data being the value offering for the chosen target group. The primary-data is focused on personal experiences, opinions and views within a sociocultural context. The secondary-data is keener on knowledge and information paying little or no value for personal experiences when seeking satisfying knowledge. This focus on secondary data, means that information has value once it is aggregated. Thus, a single opinion is irrelevant in this SNS type while the value is created on representing consensus or average of the general population involved in the platform as well as their experiences and opinions when aggregated. Meaning that the value produced by this type of SNS becomes more valuable the more people engage with it and it benefits from the network effects. Among the three platform types Social Networking Sites is probably the most difficult when it comes to realizing its value, monetizing it and acquiring a cash flow it also has the most non-profits among all the three platform types. Consequently, many of these services rely on advertising income or monetizing on the more questionable manner by selling user's information forward.

In terms of expansion strategy, the platform following a vertical expansion strategy seem to follow one of the 12 subcategories described above when creating their MVP at launch. Later, when companies choose to expand, they choose between vertical and horizontal expansion strategy. If the company chooses to enter new market by adopting horizontal expansion strategy, they keep the value offering the same while slightly varying with the key target group. Mainly meaning the location and possibly other sociocultural modifications and heavier marketing focus that might be associated with a market entry strategy. Whereas, if the company chooses to expand their offering by vertical expansion strategy, they are likely to expand their value offering for the same or similar target group. Thus, the company keeps its initial platform type as e-marketplace or SaaS or SNS as well as the MVP while it increases its value from ¼ areas to 2/4 areas within the value offering targeting everyone falling for their key target group instead of half of them. Meaning they start blending the initial focus into the closest subcategory representing instead of one of the 12 categories one of the six. Meaning slight expansion of the initial strategy that they started with, but still very much aligned with it. As companies mature and extend their offering, they tend to stick with one of the six subcategories. Some successful companies expand even further, especially when they have resources or start facing maturity, they tend to start complimenting new platform that has the potential of growing their business further. When this happens, they start the strategic process all over again, seeking for new business opportunity to exploit with a new MVP and a new value offering based on the 12 strategic suggestions. Thus, they aren't any longer limited to the same platform type they originally chose. Instead, they might grow into a completely new area as Facebook has done with its SNS focus and additional new platform within e-marketplace.

Although, platforms mainly follow e-marketplace, Software as a Service or Social Networking Sites strategy, some of them try to cover areas from more than one. Companies that attempt this strategy are mainly incumbents that are involved in horizontal integration covering multiple industries and attempting simultaneously multiple platform projects and so follow more than one of the strategic categories. Yet, if each platform is treated as a single entity, incumbents should also benefit and utilize the framework discovered in this thesis and apply it for their benefit. A second group of potential dual- or multi-platform strategies are early phase startups that haven't yet found a scalable business model but explore their options. The latter group tends to settle for a single platform strategy or alternatively seek growth with a dual-strategy balancing between resource split when seeking growth. If a startup keeps its dual-strategy before moving to growth it risks splitting focus and resources in too many attempts that might cause the business to fail. Therefore, it is encouraged do have a specific focus and select only one of the 12 strategies from the framework to follow.

Having a single strategy will improve startups potential to successfully tap into a market and uncover positive network effects and enable them to grow and scale fast enough.

Lastly, it seems rather evident based on this study that it is possible to succeed as a platform business even with some bad luck, mistakes, pivots and early failures. Simultaneously, no matter how successful your business currently is, it might not lower your risk nor uncertainty level for future success. In fact, due to the fast-paced and volatile nature of the industry, platforms might be able to both fail and thrive in a shorter time loop than most other businesses.

6.2 Contributions, limitations and future research

The framework is radical and groundbreaking in the sense that there aren't many who have attempted to map different platform types and their strategies in a mutually exclusive manner. Instead, they have provided rather wide, but scattered pieces of information with regards to one platform type being the most common scope. Whereas, only few have mapped platforms types and even then, with only little consistency and logic. Moreover, none of the previous papers have been able to be precise, extensive and mutually exclusive in their platform type groupings. Furthermore, none of the papers concerned about strategy have been able to give clear indications of which models to use in combination with each other leaving the business owner with multiple decisions at hand, but no guideline to follow. This is the single biggest flaw in current strategy literature amongst platforms as they lack concrete and holistic strategic help towards the business decision making. Thus, this thesis is extremely valuable to both academia as well as businesses, as it builds a rather wide and holistic theoretical framework through which platform businesses can be viewed and discussed in the future. Therefore, the framework itself suggests multiple interesting study areas for the future wheatear the focus would be on understanding on of the platform strategies of e-marketplace, Software as a Service or Social Networking Sites or their 12 subcategories, the 70 companies categorized or perhaps the link between maturity and the strategic decisions made later in the platform life cycle.

While the theoretical framework of this thesis is unique, the structure and understanding it creates around platform types and their strategies is significant. Furthermore, the way different factors have been discussed and included to the framework creates an extremely valuable insight as it makes the framework relevant to most papers of the field, tying majority of the past platform literature more closely to one another. Thus, increasing most papers value and relevance to the rest of the field as now their detailed discussion topics are linked to the bigger discussion and bigger variety of platform types instead of the narrower original focus these papers had. This holistic approach of the paper has been much needed as it brings unity and context to the multiple papers within the field.

While many authors have discussed few factors, those have only been loosely connected to the platform type or strategy. Hence, there is a lot of knowledge around single factors and how to enable or benefit from it, but most of the knowledge is scattered and inconclusive for business decision making. Meaning, that there is an opportunity to further organize past literature to form even more rounded, holistic and significant conclusions on how each factor might behave in a different platform type and its strategy. Alternatively, a multi case study focusing on a single platform type and their different strategic variations across the life cycle would be a preferable method to confirm which factors are in fact the most important once given the target focus group and MVP of each platform. Once the factors are better understood in relation of the platform and each strategy a quantitative method could test and confirm whether the main body of literature based upon qualitative case studies has been able to accurately model the platform reality.

Although, the framework supports and further structures the existing knowledge around e-marketplace model and its strategy it also shapes academic discussion towards a more rounded and comprehensive understanding of this area. While it seems that the basic understanding of e-marketplace platforms has matured especially in relative terms when compared towards any other platform type thus suggesting that the focus of the field can either be directed towards a more in-depth strategic factor analysis of e-marketplaces or creating and enhancing understanding of other platform strategy types that have remained nearly untapped. Consequently, this theoretical framework is ground breaking for the current understanding of both SaaS and SNS platform models and strategies bringing the level of understanding of these concepts towards the level they deserve. As both platform types have been looked upon and their significance to the whole platform discussion forgotten or ignored in most studies. This means that the strategic understanding of these two concepts are yet forming and researchers can rather easily find new venues to contribute in while creating bigger impact though their findings for both academia and businesses in the field.

While this thesis has put on effort to find most popular terms to discuss the topic, it has been done because of the inconsistent and varying terminologies utilized in the field. Meaning that consensus is yet to be reached to settle common terms. Thus, this thesis encourages others to utilize these same terms in order to bring consistency and to move the discussion from words to meaning and stabilize the field. However, studying past studies before conducting own research isn't without a compromise although expected. While the accumulated knowledge helps to increase relevance and significance of the research it can also restrict and hinder the creative conclusions otherwise possibly drawn from the analysis. Given this, the past papers studied prior conducting the study might have guided the thinking and the suggestions made based on the findings. As the theoretical

framework is derived from companies operating in the field, it also follows the key ideas found from the literature. Although the latter might be coincidence it can also be unintentionally done and misleading. Suggesting, that the sample could have resulted towards different conclusions drawn from them if the researcher's knowledge of the platform studies had been smaller. Thus, the resemblance between major studies and the framework suggested by this thesis can mean multiple things. Just like the similarities between independent papers can mean that maturity is about to be reached among some areas like identifying some key factors of platforms as well as e-marketplace platform concept. However, it can also mean researchers inability to question and invalidate past conclusions or the difficulty they face when seeking to do so. If the theoretical framework of this paper is flawed in this manner, it is most likely evident within e-marketplace area of the framework.

For businesses, this research provides a theoretical framework that can be applied to estimate one's own platform strategy or utilizing it when creating a new platform to have a strategic guide to follow. This framework might also help to understand the competition, different players and their strategic advantages and vulnerabilities better. Most of all, this brings transparency and clarity to the industry that is comparatively young regardless of the fact, that there are companies that have operated for few decades successfully. For startups, this might bring focus and structure on understanding basic principles on what concepts belong together and how these forces are intertwined like in the case of network effects and growing the platform and being able to monetize it. With regard of platform companies, this paper might help them to weight different options on how and from where to seek growth from, between expanding offering or supporting wider geographical area.

While, the theoretical framework is derived from companies operating in the field, the sample size might have limited or skewed the results. Since, the sample size of 14 cases was used to generate the two-layered theoretical framework a bigger sample with bigger internal variations could have resulted towards a different framework. While the additional sample of 70 platforms did build a new third layer to the theory an addition of 200 platforms might have built even more complexity to the framework. While the framework does capture well Western platform realities it dismisses both the Global South and Oceania completely while having a very limited coverage of any Eastern platforms in the sample. Thus, the sample doesn't capture all market realities and leaves the reader wonder if the theoretical model is universally applicable. While, the markets covered is a concern, a greater sample could uncover even more. Hence, generating new research on locally or globally operating platform types could foster, expand or invalidate the points made about the 12 platform strategies and their similarities and differences. Thus, illustrating a venue for further research on

each platform type to discover how the strategic decisions vary between a local and global market player.

When the two-layered theoretical framework of six platform strategies was tested by allocating 70 companies to one of the six clusters. The test could have ended differently if two different researchers had done independently the test or the framework. Similarly, if the starting point had been to cluster 70 companies from platform field, the frame could have been different. Interestingly, past two studies that had this starting point for platform clustering, were only partially in line with the three-layered theoretical framework this thesis created while arguing for the invalidation of the two past studies. Moreover, as the analysis of 70 companies was heavily based upon the researcher's own user experience of each platform, the analysis could have been more insightful, if people working for these companies had been interviewed or utilized for the analysis. Thus, opening yet another alternative for future research area to understand platform strategies more fully.

7. REFERENCES

- Adobe Creative Cloud (2014). The Story Behind Adobe Illustrator (Part 1 of 3) | Adobe Creative Cloud. YouTube. Available at: https://www.youtube.com/watch?v=1gaCKT_Ncdk [Accessed 27 Aug. 2019].
- Alstyne, M. W. V., Parker, G. G. and Choudary, S. P. (2016) 'Pipelines, Platforms, and the New Rules of Strategy', *Harvard Business Review*, 94(4), pp. 54–62. Available at: <http://search.ebscohost.com.libproxy.aalto.fi/login.aspx?direct=true&db=bth&AN=113934414&site=ehost-live> (Accessed: 26 April 2019).
- Al Jazeera (2010). WikiLeaks vs the Pentagon. [online] Al Jazeera. Available at: <https://web.archive.org/web/20140209163305/http://blogs.aljazeera.com/blog/americas/wikileaks-vs-pentagon>
- Ansari, A. et al. (2018) 'Building a Social Network for Success', *Journal of Marketing Research (JMR)*, 55(3), pp. 321–338. doi: 10.1509/jmr.12.0417.
- BBC NEWS (2005). EBay to buy Skype in \$2.6bn deal. [online] BBC NEWS. Available at: <http://news.bbc.co.uk/2/hi/business/4237338.stm> [Accessed 27 Aug. 2019].
- Bergman, S. M. et al. (2011) 'Millennials, narcissism, and social networking: What narcissists do on social networking sites and why', *Personality & Individual Differences*, 50(5), pp. 706–711. doi: 10.1016/j.paid.2010.12.022.
- Berman, S.J., (2012), "Digital transformation: opportunities to create new business models", *Strategy & Leadership*, Vol. 40 Iss 2 pp. 16 – 24
- Bernard, Z. (2018). Everything you need to know about Bitcoin, its mysterious origins, and the many alleged identities of its creator. [online] Business Insider. Available at: <https://www.businessinsider.com/bitcoin-history-cryptocurrency-satoshi-nakamoto-2017-12?r=US&IR=T> [Accessed 27 Aug. 2019].
- Bibi, S., Katsaros, D. & Bozanis, P. (2012). Business Application Acquisition: On-Premise or SaaS-Based Solutions? *IEEE Software*, 29(3), pp. 86-93.
- Boudreau, K. & Lakhani, K. 2009, "How to Manage Outside Innovation", *MIT Sloan Management Review*, vol. 50, no. 4, pp. 69-76.

- Brand Finance Global 500 (2019). The annual report on the world's most valuable brands 2019. January 2019. [online] Brand Finance Global 500, pp.5-11. Available at: https://brandfinance.com/images/upload/global_500_2019_locked_4.pdf [Accessed 24 Apr. 2019].
- Brunn, P., Jensen, M. & Skovgaard, J. (2002). e-Marketplaces: : Crafting A Winning Strategy. *European Management Journal*, 20(3), pp. 286-298.
- Cantamessa, M., Gatteschi, V., Perboli, G. & Rosano, M. 2018. Startups' Roads to Failure. *Sustainability*, 10(7), . doi:10.3390/su10072346
- Carpenter, C. 2012. Narcissism on Facebook: Self-promotional and anti-social behavior. *Personality And Individual Differences*, 52(4), pp. 482-486.
- Chmielewski, D. (2013). Col Needham created IMDb. [online] Los Angeles Times. Available at: <https://www.latimes.com/business/la-xpm-2013-jan-19-la-fi-himi-needham-20130120-story.html> [Accessed 27 Aug. 2019].
- Church, Z. (2017). Platform strategy, explained. [online] MIT Sloan. Available at: <https://mitsloan.mit.edu/ideas-made-to-matter/platform-strategy-explained> [Accessed 4 Mar. 2019].
- Concha, D., Espadas, J., Romero, D., Molina, A. (2010). The e-HUB evolution: From a Custom Software Architecture to a Software-as-a-Service implementation. *Computers in Industry*, 61(2), pp. 145-151. <https://doi.org/10.1016/j.compind.2009.10.010>.
- Curran, C., Bröring, S. & Leker, J. 2010, Anticipating converging industries using publicly available data.
- Cusumano, M. (2011b) The platform leader's dilemma. *Communications of the ACM*, 54(10), pp. 21-24.
- Cusumano, M. A. (2011a) 'Technology Strategy and Management Platform Wars Come to Social Media', *Communications of the ACM*, 54(4), pp. 31–33. doi: 10.1145/1924421.1924433.
- Cusumano, M.A. & Gawer, A. 2002, "The elements of platform leadership", *MIT Sloan Management Review*, vol. 43, no. 3, pp. 51-58.
- Desjardins, J. (2016). Chart: The Largest Companies by Market Cap Over 15 Years. [online] Visual Capitalist. Available at: <http://www.visualcapitalist.com/chart-largest-companies-market-cap-15-years/> [Accessed 24 Oct. 2018].

- Desjardins, J. (2017). Chart: Ranking the World's Most Valuable Brands. [online] Visual Capitalist. Available at: <https://www.visualcapitalist.com/chart-valuable-brands-world/> [Accessed 24 Apr. 2019].
- Dufva, M., Koivisto, R., Ilmola-Sheppard, L. & Junno, S. 2017, "Anticipating Alternative Futures for the Platform Economy", *Technology Innovation Management Review*, vol. 7, no. 9, pp. 6-16.
- Duysters, G. & Hagedoorn, J. (1998) Technological Convergence in the IT Industry: The Role of Strategic Technology Alliances and Technological Competencies, *International Journal of the Economics of Business*, 5:3, 355-368, DOI: 10.1080/13571519884431
- Edelman, B. 2015. How To Launch Your Digital Platform: A Playbook For Strategists. *Harvard Business Review*, 93(4), pp. 90-97.
- Eisenhardt, K. M. (1989) 'Building Theories from Case Study Research', *Academy of Management Review*, 14(4), pp. 532–550. doi: 10.5465/AMR.1989.4308385.
- Eisenhardt, K. M. (1991) 'Better Stories and Better Constructs: The Case for Rigor and Comparative Logic', *Academy of Management Review*, 16(3), pp. 620–627. doi: 10.5465/AMR.1991.4279496.
- Eisenmann, T., Parker, G. & Van Alstyne, M. (2008). Opening Platforms: How, When and Why?. *Platforms, Markets and Innovation*. 10.2139/ssrn.1264012.
- Eng, T. 2004. The role of e-marketplaces in supply chain management. *Industrial Marketing Management*, 33(2), pp. 97-105.
- Evans, D. & Schmalensee, R. (2010). Failure to launch: Critical mass in platform businesses. *Review of Network Economics*, 9(4), p. doi:10.2202/1446-9022.1256
- Focacci, L., Mockler, R.J., Gartenfeld, M.E. & Dologite, D.G. 2003, "How to choose an ASP: Selection guidelines", *Information Management & Computer Security*, vol. 11, no. 2-3, pp. 67-73.
- Fortune. (2019). Fortune Global 500 List 2019: See Who Made It. [online] Available at: <http://fortune.com/global500/list/> [Accessed 13 Jul. 2020].
- Fox-Wolfgramm, S. J. 1997. Towards developing a methodology for doing qualitative research: The dynamic-comparative case study method. *Scandinavian Journal of Management*, 13(4), pp. 439-455.

- FXSSI. (2019). Most Valuable Companies in the World - 2019. [online] Available at: <https://fxssi.com/top-10-most-valuable-companies-in-the-world> [Accessed 24 Apr. 2019].
- Gannes, L. (2009). Dropbox Raises \$7.25M, Crosses 3M Users. [online] GigaOm. Available at: <https://gigaom.com/2009/11/24/dropbox-raises-7-25m-crosses-3m-users/> [Accessed 27 Aug. 2019].
- Gao, H. et al. (2018) 'Social Media Ties Strategy in International Branding: An Application of Resource-Based Theory', *Journal of International Marketing*, 26(3), pp. 45–69. doi: 10.1509/jim.17.0014.
- Gawer, A. & Cusumano, M.A. 2008, "How Companies Become Platform Leaders", *MIT Sloan Management Review*, vol. 49, no. 2, pp. 28-35.
- Gawer, A., & Cusumano, M. A. (2014). Industry platforms and ecosystem innovation. *Journal of Product Innovation Management*, 31(3), 417–433.
- Goodwin, T. (2015). The Battle Is For The Customer Interface. [online] TechCrunch. Available at: <https://techcrunch.com/2015/03/03/in-the-age-of-disintermediation-the-battle-is-all-for-the-customer-interface/> [Accessed 26 Apr. 2019].
- Hacklin, F., Battistini, B., & Von Krogh, G. (2013). Strategic choices in converging industries. *MIT Sloan Management Review*, 55(1), 65-73. Retrieved from <https://search.proquest.com/docview/1438818892?accountid=27468>
- Hagiu, A. & Spulber, D. (2013). First-Party Content and Coordination in Two-Sided Markets. *Management Science*, 59(4), pp. 933-949. <https://doi.org/10.1287/mnsc.1120.1577>
- Hagiu, A. 2014, "Strategic Decisions for Multisided Platforms", *MIT Sloan Management Review*, vol. 55, no. 2, pp. 71-80.
- Interbrand. (2017). Best Global Brands. [online] Available at: <https://www.interbrand.com/best-brands/best-global-brands/previous-years/> [Accessed 24 Apr. 2019].
- Jeday, N. and Adobe Systems Inc. (1993). Paperless: Tools resurrect hope for paperless office concept. *InfoWorld*, [online] 14 Jun., p.24. Available at: https://books.google.fi/books?id=QDsEAAAAMBAJ&pg=PA24&lpg=PA24&redir_esc=y#v=onepage&q&f=false [Accessed 27 Aug. 2019].

- Kauppalehti (2015). Digital Fabric Oy | Yritys- ja taloustiedot | Kauppalehti. [online] Tärkeimmät talousuutiset | Kauppalehti. Available at: <https://www.kauppalehti.fi/yritykset/yritys/digital+fabric+oy/2688054-4> [Accessed 27 Aug. 2019].
- Kauppalehti (2019). Wolt Enterprises Oy. [online] Kauppalehti. Available at: <https://www.kauppalehti.fi/yritykset/yritys/wolt+enterprises+oy/2646674-9> [Accessed 27 Aug. 2019].
- Keynes, J. (1930) 'Economic Possibilities for our Grandchildren' In: (1963) *Essays in Persuasion*. New York: W.W.Norton & Co. pp. 358-373.
- Kwon, K. H., Stefanone, M. A. and Barnett, G. A. (2014) 'Social Network Influence on Online Behavioral Choices: Exploring Group Formation on Social Network Sites', *American Behavioral Scientist*, 58(10), pp. 1345–1360. doi: 10.1177/0002764214527092.
- Lamberti, L. & Lettieri, E. 2011, *Gaining legitimacy in converging industries: Evidence from the emerging market of functional food*.
- Lang, A. (2015). Why is Expedia Called Expedia? [online] *Rewind & Capture*. Available at: <https://www.rewindandcapture.com/why-is-expedia-called-expedia/> [Accessed 27 Aug. 2019].
- Lee, S. (2014). How do people compare themselves with others on social network sites?: the case of Facebook. *Computers in Human Behavior*, 32, p. 253-260, 10.1016/j.chb.2013.12.009
- Lee, S., Kim, T., Noh, Y. & Lee, B. (2010). Success factors of platform leadership in web 2.0 service business. *Service Business*, 4(2), pp. 89-103.
- Lee, S., McCann, D. & Messenger, J. (2007) *Working Time Around the World, Trends in working hours, laws and policies in a global comparative perspective*. Available from: http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_104895.pdf [Accessed on 16 February 2015].
- Lee, S., Park, S. B. & Lim, G. G. (2013). Using balanced scorecards for the evaluation of "Software-as-a-service". *Information & Management*, 50(7), pp. 553-561. <https://doi.org/10.1016/j.im.2013.07.006>.
- Lee, S.M., Kim, T., Noh, Y. & Lee, B. 2010, "Success factors of platform leadership in web 2.0 service business", *Service Business*, vol. 4, no. 2, pp. 89-103.

Li, G., Liu, H. & Li, G. (2014). Payment willingness for VIP subscription in social networking sites. *Journal of business research* : JBR, 67(10), pp. 2179-2184.

Lim, M. & Choi, S. (2017). Stress caused by social media network applications and user responses. *Multimedia Tools and Applications*, 76(17), pp. 17685-17698.

LinkedIn (2019a). Happn - Dating app, application mobile de rencontre. [online] LinkedIn. Available at: <https://www.linkedin.com/company/happn/about/> [Accessed 27 Aug. 2019].

LinkedIn (2019b). HappyPancake - A sponsor of true love. 100% Free dating in Sweden, Finland and the Netherlands... [online] LinkedIn. Available at: <https://www.linkedin.com/company/happy-pancake-ab/about/> [Accessed 27 Aug. 2019].

Liu, D. Ye, G., Chen, C. T., Yan, S., Chang, S. F. (2012). Hybrid social media network.

Marmer, M., Herrmann, B.L., Dogrultan, E. and Berman, R. (2011). Startup Genome Report Extra on Premature Scaling. [online] Startup Genome. Available at: <http://innovationfootprints.com/wp-content/uploads/2015/07/startup-genome-report-extra-on-premature-scaling.pdf> [Accessed 23 Mar. 2020].

Mazarakis, A. and Shontell, A. (2017). "I was having nightmares for a few weeks": Box CEO Aaron Levie reveals how hard it was to build a \$2.5 billion business and take it public by age 29. [online] Business Insider. Available at: <https://www.businessinsider.com/aaron-levie-quit-college-to-found-box-now-25-billion-company-2017-7?r=US&IR=T> [Accessed 27 Aug. 2019].

Mckinsey.com. (2015). SHAPING THE FUTURE OF FINNISH MACHINERY, METALS, AND ELECTRONICS. [online] Available at: https://www.mckinsey.com/~/media/McKinsey/Locations/Europe%20and%20Middle%20East/Finland/Overview/Shaping%20the%20future%20of%20Finnish%20machinery%20metals%20and%20electronics/Shaping_the_future_of_Finnish_machinery-metals-and-electronics.ashx [Accessed 24 Oct. 2018].

Microsoft (1990). Three top performers unite for box office smash. The Microsoft Office for Windows. InfoWorld, [online] 19 Nov., p.50. Available at: https://books.google.fi/books?id=wFAEAAAAMBAJ&lpg=PA1&pg=PA50&redir_esc=y#v=onepage&q&f=false [Accessed 27 Aug. 2019].

Microsoft (2017). Introducing Microsoft Teams: The new chat-based workspace in Office 365. [online] Microsoft Stories. Available at: <https://news.microsoft.com/november-2016-event/> [Accessed 27 Aug. 2019].

Muffatto, M. & Roveda, M. (2000). Developing product platforms: : analysis of the development process. *Technovation*, 20(11), pp. 617-630. [https://doi.org/10.1016/S0166-4972\(99\)00178-9](https://doi.org/10.1016/S0166-4972(99)00178-9).

New Hampshire Department of State (2010). Business Information. [online] New Hampshire Department of State. Available at: <https://quickstart.sos.nh.gov/online/BusinessInquire/BusinessInformation?businessID=126502> [Accessed 27 Aug. 2019].

Newman, M. E. J. & Park, J. 2003. Why social networks are different from other types of networks. *Physical review. E, Statistical, nonlinear, and soft matter physics*, 68(3 Pt 2), p. 036122.

Oliver, C. (1990) 'Determinants of Interorganizational Relationships: Integration and Future Directions', *Academy of Management Review*, 15(2), pp. 241–265. doi: 10.5465/AMR.1990.4308156.

Park, C., Jun, J. & Lee, T. 2015, "Consumer characteristics and the use of social networking sites", *International Marketing Review*, vol. 32, no. 3, pp. 414-437.

Parker, G., Van Alstyne, M. and Choudary, S. (2016). *Platform Revolution: How Networked Markets Are Transforming the Economy and How to Make Them Work for You*. 1st ed. W. W. Norton & Company.

Pennings, J.M., & Puranam, P. (2001). Market convergence and firm strategy: New directions for theory and research, ECIS Conference, The Future of Innovation Studies: Eindhoven, The Netherlands.

Pilothouse Consulting (2018). SharePoint History - SharePoint 2016, Online, and before. [online] SharePoint History. Available at: <https://www.pilothouseconsulting.com/sharepoint-history-sharepoint-2016-release.html> [Accessed 27 Aug. 2019].

Pornsakulvanich, V. 2017. Personality, attitudes, social influences, and social networking site usage predicting online social support. *Computers in Human Behavior*, 76, pp. 255-262.

Pulkka, V. (2017a). Neljäs teollinen vallankumous Ylen uutisissa 2016. [online] Vvpulkka.files.wordpress.com. Available at:

<https://vvpulkka.files.wordpress.com/2017/06/nelj3a4s-teollinen-vallankumous-ylen-uutisissa-2016.pdf> [Accessed 24 Oct. 2018].

Pulkka, V. (2017b). Ville-Veikko Pulkka: Suomalaiset eivät usko työn loppuun. [online] Kansallinen ennakointiverkosto. Available at: <http://foresight.fi/ville-veikko-pulkka-suomalaiset-eivat-usko-tyon-loppuun/> [Accessed 24 Oct. 2018].

Schwab, K. 2016, *Shaping the Fourth Industrial Revolution*, Prague.

Schwab, K. 2017, "The Fourth Industrial Revolution: its meaning and how to respond", *Logistics and Transport Focus*, vol. 19, no. 2, pp. 40.

Scott, C. H. & Scott, J. E. (2004). On models for the operation of a class of electronic marketplaces. *Omega*, 32(5), pp. 373-383.

Seppälä, T., Halén, M., Juhanko, J., Korhonen, H., Mattila, J., Parviainen, P., Talvitie, J., Ailisto, H., Hyytinen, K., Kääriäinen, J., Mäntylä, M., Ruutu, S. (2015). "Platform" –Historiaa, ominaispiirteitä ja määritelmä("Platform" -History, characteristics and definition). Helsinki: Elinkeinoelämän tutkimuslaitos (The Research Institute of the Finnish Economy).

Shustek, L. (2019). Adobe Photoshop Source Code. [online] Software Gems: The Computer History Museum Historical Source Code Series. Available at: <https://web.archive.org/web/20140507131754/http://www.computerhistory.org/atcm/adobe-photoshop-source-code/> [Accessed 27 Aug. 2019].

Shuying, W., Shuai, C., & Sun, Y. (2013). Collaborative Response Model on Business Event of Multi-Core Enterprise Cluster for SaaS Platform. *International Journal of Advanced Pervasive and Ubiquitous Computing (IJAPUC)*, 5(4), 1-15. doi:10.4018/ijapuc.2013100101

Simpson, T.W., Maier, J.R. & Mistree, F. (2001). Product platform design: Method and application. *Research in Engineering Design*, 13(1), pp. 2-22. <https://doi-org.libproxy.aalto.fi/10.1007/s001630100002>

Smith, C. (2020). What is Creative Cloud. [online] American Graphics Institute. Available at: <https://www.agitraining.com/adobe/creative-cloud-training/what-is-creative-cloud> [Accessed 17 May 2020].

Standing, C., Love, P., Stockdale, R. and Gengatharen, D. 2006. Examining the relationship between electronic marketplace strategy and structure. *Engineering Management, IEEE Transactions on*, 53(2), pp. 297-311.

- Statista. (2018). The 100 largest companies in the world by market value in 2018 (in billion U.S. dollars). [online] Available at: <https://www.statista.com/statistics/263264/top-companies-in-the-world-by-market-value/> [Accessed 24 Apr. 2019].
- Strowel, A. and Vergote, W. (2016). Digital Platforms: To Regulate or Not To Regulate? Message to Regulators: Fix the Economics First, Then Focus on the Right Regulation. [online] Ec.europa.eu. Available at: http://ec.europa.eu/information_society/newsroom/image/document/2016-7/uclouvain_et_universit_saint_louis_14044.pdf [Accessed 26 Apr. 2019].
- Tao, Y., Chen, C. & Chang, C. (2007). Unmet adoption expectation as the key to e-marketplace failure: A case of Taiwan's steel industry. *Industrial Marketing Management*, 36(8), pp. 1057-1067.
- Thakur, S. 2019. A reputation management mechanism that incorporates accountability in online ratings. *Electronic Commerce Research*, 19(1), pp. 23-57.
- Theonlineinvestor.com. (2019). Large Caps - Top 20 by Market Capitalization. [online] Available at: https://www.theonlineinvestor.com/large_caps/ [Accessed 24 Apr. 2019].
- U.S. Small Business Administration (2019). Frequently Asked Questions About Small Business. [online] Office of Advocacy. Available at: <https://cdn.advocacy.sba.gov/wp-content/uploads/2019/09/24153946/Frequently-Asked-Questions-Small-Business-2019-1.pdf> [Accessed 24 Mar. 2020].
- Ullman, E. 2012, "The Social [MEDIA] Network", *Community College Journal*, vol. 82, no. 3, pp. 24-26,28.
- Van Alstyne, M. & Parker, G. 2017, "Platform Business: From Resources to Relationships", *GfK Marketing Intelligence Review*, vol. 9, no. 1, pp. 24-29.
- Wan, X., Cenamor, J., Parker, G. & VanAlstyne, M. 2017, "Unraveling Platform Strategies: A Review from an Organizational Ambidexterity Perspective", *Sustainability*, vol. 9, no. 5, pp. 734.
- Varza, R. (2012). Videdressing co-founder reveals the benefit of being a US entrepreneur in France. [online] Rude Baguette. Available at: <https://www.rudebaguette.com/en/2012/02/interview-videdressing/> [Accessed 27 Aug. 2019].
- Wasserman, S. & Fraust, K. 1994. *Social Network Analysis: Methods and Applications*.
- Woodside, A.G. & Wilson, E.J. 2003, "Case study research methods for theory building", *The Journal of Business & Industrial Marketing*, vol. 18, no. 6, pp. 493-508.

World Economic Forum. (n.d.). The Fourth Industrial Revolution, by Klaus Schwab. [online] Available at: <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab> [Accessed 25 Oct. 2018].

Yahoo! Finance (2019). Spotify Technology S.A. (SPOT). [online] Yahoo! Finance. Available at: https://finance.yahoo.com/quote/SPOT/profile/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2x1LmNvbS8&guce_referrer_sig=AQAAACmtEjJs8JhN3BbLP_-GbozRVPU4tDRXARcQMYXK971mlPx74h4eAJ_D7zS4XK0fhVU1XGh1UHmbG-8g64gafzw30uxo9qGHI4E-pSS3Dd86ayy9VCGcz2jkq84zTLcIDcNNsIJF713NMPArrX4xknlJezJLRIEMdp4WYTREbmj [Accessed 27 Aug. 2019].

Yang, C. & Robinson, A. 2018. Not necessarily detrimental: Two social comparison orientations and their associations with social media use and college social adjustment. *Computers in Human Behavior*, 84, p. 49.

Zhu, F. and lansiti, M. (2019) 'Why Some Platforms Thrive and Others Don't', *Harvard Business Review*, 97(1), pp. 118–125. Available at: <http://search.ebscohost.com.libproxy.aalto.fi/login.aspx?direct=true&db=bth&AN=133608393&site=ehost-live> (Accessed: 22 April 2019).

8. APPENDIX

Appendix 1, Message used to contact potential interviewees and translations of them

Private message:

Hei _____,

Kirjoitan mun gradua alustataloudesta ja haluaisin kovasti haastatella sua aiheesta _____ edustajana. Haluaisin erityisesti kuulla teidän kokemuksista ja opeista matkalta. Oisko sulla mahdollisesti tunti aikaa esim ensviikolla haastattelulle? 😊

Tutkimuksen tulokset on anonyymejä ja voin mieluusti lähettää sulle gradun sen valmistuttua alkuvuodesta 2019 sekä haastattelukysymykset ennakkoon.

Translated private message:

Hi (first name of the receiver),

I'm writing my thesis about platform businesses and I'd like to interview you about it as (name of the company represented) representative. I'd especially love to hear about your experiences and learnings along the journey. Would you have an hour during next week for this interview? 😊

The results of the analysis will be anonymous, and I could send you the final Thesis after it's finished in 2019. I can also send you the interview questions prior the interview.

Email:

Hei _____,

Kirjoitan mun gradua alustataloudesta Aalto-yliopistolle ja haluaisin kovasti haastatella sua aiheesta _____ edustajana. Haluaisin erityisesti kuulla teidän kokemuksista ja opeista matkalta. Oisko sulla mahdollisesti tunti aikaa esim ensviikolla haastattelulle?

Tutkimuksen tulokset on anonyymejä ja voin mieluusti lähettää sulle gradun sen valmistuttua alkuvuodesta 2019 sekä haastattelukysymykset ennakkoon.

Terveisin,

Sanni Siipilehto

Translated email:

Hello (first name of the receiver),

I'm writing my thesis about platform businesses in Aalto University and I'd like to interview you about it as (name of the company represented) representative. I'd especially enjoy hearing about your experiences and learnings along the journey. Do you happen to have an hour next week for conducting this interview?

The results of the analysis will be anonymous, and I could send you the final Thesis after it has been finished in early 2019. I can also send you the interview questions prior the interview.

Sincerely,

Sanni Siipilehto

Appendix 2, Interview guide

Interview guide for Finnish platform businesses

Thank you for taking the time to meet and do this interview. My name is Sanni Siipilehto and I am from Aalto University conducting interviews on platform businesses. This interview is being recorded for academic purposes and analysis, but the results will be anonymous. If it's ok, I'd like to conduct this interview in English to mitigate potential misinterpretations of the data. I'd like to confirm our schedule? Do we have 60 minutes for conducting this interview?

Background:

- 1) Could you briefly tell what you do in the organization and when did you join the company?

Business model:

- 2) Can you explain your organizations business model and how it works?
 - a. Offering and value proposition, customers and users, monetization model?
- 3) Has the business model changed over time? If yes, how and why?
- 4) How do you measure and follow up on how your businesses is doing? What KPIs you use?
- 5) How do you compare to your competitors in the market currently?

Understanding the platform:

- 6) Do platform businesses differentiate themselves form other kind of businesses? How?
- 7) Could you shortly describe what information and resources you share on your platform (internally, within your supply chain, within your 3rd party network or industry)?
- 8) Does the company facilitate innovation? How does it do it?
- 9) Does the company facilitate network effects? How does it do it?
- 10) Does the company improve efficiency? How does it do it?
- 11) Does the company attract complementaries? How does it do it?
- 12) Does the company enable connectivity? How does it do it?

Business life cycle:

- 13) Has your business broken even? If, when did it happen or when do you estimate it to happen?
- 14) Could you describe the current state and maturity of the business?
- 15) What business priorities do you have? Have these priorities changed along the journey and if, how?
- 16) What have you learned along the journey?
- 17) What kind of future prospects do you see for your company or industry?

Other comments:

- 18) Is there something else you would like to discuss?