BI Norwegian Business School - campus Oslo

GRA 19703

Master Thesis

Thesis Master of Science

The global intentions of digital payment platforms: A comparative study of Vipps and Payr

Navn: Mathias Egge Kvalheim, Andreas Skattum Nordby

Start: 15.01.2020 09.00

Finish: 01.09.2020 12.00

Master Thesis

The global intentions of digital payment platforms: A comparative study of Vipps and Payr

Authors:
Mathias Egge Kvalheim & Andreas Skattum Nordby

Programme:
Master of Science in Business, Major in Strategy

Supervisor:
Gabriel Robertstad Garcia Benito

Hand-in date:
01.07.2020

Campus:
BI Oslo

Acknowledgements

We would like to extend our gratitude to some key people helping us reach completion of this thesis. Our gratitude is not expressed in any deliberate order.

We want to thank Bjørn Skjelbred, Leif Erik Kleivene and Richard Carlsen from Vipps for taking part in our in-depth interviews, providing us with valuable information regarding the payment landscape and international ventures of Vipps.

We also want to thank Espen Einn and Kyrre Andersen from Payr for contributing with detailed and highly relevant descriptions of Payr from foundation to international development.

Lastly, we extend our gratitude to our supervisor, Gabriel Robertstad Garcia Benito, for his commitment and professionalism during our work with the thesis. The constructive feedback, guidance and key insights has been invaluable to our research.

Executive summary

Digital platforms have become a significant feature in the global payment landscape, frequently disrupting traditional industry structures (European Payments Council, 2019). Innovative technology, shifting consumer behavior, and regulations are contributing factors to this alteration of business models (European Commission, 2019; Deloitte, 2019). However, limited knowledge exists of how these digital platforms internationalize their services, or in what way they make their platforms accessible for international markets (Ojala, Evers, & Rialp, 2018). To address this research gap, this thesis aims to focus on the digital platforms Vipps and Payr, while providing a deeper understanding of the differences between international strategies of digital payment platforms.

The data collection analysis indicates that several factors influence digital platform internationalization, which is reviewed in four categories; financial resources, ownership, networks and reputation, and location. Substantial financial capital to overcome the cost of establishment, while putting the firm in a position to acquire relevant technology is deemed to be essential. The findings also highlighted the prominent role of the owners in decision-making, while a diversified network of relationships may increase the chances of international scale-up. Reaching critical mass is the most crucial goal for a digital payment platform, which can be significantly influenced by the location the firms opt to choose.

Table of Contents

List of figures

1.0 Introduction

Technologies transforming the economy have stimulated the evolution of digital platform businesses (Parker, Van Alstyne, & Choudary, 2016). Platforms create value by enabling transactions between diverse groups of users, such as buyers and sellers (Reuver, Sørensen, & Basole, 2018), and these online exchanges are a rising characteristic of digital competition (Bughin & van Zeebroeck, 2017).

Despite that platforms, or multisided markets, are not a novel phenomenon in business literature, they have a significant function in a progressively digitalized economy (Gawer, 2014; Wan, Cenamor, Parker & Van Alstyne, 2017). The extensive adoption of internet and mobile devices has motivated the introduction of digital platform business models in various industries, frequently challenging traditional structures (Bughin, Catlin & Dietz, 2019; Eisenmann, Parker & Van Alstyne, 2006). This is increasingly relevant in the payments industry, where innovative technology and expertise, shifting consumer behavior and regulations like PSD1 (Payment Services Directive) in 2007 and PSD2 (Revised Payment Services Directive) in 2018 are contributing factors to the digital revolution of the payment landscape in Europe, Scandinavia and Norway (European Commission, 2019; Deloitte, 2019). With PSD1 and PSD2, retailers and technology companies can disrupt a significant part of the traditional payment industry (Deloitte, 2019).

The exploration of digital platforms has been prosperous in strategic research for the last years (McIntyre & Srinivasan, 2017; Nair & Prabhu, 2018). However, this literature has mostly overlooked domestic borders (Stallkamp & Schotter, 2019) and primarily explored platforms as a part of separate, homogenous markets (Lee, Song, & Yang, 2016). Not until recently, researchers have initiated the scrutiny of digital platforms in an international context (Brouthers, Geisser, & Rothlauf, 2016; Ojala et al., 2018; Stallkamp & Schotter, 2019). Yet, the understanding of how digital platforms internationalizes their services or in what way they make their platforms accessible for international markets remains limited (Ojala et al., 2018). Hence, our knowledge of digital payment platform internationalization—and which factors influence international digital platform strategy— is scarce.

How do factors like resources and ownership shape the international expansion of payment platform firms? Are they assisting or impeding their entry to foreign markets? Do they influence the strategic choices related to preferred entry mode and foreign market selection? The understanding regarding these subjects is restricted due to the inadequate integration among the current research on digital payment platforms and factors that influence a given international strategic approach (Brouthers et al., 2016). This thesis examines this gap by drawing on concepts from digital platform theory and bridge it to relevant, prior research within the field of international business (IB) and foreign direct investment (FDI). Furthermore, it deliberates on how the internationalization strategies between two digital payment platforms differ in a single-country context, arguing that separate and interconnected factors influence their entry mode, international strategic posture, and foreign market selection (Stallkamp & Schotter, 2019). This contributed to the formation of our research question:

Which factors may lead to differences in the international strategies of digital payment platform organizations?

This paper aims to contribute to the linking of international business literature and strategic research on digital platforms, with the intention of presenting insights into the international strategies of digital payment platforms and which factors influence them. We examine the international expansion plans of Vipps and Payr, leading to an understanding of how these companies seek to internationalize their digital payment platforms. Vipps and Payr state that it is imperative for digital payment platforms to reach a critical mass of participants. In order to reach critical mass in foreign markets, our findings indicate that several factors are influencing digital platform internationalization, which is reviewed in four categories; financial resources, ownership, networks and reputation, and location. Furthermore, we examine the theoretical and managerial relevance and conclude by proposing a roadmap for future research.

2.0 Literature review

Both Vipps and Payr has expressed ambitions of international expansion with their respective digital payment platforms (Jacobsen, 2018; Nikolaisen, 2018), making it relevant to examine prior research with regards to the field of international business and foreign direct investment. Internationalization in relevance with digital platform strategy has not been widely researched, so this review intends to connect prior theory in the field of internationalization with research conducted on digital platforms, leading into the specifics of digital payment platforms. We realize the many channels of international involvement but addressing the factors regarding both firms` established intentions of expansion into foreign markets would be most applicable. The concept of the eclectic paradigm will be addressed when identifying and assessing the importance of factors affecting FDI-decisions and the continuing of foreign operations, building into different types of ownership, choice of location, and internalization theory. The choice of entry mode will be a part of the firm's internationalization process, as the decision of the most suitable entry mode will be crucial for success in foreign markets.

2.1 The emergence of platforms

Kenney and Zysman (2015, p.2) describe platforms as "*frameworks that permit collaborators - users, peers, providers - to undertake a range of activities, often creating de facto standards, forming entire ecosystems for value creation and capture*". Gawer (2009, p. 47) propose a stagewise interpretation of the emergence of platforms, starting with internal platforms developed by a single firm. Internal platforms then develop into supply chain platforms when components of the original platform are outsourced from external suppliers. When subsystems of the supply chain platform become outsourced of its own, a platform ecosystem emerges. Tiwana, Konsynski and Bush (2010) define digital platforms as systems where the codebase in the platform is extendable, allowing third-party actors to complement the code and thus establish a platform ecosystem faster and at a lower cost than non-digital platforms (Koh & Fichman, 2014; Zhao, von Delft, Morgan-Thomas & Buck, 2019). Digital platforms can be viewed as purely technical artifacts but can also be characterized as sociotechnical designs enabling online value creation (Reuver, Sørensen & Basole, 2018). These platforms are challenging deeply rooted industry structures and are transforming almost every industry today (Reuver et al., 2018; Stallkamp & Schotter, 2019) but are usually dependent on the platform's scalability and its ability to attract a significant number of participants.

2.2 Multisided platforms and markets

Platforms where different groups of participants contribute to the interactions, such as buyers and sellers, are described as multisided, or two-sided, platforms (Reuver et al., 2018). Multisided markets are when two distinct groups are conjoined, and the increase of participants of the one will increase the value for the other (Caillaud & Jullien, 2003; Evans, 2003; Armstrong, 2006; Eisenmann, Parker & Van Alstyne, 2006; Gawer, 2014; Thomas, Autio & Gann, 2014; Stallkamp & Schotter, 2019; Cusumano, Yoffie & Gawer, 2020). Multisided digital platforms are highly reliant on gaining a large number of participants in a short period of time (Edelman, 2015), as value in the economic view of platforms is created when coordinating and being conduits between the participants (Gawer, 2014). Uber is an example of a platform where the indirect network effects of multisided markets are crucial. In order for Uber to function, there have to be users on both sides of the platform. Users in need of a ride would also need users that are willing to drive them, and a skewed distribution on either side will lead to a shortage of rides or a shortage of bookings. The value is affected through pricing, where value can be captured by both users and owners when customer bases increase, which in turn is affected by indirect network effects (Evans & Schmalensee, 2008). The economic view of platforms explains that competition arises from network effects, indicating why some become more dominant than others. On the other hand, the economic view has been criticized for its static demand-perspective of platforms and for not explaining how platforms evolve beyond growing its userbase. For that reason, we also have to take a look at how platforms evolve and innovate.

2.3 Digital platforms have to obtain critical mass

Reuver, Sørensen and Basole (2018) argue for economies of scale as a driving force for how digital platforms evolve, with increasingly complex architecture. Network effects, with increased scale, occur when more participants join the platform, making the platform more attractive and useful for other participants. More participants will then lead to companies wanting to advertise on the platform, which can increase revenue for the platform owner. To create value at scale, the platforms have to obtain a critical mass of users (Van Alstyne & Parker, 2017; Ruutu, Casey & Kotovirta, 2017), which we regard as the sufficient number of participants to keep the platform running. Achieving critical mass is difficult as platform providers often face highly competitive markets, and in the pursuit of gaining participants we usually see that one or two platforms come to dominate markets, making it a "winner takes all"-scenario (Eisenmann et al., 2006; Sun & Tse, 2007; Gawer, 2014; Ruutu, et al., 2017; Reuver et al., 2018; Zhao et al., 2019). As platforms gain participants and the market is approaching saturation, they either have to evolve with additional services, look to other segments in the same country, or venture abroad into foreign markets. The focus here will remain on the latter.

2.4 Internationalization

Welch and Luostarinen (1988, p. 36) seek to expand the definition of internationalization as an outward movement of a firms´ operations into foreign markets, with a more dynamic view of the subject by adding "*the process of increasing involvement in international operations*", clearly to adopt a broader view of internationalization being both inward and outward movements in international business. Johanson and Vahlne (1977; 2009) found that firms often initiate their internationalization process by exporting through an agent while later establishing subsidiaries, and in some instances, begin production of their own in a foreign country. This growth process emphasizes perceptions of risk and lack of information, while being characterized by learning through gradual commitment in foreign markets (Melin, 1992). Another dominating theory of internationalization is the eclectic paradigm. The eclectic paradigm (Dunning, 1980; 1988), also known as the OLI-paradigm, seeks to assess factors influencing foreign direct investment with a distinct set of advantages; ownership advantages, location advantages, and internalization advantages. Central to the theory is the assumption of rational decision-making in the firms making decisions towards foreign direct investments and that firms are profit maximizers.

2.4.1 Market selection decision

Kumar and Subramaniam (1997) argue that the market selection decision begins with choosing the foreign market the firm wishes to operate, which in turn should be based on the strategic needs of the firm (Hill, Hwang & Kim, 1990). According to Galan, Gonzalez-Benito and Zuniga-Vincente (2007), the choice of foreign market is one of the most complex decisions managers have to make. Papadopoulos and Martin (2011) argues that the complexity arise in the search of comparative information of markets, countries and consumers, combined with the prior knowledge possess by managers making the decisions. Davidson (1983) also stated that firms choose markets that are similar to their home markets and that this preference decline when the firm gain more experience in the process of international expansion. Even though the decision itself is believed to be originated from rationality, the irrational choice based on personal preferences or individual experiences may be highly influential (Alexander, Myers & Rhodes, 2007).

2.5 Entry Mode

Choice of entry mode is a critical part of international expansion, as the appropriate decision is crucial for the success of the operation (Hill et al., 1990; Agarwal & Ramaswami, 1992; Benito & Welch, 1994; Kumar & Subramaniam, 1997; Brouthers & Hennart, 2007). Research in the area of entry modes into foreign markets has considered the rational and analytical decision-making of managers to be the main factor leading to the specific choice of entry mode. Entry mode decision-making is often related to prior experience in foreign markets, in the sense that when decision-makers do not possess international experience, it increases the likelihood of non-equity entries, such as licensing and exporting (Benito & Welch, 1994). Insufficient knowledge and experience in foreign markets tend to generate uncertainty and a stronger sense of risk for decision-makers. On the other hand, vast knowledge of foreign markets can cause greater international involvement and lead to decisions towards internalization with subsidiaries as mode of entry (Benito & Welch, 1994; Elia, Larsen & Piscitello, 2019).

There are different kinds of entry modes, which can be categorized into equity-based or non-equity based (Anderson & Gatignon, 1986; Root, 1994; Pan & Tse, 2000). Equity-based are again divided into wholly owned operations (greenfield, acquisition) and joint ventures (50% share, minority/majority), while non-equity entry modes are divided into contractual agreements (licensing, alliances (equity or non-equity), R&D contracts) and exports (direct export, indirect export) (Anderson & Gatignon, 1986; Agarwal & Ramaswami, 1992; Root, 1994).

Entry mode strategies

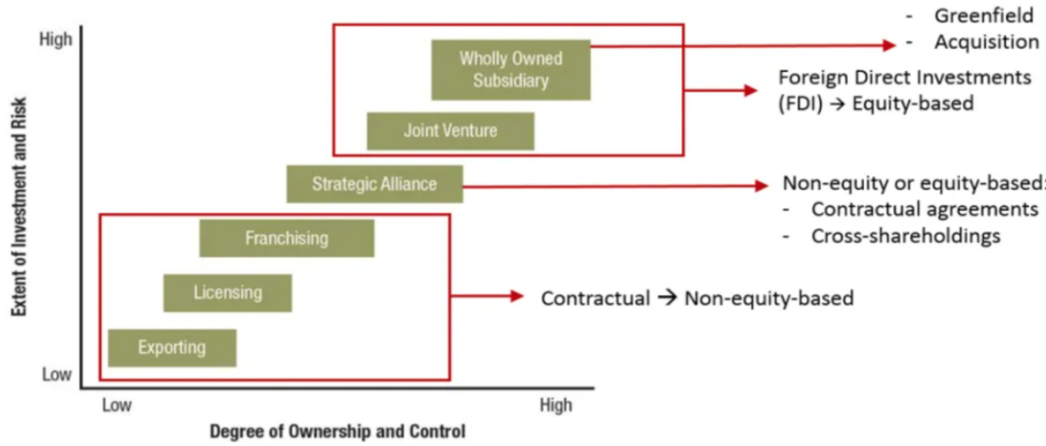

Figure 1: Entry strategies for international markets (Root, 1994).

There is a considerable difference in resource commitment in equity-based and non-equity-based, as equity-based modes require more resources by setting up independent operations (Pan & Tse, 2000). Hill, Hwang and Kim (1990) argue that each mode of entry has different degrees of implication on the control in the foreign operations and further states that each mode has implications on the risks involved in these operations. Wholly owned subsidiaries in foreign countries will increase control over the operation as opposed to externalization but will also involve more risks. Anderson and Gatignon (1986) propose that the most efficient mode of entry is in the trade-off between resource commitment and control over the operation, while Buckley and Ghauri (1999) argue that, with all things equal, a low degree of resource commitment is the preferred option. The risk of dissemination is another important factor when a firm is choosing the mode of entry and is especially high when the firm is venturing into licensing modes where the agreement involves firm-specific know-how. The risk lies in the counterpart's possibilities of using the firm-specific know-how to other purposes than intended and utilizing it to their advantage. Risk of dissemination would then be high in licensing, lower in joint ventures, and lowest when firms internalize.

2.6 Internalization theory

Buckley and Casson (1976) address internalization theory to explain how the boundaries of firms stretch across borders while arguing that expansion into foreign markets is governed by the benefits and costs of internalization in foreign countries. At the core of internalization theory is the notion that firms are profit maximizers and that firms will create internal markets of their own to circumvent external markets for intermediate products, which in turn construct the multinational enterprise (Buckley & Casson, 1976, p. 33). This is in relation to the perspective of transaction costs, as the theory states that firms will internalize activities to an extent at which they can perform the activities at a lower cost than by externalization modes (Anderson & Gatignon, 1986; Buckley, 1988; Hollensen, 2007). Buckley (1988, p.181) also stated that the multinational enterprise (MNE) would "*choose the least cost location for each activity they perform*". Deviation from the theory have been related to state-owned organizations, as these organizations are not merely being driven by profit-seeking, and often has other risk preferences than privately-owned organizations (Grøgaard, Rygh & Benito, 2019).

2.6.1 Firm-specific advantages (FSAs) and country-specific advantages (CSAs)

Internalization theory also states that firm-specific advantages (FSAs) influence firms´ entry modes into foreign markets (Rugman & Verbeke, 2003; Grøgaard et al., 2019). FSAs can be bound to a location such as local market expertise, or it can be transferable such as technological knowledge or learning capabilities. In the cases of Vipps and Payr, both firms have technological capabilities they wish to transfer to other markets in order for them to capitalize on the knowledge they have procured in their local markets. Internalizing technological know-how provides control and hinders other parties from being opportunistic, which is relevant to fast-changing, high-level technologies (Afuah, 2001). Country-specific advantages (CSAs) is another concept in internalization theory that will influence firm performance and choice of foreign market. CSAs are external factors such as labor, demand conditions, or government policies that will affect the firms that seek to enter foreign markets (Rugman & Verbeke, 2008). Wholly owned subsidiaries can enjoy CSAs in countries with low company taxation, or on the other side, be forced out of the market by the same external factors, which can be decisive for intentions of international expansion.

2.6.2 Altering dependencies of FSAs and CSAs

Bharadwaj, El Sawy, Pavlou and Venkatraman (2013) emphasize the role of IT and networks in business strategy by combining business strategy and IT strategy into digital business strategy. Digital business strategy and digital technologies can alter dependencies of internal (FSAs) and external (CSAs) factors with digital technologies being able to function and form dynamic capabilities for turbulent environments (Pavlou & El Sawy, 2006). Banalieva and Dhanaraj (2019) argue that network advantages should be considered separately from traditional equity-based and non-equity-based advantages. The argument is that FSAs with regards to networks follow a different logic when it comes to location boundedness. Stallkamp and Schotter (2019) mention certain network advantages, such as digital food delivery platforms enjoying its user base in the home country, which is not transferable to other countries, making it location-bound FSAs. Platforms can, on the other hand, become available in other countries by exporting the platform or creating additional services, making it more useful for existing participants while increasing network potential.

2.7 The OLI-paradigm

The FSA/CSA factors is built upon internalization theory and explain the outward FDI from a home country perspective (Rugman, 2010), with decisions being made based on advantages located at home. Dunning (1980; 1988) developed a paradigm to understand the outward FDI of firms from a host country perspective, considering three types of advantages in the rationale regarding outward movements, also known as the OLI-paradigm; ownership advantages (O), location advantages (L), and internalization advantages (I). If a firm does not possess advantages in all stages of OLI, then the decision should be reflected by not engaging in foreign direct investment.

Firms entering foreign countries must inherit certain ownership advantages specific to the foreign market they are seeking to operate to be competitive. Compensating for costs related to the establishment and future operations in the foreign market is essential in competition with indigenous firms (Dunning, 1988). If the firm does not possess these ownership-specific advantages, the reasoning is to remain domestic. Locational advantages are concerned with where production or interaction in the foreign market will be located. Locational factors such as low wages in the country, favorable tax conditions, or a technologically mature population could be location-specific advantages generating grounds for a decision to invest in foreign operations, which can be directly linked to the CSAs (Rugman, 2010), even though CSAs are based from a home country perspective. Internalization advantages are evident when the firm should perform their activities in-house rather than by external parties. This could be in relation to the costs of negotiating partnerships, safeguarding essential knowledge, protect property right and more. Dunning (1988) emphasizes the distinctions between multinational enterprises (MNEs) willingness to internalize and its actual ability to do so, noting that a firm might be willing but lack the competence or capital to initiate.

2.8 Conceptual framework

In the process of identifying factors that influence differences in digital payment platform strategy in a single-country context, this research aims to explore internationalization in relevance with digital platform strategy. Hence, the intention is to link internationalization theory with research conducted on digital platforms, leading into the specifics of digital payment platforms. As illustrated in the conceptual framework (Figure 2) below, our review highlights three central concepts: (1) the internationalization process of the firm, (2) digital platform theory, and (3) achieving critical mass and network effects. Based on the existing literature, we argue that these concepts are interrelated in accordance with Figure 2. Internationalization theory concerns firms´ operations in foreign markets, where economies of scale are argued to drive the progress and evolution of digital platforms. Similarly, an important aspect of this process considers the number of participants the digital platform gains over time (critical mass), which may increase or decrease their involvement in the foreign markets.

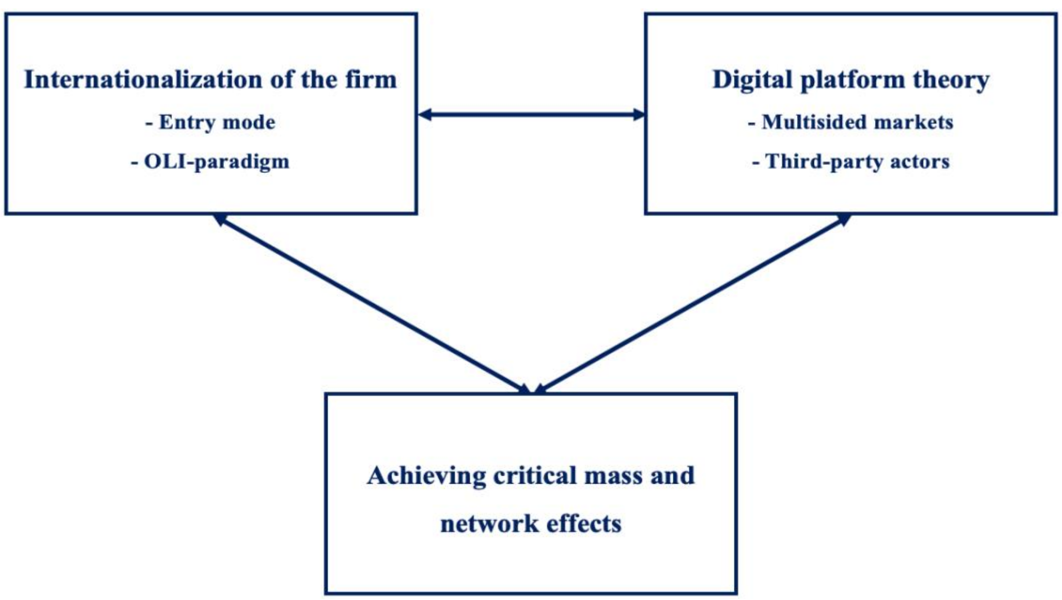

Figure 2: Conceptual framework

3.0 Methodology

3.1 Research setting

Throughout the previous two decades, business infrastructure has become digitalized with augmented interconnections between products, processes, and services (Bharadwaj et al., 2013), which has led to the flourishing of digital platform business models. However, internationalization concerning digital platforms has not been significantly scrutinized (Ng, Muthukannan, Tan & Long, 2017; Ojala et al., 2018; Stallkamp & Schotter, 2019). We aim to connect the emergence of digital platforms to the theory of internationalization by comparing the international expansion plans of Vipps and Payr. The methodology section will initially shed light on the benefits of conducting a comparative case study, elaborating on the choice of a qualitative case study as an efficient research strategy. Subsequently, data collection and analysis will be illustrated thoroughly, before ethical considerations and threats to research quality are considered conclusively.

3.2 Comparative case study design

As our field of research and associated literature is complex, a comparative design is believed to provide a proper in-depth understanding of the research area (Bell, Bryman & Harley, 2019, p. 68). Comparative research intends to recognize similarities and distinctions between social entities (Lewis-Beck, Bryman & Liao, 2014), such as organizations with collective goals. This is in line with Goodrick (2014, p.1), which define comparative case studies as "*the involvement of analysis and synthesis of similarities, differences, and patterns across two or more cases that share a common focus or goal in a way that produces knowledge that is easier to generalize about causal questions – as to how and why particular programmes or policies work or fail to work*". The design may be selected as an appropriate impact evaluation method since it can offer explanations of structures influencing the success of international strategic operations of digital payment platforms (Goodrick, 2014). By comparing two or more cases, the research is in a better position to assess if a theory will hold or not hold (Eisenhardt, 1989; Bell et al., 2019, p. 70), and the comparison itself can propose concepts that are relevant to a developing theory (Eisenhardt, 1989).

With a case-selection approach like this of Vipps and Payr, the findings mutual to the firms can be just as interesting as those distinguishing them (Bell et al., 2019, p. 70). As the cases are similar in several aspects and have more in common than they differ, both the external and internal validity is enhanced compared to single-case studies.

Conversely, the comparative design has some disadvantages. Dyer and Wilkins (1991) debate that these methods may lead to researchers paying less attention to the specific context and more to how they can be contrasted. Besides, the necessity to make comparisons tends to imply that researcher has to construct a clear focus from the beginning, while it may be beneficial to implement a more open-ended approach in several occasions (Dyer & Wilkins, 1991; Bell et al., 2019, p. 70).

3.3 Data collection and analysis

This study has various foundations of evidence, where the main sources of data were collected from primary and secondary data. The primary data was collected through multiple in-depth interviews. To obtain wider comprehension of the research area, and contribute the findings from the primary data, secondary data from journal articles, annual reports, press releases, and databases were accumulated to support and critically evaluate the validity of the findings.

3.3.1 Primary data

The primary data was gathered from the execution of five semi-structured interviews with administrators from the companies Vipps and Payr. Each of the interview objects has direct involvement with international strategic operations in their organization and held a managerial or executive position. None of the interviewees required anonymity and are therefore schematically represented below this section.

Company	Name	Position	Interview setting	Location
Vipps	Richard Carlsen	SVP International Business Development	Digital	Oslo, Norway
	Leif Erik Kleivene	International Business Development	In person	Oslo, Norway
	Bjørn Skjelbred	International Business Development	Digital	Oslo, Norway
Payr	Espen Einn	Former CEO and Chief Payments Officer (Hudya)	Digital	Oslo, Norway
	Kyrre Andersen	Former CMO Payr, and Team Leader for Payr in Hudya	Digital	Oslo, Norway

Figure 3: Interview participants from Vipps and Payr

3.3.2 Participants

In the interest of gathering responses from the firms, the participants were chosen based on a selective strategy. Thereby, the respondents are not randomly selected. When approaching respondents within each company, we intended to obtain interviews with employees who have responsibility for, or are connected to, international strategic management or strategic operations within the firm.

The process of identifying feasible applicants began early in January 2020, and promising candidates were contacted by formal e-mails containing general information about the study and its objectives. The contact information of these individuals was obtained through personal connections with employees in Vipps and Payr, which turned out to be an effective method in gaining company access. This was particularly crucial in Vipps, as we were directly introduced in advance to managers in their international department.

3.3.3 Interview guide

The interview guide was based on open-ended questions for the reason that they require participants to provide more detail and possibly demonstrate more inclusive organizational processes. Considering the short life span of Vipps and Payr, the respondents were requested to sequentially portray their company`s internationalization strategy evolution, preferably annually and geographically, according to their specific knowledge and experience. The dialogue emphasized underlying drivers related to market and organizational characteristics when the distinctive internationalization strategies arose and the rationale behind them. Hence, the distinguished entry modes, integration, encountered challenges and "lessons learned" were enlightened. The candidates were suggested to express personal perceptions of specific situations when narrating. A majority of the described events were retrospective; however, certain information regarding current strategies was also outlined.

3.3.4 Semi-structured interviews

As previously stated, five semi-structured interviews with individuals strategic connected to strategic international management or strategic operations in the firms were executed. This interview form enables the researchers to keep an open mind about what is essential to know so that hypotheses can arise from the data (Bell et al., 2019, p. 11). This method tends to have reduced rigidity, where the principal focus is on the participant's perspective. Consequently, there is less emphasis on being consistent with the interview guide or prepare a structured and inflexible schedule beforehand (Bell et al., 2019, p. 11).

Four of the five interviews were carried out through digital video communication platforms due to the COVID-19 pandemic` s social restrictions. The dates, time, and location of the meetings were determined in collaboration with the participants, which did not receive an extensive interview guide unless it was requested in advance. This approach was reasonably suitable, as it facilitated the participants to reflect and discuss the different circumstances and scenarios as the interview progressed. Furthermore, this provided us with flexibility and room for helpful follow-up questions throughout the conversation.

The interviews, which timespan was between 60-80 minutes, were audio-recorded in order for us to be a part of the dialogue to a larger extent. Relevant observations as non-verbal communication and other remarks that contributed to secondary questions were documented in notes during the session. Before the interviews were prepared, a form concerning personal information processing (collection, registering and storing) was submitted to the Norwegian Centre for Research Data (NSD) to satisfy regulatory requirements for project research and data collection (NSD, 2019).

3.3.5 Transcription of semi-structured interviews
The interviews were transcribed verbatim within 48 hours after each conversation. Only inconsequential grammatical inaccuracies were modified, and no expressions were rephrased. The transcription process was unproblematic and generated 66 double-spaced pages in Microsoft Word. Both researchers listened to the audio-recording before transcription and converted the interview manually into text together in order to discuss misinterpretations that might have occurred under the actual interview.

3.3.6 Secondary data
The data collection of this thesis project will rely on secondary data from journal articles, articles, company reports, and other available firm-specific information. The main contributing benefits secondary data has to this project is the usage of minimal resources as cost and time, and that high-quality data is accessible through databases (e.g., Factiva) and journals such as Journal of International Business Studies and Global Strategy Journal. The secondary data will be contrasted to the information acquired from the interviews, with the intention to identify similarities, distinctions, and gaps concerning theoretical perspectives presented.

3.4 Analysis

The data analysis is a considerable part of qualitative research projects as it supports the examination of the collected data and assumptions based on them. According to Bell et al. (2019, p. 517), qualitative data tend to be unstructured, and there are no rigorous procedures about how this data analysis should be performed. Jorgensen (1989, p. 107) outlines that data analyses may begin with " ... *breaking up, separating, or disassembling research materials into pieces, parts, elements, or units*". Subsequently, the process of sorting the data and identifying patterns or evidence to address the initial propositions of the study is applied, where the focal purpose is to restructure data in a meaningful way (Jorgensen, 1989, p. 107). This approach provided a broad overview of the data and enabled the obtainment of useful insights on specific concepts and areas that required additional scrutiny.

When gaining an organized overview, the distinct phenomena were given labels for recognition and usefulness in accordance with critical events in the organizational context of Vipps and Payr (Bell et al., 2019, p. 522). Thenceforth, it was simpler to structure the data into groups and phases. Due to the high complexity, it was necessary to revisit the data continuously to recognize and investigate parallels and variances in the cases that could be linked to the research question. The strategic development of Vipps and Payr is, to a broad extent, presented in these sequential, firm-specific phases to examine and identify patterns or alterations in strategic operations from foundation to present time. This provides the necessary structure to assess significant distinctions and parallels in strategic approach among the organizations, based on individual resources and international ambition.

3.5 Ethical considerations

In line with Bell et al. (2019), ethical concerns should be a fundamental and incorporated part of a research process and should be considered throughout the study period. This research project is in accordance with the ethical principles of Diener and Crandall (1978, p. 23), implicating inquiry that may harm participants, show lack of informed consent, is considered an invasion of privacy, or has deception involved, should not be performed. Especially relevant was the assumption of anonymity if participants or interviewees required to be unnamed or unidentified. In the case of this eventuality, data material would have been preserved as anonymous in accordance with NSD guidelines (NSD, 2019). Confidentiality agreements were another important aspect of ethical subjects considered in the initial phase of the project, as it is increasingly common for companies to define and restrict information access (Bell et al., 2019, p. 117). Consequently, because it is in our interest to apply material that is not confidential, it was discussed to produce a consent form for participants to sign it necessary. To sum up, these values act as guidelines concerning data collection and influence the selection of data in terms of legitimacy and legality (Bell et al., 2019, p. 112). In general, principles like integrity, respect, and legality are important for all researchers to abide by, where integrity involves awareness towards plagiarism, falsification, and fabrication (NNCRE, 2014).

Conflict of interest was not considered an issue during this project, as it was not subsidized or supported by any organization that held an interest in the discussed topics (Bell et al., 2019, p. 127). However, both researchers are monthly users of services delivered by Vipps, and it was important to remain objective when accumulating, interpreting, and analyzing data.

4.0 Findings

This section will provide the findings of the data collection. Initially, we introduce a brief overview of the two studied cases. Subsequently, drivers of the digitalization in the payment landscape in Europe are outlined, which have had a significant historical influence on the strategic development of Vipps and Payr. Despite several of these factors being interconnected, they are reviewed separately due to its level of intricacy. Among these, domestic and international regulations are significant contextual drivers aiding the understanding of why specific strategies have evolved. Thenceforth, the strategic evolution of the organizations is presented. This area intends to illuminate the internationalization process of Vipps and Payr to examine and identify patterns or alterations in strategic operations from firm foundation to the present time. Here, the way forward is further deliberated, considering both organizations are engaged in ongoing strategic processes.

4.1 Introduction to the cases: Vipps and Payr

4.1.1 Vipps

Vipps is a Norwegian company offering mobile payment applications designed for smartphones. Vipps was released in May 2015 by DNB ASA as a digital payment solution for smartphones between private individuals, reaching 1 million users in Norway by the 5th of November 2015 (Vipps, 2019). In 2017, Vipps ownership was transferred from DNB to a separate company, owned by 106 Norwegian financial institutions (Vipps, 2019). DNB currently holds share ownership of 44.49%, while Sparebank 1-alliansen, Balder Betaling, Eika VBB, Nordea, and independent banks respectively own 20.04%, 10.49%, 9.27%, 6.38% and 7.33% (Bjerknes, 2017). At this period, the service had 3.4 million users in Norway, where the most active users were 15-29 years old. The number of daily transactions increased from 15,000 in July 2015 to 160,000 in October 2017 (Havnes, 2017). In 2018, Vipps merged with BankID Norge and BankAxept (Reuters, 2018). In practical terms, this led to supplementary payment services as B2C, e-commerce, invoice, and in-store payment (Vipps, 2019).

The company is furthermore stepping up its international commitment through collaboration with Alipay, a Chinese payment-application owned by the Alibaba group with 700 million end-users (Giske, 2019). Alipay does not require integration with payment terminals, only a portable computer, tablet, or phone to receive confirmation that the payment is completed (Vipps, 2019). Berit Svendsen, Head of International Operations in Vipps, stated that "*competition within payment solutions are becoming more global, and we believe that partnerships with other actors provide our users with the best solutions*" (Giske, 2019). The Finnish payment service ePassi is also a part of the cooperation with Alipay, and are already offering QR-payment in Sweden, Finland, Estonia, and Spain. Vipps are confident that this partnership, together with the participation in the European Mobile Payment Systems Association (EMPSA) including seven European mobile payment systems, will mean that users can progressively pay with Vipps in Sweden, Denmark, Finland, Portugal, Belgium, Germany, Austria and Switzerland (DNB, 2018; EMPSA, 2019). According to EMPSA (2019), the association is uniting more than 25 million mobile payment users and 350 financial institutions.

4.1.2 Payr

Payr AS is a Norwegian digital payment provider, initiated in January 2016 (Payr, 2019). In 2017, the firm launched an application that allows users to enter or transfer payment information through uploading a picture of the invoice or bill, independent of which financial institution the user is connected to (Payr, 2019). The same year, Payr acquired the price-comparison service Bedrebest.no and launched the service titled Smarte Regninger (Smart Invoices) to provide users with up-to-date price information regarding competing suppliers directly in the digital platform. This was a contributing factor when Payr was named Best Fintech Startup and Startup of the Year in Nordic Startup Awards, and additionally, a place on the list of most innovative fintech companies in the world by H2 Ventures and KPMG (Payr, 2019).

In 2019, Payr merged with Hudya, a Norwegian company that offers a digital platform simplifying the purchase of traditional consumer services as electricity, insurance, and banking (Hudya, 2019). After the merger, the new company will include 500 employees in Norway, Sweden, and Denmark. As of July 2019, Payr had 40.000 registered users and 15.000 active monthly users (Payr, 2019).

4.2 Drivers of digitalization in the payment landscape

To understand why digital payment platform actors like Vipps and Payr have emerged, it is essential to recognize and distinguish the drivers of the digitalization of the payment industry in Europe, Scandinavia, and Norway. Innovative technology and expertise, shifting consumer behavior and regulations like PSD1 (Payment Services Directive) in 2007 and PSD2 (Revised Payment Services Directive) in 2018, are contributing factors to this alteration of business models, and are placing the continent at the cutting edge of payments transformation (European Commission, 2019; Deloitte, 2019). These conditions drive ambitions of swift, frictionless and borderless payments embedded in transaction chains and eco-systems, either tied to peer-to-peer transactions, retail purchases, or business operations (Swift, 2018). This is a complex and demanding environment for financial establishments that have invested in branded payment channels and use clearing mechanisms that are not yet instant, while the rising digital payment platforms directly connect consumers and providers, reducing the search cost and coordination between them (Bughin, Manyika & Woetzel, 2019).

" The financial industry is going through a period of profound change. In this evolving landscape, market infrastructures and financial institutions have to renew their infrastructure and reshape their business models to meet customer expectations and capitalize on new opportunities."

Alain Raes, Chief Executive EMEA and Asia Pacific (Swift, 2018)

4.2.1 Regulation and political factors are stimulating payments innovation

Domestic and international regulating mechanisms are set to encourage competition, preserve consumer rights, and endorse effectiveness and innovation through emerging technologies (Swift, 2018). This involvement is representing a promotion for game-changing advancement, where financial self-regulation, and EU-launched PSD1 and PSD2 are most significant (Finance Norway, 2019).

Self-regulation

In Norway, the payment systems infrastructure is, to a certain extent, founded on the belief of credible self-regulation (Finance Norway, 2016). As a first-class payment infrastructure, the system assures the Norwegian society with user-friendly, cost-efficient, and stable solutions. Hence, currency, transactions, and information are transferred seamlessly between actors (Bits, 2020). Bits AS is the financial infrastructure organization of the bank and finance industry in Norway and maintains this process to be safe and well-organized (Bits, 2020). The company was established on the 1st of April 2016, created from the merger among Bankenes Standardiseringskontor (BSK) and Finance Norway's dedicated unit for payment transactions (Finance Norway, 2016). The organization is held and administered by Finance Norway and was initiated from the finance industry's mutual aspiration to reinforce and consolidate the domestic payment infrastructure (Finance Norway, 2016). Consequently, the industry is in an improved position to manage impending issues and cases associated with new technology, innovative digital payment institutions, and transnational directives.

Self-regulation has commonly remained conducted between the banks themselves, embracing various practices, shared guidelines, rules of conduct, and voluntary settlements (Finance Norway, 2020). The advantages of self-regulation embrace awareness and flexibility as it can be recognized, applied and reformed more rapidly than legislatures. Hence, it could be desirable in markets developing at a high pace. The self-regulation goes two ways for the financial institutions. In has shaped and generated an approvingly cost-effective infrastructure with the national card payment system BankAxept as a fundamental player (Bits, 2020). Still, it has provided market control to a great extent, which in exchange has given limited motivation to modernize and remain vigilant for new technologies and payment services. As the banks now face new emerging national and international competition from digital payment providers, Rune Bjerke (former CEO, DNB) raise the alarm;

"Norway has a financial infrastructure to be proud of. However, it has been in hibernation for 20 years. Norwegian banks have not taken advantage of the momentum and developed its systems further. We cannot continue to sleep".

Rune Bjerke *(Hokholt Bjerve, 2017)*

PSD1

PSD1 (Payments Services Directive) was approved the 13th of November 2007 as a central step towards the implementation of SEPA (Single Euro Payments Area), which essence is the establishment of shared rules for payments, direct debits and cards in Europe (Deloitte, 2016; DNB, 2020). The directive intended to improve trade and commerce across borders in the European Economic Area, while ensuring consumer security and transparency (Finance Norway, 2019). Furthermore, the directive enabled for other actors than banks to offer payment services. This approved for payment services to be supplied by banks, payment institutions (e.g., monetary remitters, retailers, telecommunication companies), and e-money institutions (Deloitte, 2016). Collectively, these are grouped as Payment Service Providers (PSPs). New participants that offered transaction services that did not require debit cards, credit cards, or traditional online banking were outside the scope of the directive, and therefore not regulated (European Commission, 2020). Consequently, both the EU and the participants of the payment market experienced that PSD1 did not satisfyingly facilitate innovation and product development. The directive was reviewed in 2012, culminating in a propositioned and modified regulation, namely PSD2 (European Commission, 2020).

PSD2

PSD2 (Revised Payment Services Directive) was adopted on the 8th of October 2015 (European Commission, 2020). This revised directive modifies the definition, extends the scope of payment services, and ensures that customers of financial institutions may use payment services from other players than the traditional PSPs (Deloitte, 2016; Finance Norway, 2019).

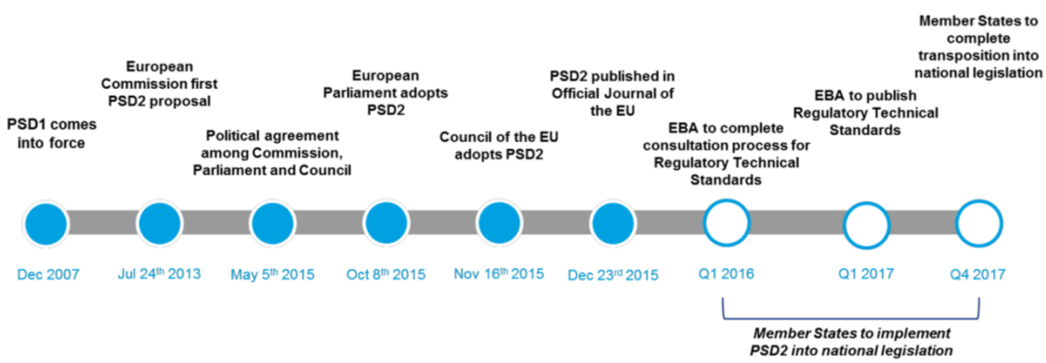

Figure 4: Sequential implementation of PSD1 and PSD2 (Deloitte, 2016)

In a market where fintechs can provide payment initiation and integration services, PSD2 formulates two modernized groups of PSPs: Account Information Service Providers (AISP) and Payment Initiation Service Providers (PISP). Collectively, they are termed Third Party Service Providers (TPSPs) (Deloitte, 2016). Customers of banks thereby have the opportunity to access their bank account via other actors. The new agile and compliant non-bank providers can, besides executing direct transactions on behalf of consumers, gather and store information from accounts and assemble this across banks – if the client holds customer relationships in several institutions (European Commission, 2020). Fintechs and other TPSPs are required to facilitate technical solutions that communicate with the bank's current systems (Finance Norway, 2019). In general, this implies all conditions and standards in PSD2 concerning safety, reporting, regulation, and customer rights.

Broadly, the directive will intensify the market competitiveness and favor the consumers, which will receive cutting edge technology and new types of value-added digital payment services that may improve customer satisfaction (Swift, 2018). TPSPs are in the position to cherry-pick and prioritize the most profitable services (Deloitte, 2016).

4.2.2 Increased customer demands for swift and frictionless payments

Digitalization in several sectors is influencing the need for speedier financial transactions. Customers, investors, wholesalers, and general business individuals are beginning to view payments as a single part of a transaction chain that has to be rapid, frictionless, and integrated (Swift, 2018). The processes require price transparency and secure delivery, with minimal hazard of fraud. Progressively, financing offers are included in combination with extensive consumer information, account, and transaction data (European Central Bank, 2020).

It is a demanding context for financial institutions that have invested vast resources in payment networks with private trademarks exploiting payment tools that are not yet instant. Moreover, although consumer financial data could be characterized as a basis of business intelligence for the majority of establishments, issues regarding data privacy require it to be preserved carefully (Bughin et al., 2019).

4.2.3 Re-designing payments infrastructure

The mature infrastructures in the payment markets are predicted to be renewed, which will enhance data processing and capability to deliver more valuable services to customers (Bughin et al., 2019). A central factor to all renovation of infrastructure was the adoption of a common payments language for financial businesses in SEPA (Single Euro Payments Area), namely ISO 20022, which standards are continuously updated to meet industry requirements and regularly created to answer market needs (European Payments Council, 2020). Its bearing influence on the payment landscape is substantial. If proclaimed deadlines and targets are achieved, the ISO 20022 format will dominate the organization of payments, supporting 79% of the total volume and 87% of the value of global transactions (Swift, 2018). It can house greater pools of structured data, permitting for more information to be transmitted and managed through a chain of market partakers, from originator to recipient. ISO 20020 also provides interoperability of systems and operates across inheritance and evolving technologies such as APIs (Nordea, 2020).

4.2.4 Intense competition – disruptors are capitalizing in a growing market

While the international presence in the Norwegian market is low, competitiveness in international payments is rising. Fintechs, telecommunications businesses, global card networks, and online retailers disrupt traditional payments, as PSD2 reduces the industry`s entry barriers (Swift, 2018).

With 441 million worldwide users in 2019 and a 48% reach among the global iPhone user base, Apple Pay is already a payment giant (Clement, 2019). The service is currently responsible for approximately 5% of global credit card volume and may account for 10% of all transactions at the end of 2025 (Koetsier, 2020). In China, in excess of 65% of POS (point-of-sale) transactions are completed with digital payment platform AliPay (Ant Financial) and social network WeChat (Tencent), as the country is on course towards a cashless society (Keyes & Magana, 2019). According to Mckinsey & Company (2020), mobile payments transactions cultivated at 123% CAGR in China from 2013 to 2018, and it is estimated that 210 transactions per capita occurred in 2018 (Bruno, Denecker, & Niederkorn, 2020). Moving to the European market, payment platforms such as TransferWise and digital-only challenger banks in the United Kingdom are advancing in the value chain, competing directly with Barclays, Royal Bank of Scotland, and other well-established financial institutions (Zhuplev, 2018, p. 106-107). Commonly, these services specialize in capacities that have remained underserved by the large banks, pursuing SMEs and peer-to-peer transactions (Swift, 2018).

To sum up, more than 601 million people in Europe used digital payments in 2017 (Ilic, 2020). During the previous three years, this figure expanded to 660 million. Prognoses indicate that Europeans using digital payments are set to reach 705 million by 2023 (Statista, 2019). Illustrated geographically, the United Kingdom represents the leading European digital payments market, expected to reach $176 million in transaction value this year. Germany and France follow, with respectively $127.4 million and $96.6 million (Ilic, 2020). This portrays a growing market for digital payments.

4.3 Strategic evolution: Vipps and Payr

This section intends to illuminate Vipps and Payr's strategic evolution in the past years to identify patterns or modifications in international strategy. The strategic development of Vipps and Payr is presented in sequential, firm-specific phases to examine and identify patterns or differences in strategic operations from foundation to present time. Furthermore, we elaborate on aspects such as international ambitions, entry mode, and market criteria, justified with the reasoning of prominent company executives.

4.4 Vipps

4.4.1 Phase 1 – Plans of international expansion

Vipps began to actively examine the potential for international expansion in February 2018. A small team of two people was tasked to investigate possibilities of capitalizing on the success from the Norwegian market, specifically related to their digital payment platform. At that time, before the merger with BankAxept and BankID in July 2018 (Reuters, 2018), Vipps was merely considered a payment application. BankAxept and BankID were both merged into Vipps, adding solutions and services to be utilized in several parts of the company, such as further development in identification (ID) and digital payments. The merger also led to a rapid expansion of the international department at Vipps, ultimately leading to the 14 people (per March 2020) specifically focusing on increasing international involvement.

Two main areas of focus for Vipps have been prioritized from the merger, the focus on building a digital wallet for payments, and the implementation of digital ID in everyday life of the population in Norway. The wallet was originally a B2C service but has been developed towards a sharper focus on B2B in the later years. Digital ID, with BankID at the forefront in Norway, has experienced rapid growth in segments such as banking, telecommunication, government, and other services in need of solid ID of each user. The wallet and BankID are the main components Vipps are attempting to introduce in foreign markets. These components have gradually been separated as two distinct services these past years and have resulted in a split in the international department, one focusing on the digital wallet, while the other is working on foreign market options regarding BankID.

Richard Carlsen (SVP, Vipps´ International Business Development) stated during the interviews that *"one of our strongest hypotheses from the startup-period has been that this is not something we can manage on our own"*, meaning that the firm cannot internationalize by itself. The interviewees all believe that some way of collaboration is necessary. The reasoning behind this hypothesis is that Vipps has been highly dependent on the Norwegian banks' trustworthiness to achieve success in Norway, and also the distribution capacity of these banks. To perform the mobile payment with Vipps, each user has to log in with BankID for positive identification. The usage of BankID has been a big part of the success in Norway due to its ease for users to onboard Vipps´ wallet. Replicating this process in other markets will be challenging because BankID is not embedded in any other country than in Norway. Sweden, Denmark, Iceland, and Estonia are examples of countries with similar solutions for ID across multiple services, with India, Singapore and Colombia showing promising technological progress. The issue is compatibility across technologies. These ID solutions will not radiate interoperability before it is broken down and rebuilt to match each other due to some of these solutions being built in the early 2000s. So, why would Vipps want to enter these foreign markets at all?

4.4.2 Phase 2 - Strategic rationale and promising markets

According to internally conducted calculations, Vipps have about 80% market penetration in Norway for their digital wallet, indicating that the market is close to saturated. Vipps has difficulties identifying any new growth possibilities for payments in Norway, so the firm want to search for more substantial volumes in the international markets to reach their full potential. That is the primary driver for proceeding with plans of foreign markets. The interviewees also believe the market potential exists abroad for the wallet solution they have created and continue to develop. Introducing both their wallet and BankID to foreign markets bring about some alterations to their original plans, with BankID being quite different from the wallet. Working with the internationalization of the wallet for approximately a year, Vipps realized the potential of BankID and started to shift focus towards ID as an individual component. Richard Carlsen argues for the shift toward ID as *"we have a unique value proposition and a stronger demand compared to the digital wallet"*, even though Vipps would prefer to internationalize both.

Landing contracts in Europe as a first move is considered most realistic since it has a somewhat similar regulatory environment as Norway. Also, when the international department of Vipps needs backing from its owners, mostly consisted of Norwegian banks, they have to be sure of their risk assessments, and Europe is considered less risky than other markets. In the long run, Leif Erik Kleivene (Vipps´ International Business Development) state that *“we aim to be an enabler for banks in other markets”*, mostly to reduce dependency from American and Chinese providers, making the payment landscape in Europe more targeted towards European countries and needs. An issue with focusing on Europe is that it is already quite digitalized, leading to increased difficulties in maneuvering the market for wallets. This is why some internal objectives of the department have been to seek the markets of Latin America, Africa and Southeast Asia. These markets are considered less developed in digital payments and have much potential but are deemed way riskier than Europe. Vipps does not consider the American market as attractive, as some of the most robust payment providers in the world are already located in the country.

“From my personal standpoint, it is more potential in Latin America, Africa and Southeast Asia with regard to Europe being relatively digitalized with many established solutions displaying different degrees of success.”

Leif Erik Kleivene, Vipps

Vipps are claiming that 1 billion people still are without any form of ID and that 3.2 billion has physical ID but not digital, making it clear that there is potential for digital ID solutions. Europe was initially intended to be the first step in the internationalization process; however, this has taken another direction when ID became more of the focus for Vipps. The reasoning behind this is that populations with both physical ID and digital ID are becoming quite normal in Europe and that markets such as Latin America, Africa, and Southeast Asia are further behind in this regard. The BankID solution may not be applied at all, but the international team's knowledge and experience can help accelerate and ensure success for other actors in their respective home markets. Few have experienced the success that Vipps has had with multi-purpose ID schemes, where the population can use BankID across the private and public sectors to either login or register safely and efficiently. Even fewer have international expansion strategies for these ID schemes, which provide Vipps with a void to potentially fill.

4.4.3 Phase 3 - Three streams of technology

Vipps emphasizes three potential streams of technology to introduce to the international markets. The first option is to focus on the digital wallet, which has been highly successful in the Norwegian market. Wallet technology is quite similar in the Nordic and European markets from a bird's eye view, with some alterations in each home country, meaning that potential for interoperability is present. The second stream is to initiate agreements regarding components of their in-house technology. Vipps began developing all of their technology in-house after the merger with BankAxept and BankID, increasing potential for certain components. The third option is to venture abroad with a focus on ID, with their BankID solution or a repackaging of the identification technology. All of these options can be exported separately, in pairs, or all together depending on the specific market targeted.

Introducing their wallet solution to foreign markets are one of the main areas of focus for the international department of Vipps. Short term goals include closing deals in Europe to get started with exporting. Negotiations have been going on for a while, and with time being of the essence in rapidly changing technologies, the department is dependent on landing a deal early. Digital wallets in Europe are relatively similar on the surface due to the regulatory environment and technological maturity but have different ownership structures and business models. Swish, the leading mobile payment platform in Sweden, is distributed through Swedish banks, meaning that users are generated through the banks that also are responsible for the redeeming of money. Vipps have direct user relations through their wallet and also hold their own redeeming business, which is a significant difference. Vipps, therefore, deem it essential to avoid too broad organizational cooperation, due to the many differences in ownership structure and business models.

Part of their process preparing for internationalization of the digital wallet is consisted of market research and pursuit of specific criteria to fit with both the company´s ambitions and resources. Some criteria mentioned by Vipps regarding their wallet are to identify consumer needs and assess if it is capable of fulfilling these needs. Vipps also have to understand the banking infrastructure in the host country to see if there are advantages to capitalize on while conducting competitive analysis to get a feel for who the competitors are. If local, dominant solutions exist, then there would be no reason to enter that market. Another prerequisite for Vipps to enter with their wallet is that the population has a high perceived level of technological maturity.

The second stream, exporting components of their technology, is something Vipps believes is beneficial in order to gain entry into markets the firm can capitalize on at a later stage, with some of their other products. Vipps already has collaborations related to their tokenization solution, a technique allowing payments without exposing card or bank account information, developed early by BankAxept. The technique takes a physical card number and creates a different unique digital card number while linking the digital card number to a specific mobile device. If the physical card is lost, then the mobile device can still be used to conduct payments (Eurocard, 2020). Tokenization is not developed by BankAxept, but is a solution created within this regiment. Vipps is already collaborating with an international partner to bring the tokenization solution to other countries. The collaboration is with Gemalto (France), a digital securities company bought by Thales Group (France) in April 2019 (Thales, 2019) and has led to export in countries such as France, Italy, and Nigeria.

Vipps will soon launch its digital payment solution in physical stores, with QR (Quick Response) technology. Vipps believe that NFC (Near Field Communication) technology developed by Apple is the technology with the most potential, even though Vipps is currently focusing on QR. The practical difference in technology is that QR consists of scanning codes, while NFC allows mobile devices to swipe or tap near a reader to initiate contact. Apple is currently blocking other companies from utilizing this solution, leading Vipps to focus on applying QR codes instead of the technology believed to have the most potential, namely NFC. QR is on the rise in Europe, mainly because Apply is constricting others from applying their solution, indicating that Vipps can have the potential for application of QR technology in Europe if their physical store launch is successful.

The third stream of technology, and the one that Vipps believe has the most international potential, is BankID or aspects of their identification technology. BankID is dating back to 2004 and has been built in a different era of technology, making it challenging to transfer to technologically mature markets. Vipps want to overcome technological challenges related to ID by either seeking markets with a low degree of technological maturity or by offering their expertise on how to create a well-performing ID solution to local partners in foreign countries. If Vipps should intend to export their ID technology, the international department will consider partnerships with actors that already has 80% of the population as users. An example could be a national bank with a high percentage of the population as costumers. Potential partners also have to carry a sufficient amount of services on its own to create critical usage, with at least 50 interactions per user yearly.

BankID has not only made it easy for Norwegian users to log in or register for services but has also streamlined processes along the way. An example is digital mortgages launched by DNB. Without being a prior customer of DNB, one can receive and sign loan agreements within 2 minutes because of the trust in BankID has in stating that the person applying for the loan is the correct person receiving the loan. Vipps wishes to create this level of trust in other countries as well. Linking BankID to more services and ensuring safety measures has led to the government and banks sharing more "need to know"-data, making it easier to provide services, such as loan agreements within minutes. Applying BankID to certain services also increases the ease of signing up to become a user, which leads to positive effects since the risk of a drop-off in the user base is usually increasing rapidly when it is tiresome to sign up. Vipps argues that the connection between BankID and its digital payment platform has been crucial for the success in Norway and that Vipps ideally would provide international markets with both the digital payment platform and BankID.

4.4.4 Phase 4 - International involvement

The primary source of international expansion for Vipps is going to be collaboration. The interviewees believe it is essential in order to reach proper volumes in host countries, especially seeking collaboration with banks holding a large customer base.

"We seek collaboration with actors that are industry-leading, have a wide distribution network and exhibit credibility."

Bjørn Skjelbred, Vipps´ International Business Development

The reasoning behind collaborations is the risks related to venturing abroad with an unknown brand and the lack of network advantages in the host country. The Vipps brand holds much value in Norway but might not be the correct brand to apply in other markets. Many would probably like to have a brand adapted to each local market, while some would like to keep the Vipps brand intact. Vipps also elaborates on the potential for subsidiaries in other countries for local governance, as long as it is possible to arrange agreements with local partners for regional know-how. Vipps has the financial capacity to acquire local firms to gain market knowledge and networks, but this will be more difficult to pull off due to the many owners of Vipps and approval needed to go through with M&A. The interviewees also acknowledge the importance of making local adaptions even though the services they provide are meant to be universal.

The most important collaboration for Vipps´ international ambitions is EMPSA (European Mobile Payment Systems Association). EMPSA is an association consisted of firms with prominent digital payment platforms from several parts of Europe. Vipps is a member of the association, with one employee from the international department being a board member. The common denominator for the firms in EMPSA is that all members began with their respective home markets, with some exceptions like Revolut (England, founded by Russians) and TransferWise (England, founded by Finns). EMPSA was established to ensure a common payment solution in the European digital payments landscape and to increase interoperability among the digital wallets. The interviewees have stated that they can provide technology and competence to reach the goal of a common solution and that they are pragmatic to which components the solution should contain. They also mention that EMPSA was established to impede American payment providers´ dominance in the European payments market, such as Apple Pay and Google Pay, mainly to reduce dependency from American payment services. Political pressure within Europe is almost demanding European banks and other payment service providers to present solutions to reduce the dependency of American and Chinese providers.

"*The main features of our international expansion are to demonstrate our ability to adapt, to reach rapid distribution with local partners*."

Bjørn Skjelbred, Vipps

Another collaboration that Vipps has engaged in is with Alipay. This is to ensure that Chinese users can utilize Alipay's digital payment platform to carry out payments in Norway. Alipay has formed agreements with other countries in Europe for the same reason, to provide Chinese users effortless payments in Europe. The main goal of the European collaboration with Alipay is to ensure interoperability between the many different solutions that have already made a significant impact in several home markets. The idea behind the collaboration from Vipps´ perspective is to create relations with a player that can shape the payment landscape for the years to come. Alipay is continuing to invest in infrastructure to ensure payment acceptance, similar to the goals of EMPSA, not only for the Chinese customers. Vipps, therefore, believe it is important to maintain collaboration with both EMPSA and Alipay.

Vipps is currently also a member of the European Payment Council, an association driven by the European Central Bank (ECB). The firm is also subject to the SEPA-regiment, which is payment regulations for all payments in the European Union (EU) and European Economic Area (EEA). Being subjected to SEPA, Vipps is also obliged to follow directives provided by the EU. PSD1 and PSD2 are examples of some directives, leading to the emergence of third-party services in the banking industry in Europe, such as Vipps and Payr. Directives from the EU have to be implemented in all countries related to the EU and EEA. These directives have to be interpreted by each country due to variations in legislation and be provided by companies within each country. Even though favorable directives from the EU have led to the emergence of third parties in banking, some of these directives and regulations hinder rapid movement for the same companies that are developing technology.

4.4.5 Phase 5 - The road ahead

The interviewees believe that BankID is tech-in – it is the way into a market, with the sharing of data and ID in applications. Vipps´ digital payment platform is tech-out – it is the payment, with wallets as the forefront. By this statement, they mean that Vipps consider BankID to have more potential than its digital wallet due to the vast number of people in the world who do not have a digital ID. Vipps already has a unique ID market position due to their success in Norway, which is one of the few success cases in the world. Some consider BankID or ID technology to be the selling point in foreign markets, meaning Vipps could enter a market with BankID and later establish the digital wallet with an ID sign-in. Vipps also examine the potential for exporting their knowledge by consulting others to create successful solutions, even opening up to invest in promising solutions in foreign markets.

"*We want to be a close partner to take part in both the risk and the upside of creating success*."

Richard Carlsen, Vipps

Germany is a country that has been on top of the wish list for Vipps´ international expansion but has proven challenging due to its complex banking infrastructure. This is a common denominator in many markets, making Vipps look for other solutions, but after researching several countries, Vipps have noticed the advantages of being less dependent on banking infrastructure. Solutions related to e-money, where the money is deposited through a card, transferred or possibly established through prepaid cards, has seen increased interest in the mobile payment markets. These solutions can be relevant in countries with weak banking infrastructure or markets with high usage of cash. It has been previously believed that collaboration with local banks was the way to enter foreign markets for digital payment platforms, but considering other digital alternatives is now an option to pursue for Vipps.

"*We need strong partners with distribution power, local trustworthiness, and local know-how to succeed in replicating our success in Norway. We explore the potential for both partnerships with international companies as well as local actors. One is for scale, the other for local knowledge.*"

Leif Erik Kleivene, Vipps

A factor Vipps mention for the future is the license to operate in banking within the EU. Acquiring such a license requires a substantial commitment of resources and time, which is why Vipps are looking for solutions where a license is not needed or where the firm can reuse an already existing license. Another way of bypassing the need for licenses is to apply segments of their technology to help other companies navigate their respective home markets. Vipps has recently been invited into a partnership with a non-disclosed company, owning close to all of the payment infrastructure in Great Britain, where the role of Vipps is to pilot a service where one can "ask for money" within an app. Vipps already has the technology and solution to handle these kinds of requests, and the service it is piloting is specially made to handle e-invoices, which is also a service Vipps currently offer in Norway. The reasoning behind offering parts of its technology is to locate ways of entering into promising markets, and the interviewees believe the partnership in Great Britain is a step in the right direction.

4.5 Payr

4.5.1 Phase 1- Business model formation and expansion

The idea behind Payr`s business model was shaped over time, initiated by the implementation of PSD1 in the European Economic Area. The directive was not considered suitable for the financial institutions and had, in practical terms, minor importance for their vast consumer bases. When the draft to PSD2 was approaching and bringing potentially game-changing alterations to the market, Åste Einn, Espen Einn, and Ola Einang seized the opportunity to acquire a head start. The co-founders of Payr injected start-up capital in the company, which was allocated to cover 12 months of market research. This included visiting international conferences and conducting interviews with central actors to understand how the Norwegian and European payment infrastructure is constructed, and consultation from potential customers to unravel needs and deficiencies in general payments.

The process revealed a demand for an agile and speedy online banking as a customized tool to a mobile lifestyle, contributing to facilitated management of personal economy (Payr, 2019). This remained the start-scope and initiated the development of the online banking application where invoices may be paid with debit- and credit cards or mobile wallets. However, the managers did not experience that this business model generated sufficient income. The solution became an AI comparison service platform that provides users with up-to-date price information regarding external suppliers directly in the application, which Payr deliberated as important to be considered user-friendly in the markets outside the Nordic countries. When a customer paid an invoice to their electricity supplier, the technology scanned the market automatically to compare providers and propose intelligent suggestions for users.

Acquisition of Conversionist and need for funding

In the summer of 2017, after one year of negotiations, Payr acquired the competitor Conversionist to expand the portfolio of industry areas and provide a more extensive comparison service. Through the digital platform Bedrebest and a robotics system named Even, Conversionist has helped 700.000 Norwegians annually to reduce costs (Nikolaisen, 2018; Payr, 2019). The acquisition ensures that Payr obtains access to a rich pool of historical customer data and an experienced managing team, with Kyrre Andersen as CPO (later CMO).

"We have positioned ourselves to exploit PDS2, and this acquisition contributes to strengthening the firm towards competitors and new, upcoming market entrants. Payr has high ambitions and is growing rapidly, but it takes time and capital to construct an international platform."

Espen Einn, Payr (Nikolaisen, 2018)

The acquiring of Conversionist enabled Payr to gain scale in the domestic market, as the number of active customers nearly breached 5000 by the end of December 2017.

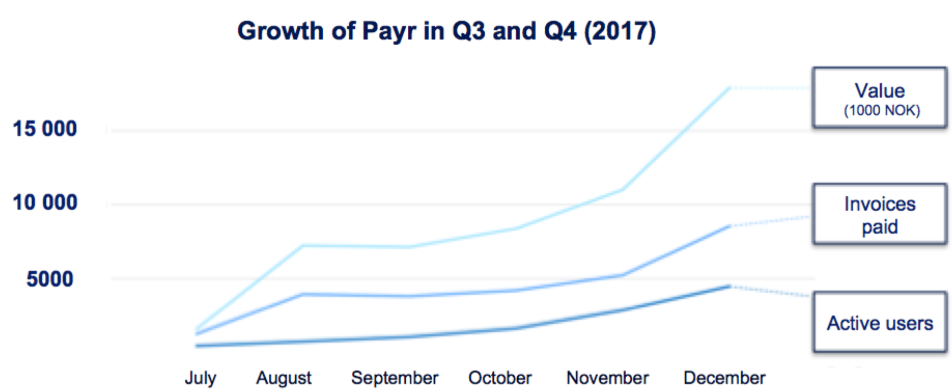

Figure 5: Growth of Payr in Q3 and Q4 in 2017 (Bakken, 2018)

The growth accelerated when the DNB Venture, a 250 MNOK financing program initiated by DNB, completed a capital investment of 6 MNOK in the company through an emission on 11 MNOK in mid-2018. This implies a valuation of the company of 71 MNOK, and DNB secured control of less than 10% of Payr. Per 28.05.2018, the application was downloaded 70,000 times with 10,000-11,000 active monthly users (Bakken, 2018).

<u>Limited domestic market and demand for volume</u>

Norway is a relatively small market in the context of services Payr offers, which is highly dependent on economies of scale and large volumes to capitalize. Their B2C model relies on attracting people to use the platform to pay and analyze their invoices, so that the platform may connect them with more suitable suppliers. Since a low percentage of individuals switch to an alternative supplier, a large volume is essential in order to obtain sufficient income. This is a major reason for why Payr initiated the exploration of markets outside Norway and Scandinavia.

4.5.2 Phase 2 - scaling up global ambitions

The principal objective of Payr was to use Norway as a testing market and implement a scaling strategy in the Nordic countries, Europe, and Asia.

"Our idea was to build this into the skies. We planned to enter the Nordic countries and Europe, before eventually reaching the Asian markets."

Espen Einn, Payr

Sweden and Denmark were the first markets to be entered, as international ambitions were shaped rapidly. This route became the roadmap for Payr in the pursuit of consumer volume. Payr experienced the consumer markets in the Nordic countries to be more facilitated than other regions on the continent, such as Western, Southern, and Central Europe. Internally conducted research indicated that it became increasingly challenging for the consumers to gain insights into services in terms of prices and conditions in these markets. Particularly relevant were Germany, Spain, Greece, United Kingdom, and The Netherlands, where services like insurance, financing, and telecom remained intricate and complex networks to navigate. This developed to be the main rationale behind the company`s internationalization strategy.

"To enter these countries and distribute valuable assistance to consumers on the best deals in the market would be revolutionary."

Kyrre Andersen, Payr

European market selection criteria

To map and decide specific markets to enter in Europe, Payr applied three guiding factors: (1) the number of individuals between the age of 18-70, (2) the number of people who have access to online banking, and (3) the number of people who have access to a credit card. These statistics were easily obtainable, which assisted the exploration and identification of the countries with wide demography and technological maturity. Southern European countries such as Spain and Greece displayed positive outcomes based on this guiding system. However, the board of Payr decided to await the implementation of these markets in the internationalization strategy due to high, local establishing expenditures. The strategy became Sweden and Denmark initially before entering Germany, Netherlands, and the United Kingdom subsequently.

Cooperation and strategic partnerships as tools for international expansion

Payr decided from an early stage that strategic partners and collaboration were a central part of scaling up volumes internationally. The company did already cooperate closely with Bits, which interacted with several European level players. An imperative ambition was that all strategic partners related to the payment infrastructure should be Pan-Nordic or European, which in time may contribute to facilitating the expansion into new markets. This was fairly intentional, and all partnership agreements were signed considering that the Nordic countries were the first to be entered. Regarding the distribution, Payr assumed that direct marketing of the service in Sweden and Denmark would realize satisfactory revenues. Because these nations had a similar composition of consumers and equivalent technological competence as the Norwegian market, internally conducted research displayed promising figures. Additionally, Payr acquired favorable earnings for each new customer in these markets and calculated how often the respective customers would change service suppliers via the digital platform.

In countries with different cultures and market composition, such as in the regions of Southern and Eastern Europe, strategic partnerships with local actors were considered vital to assist the distribution. Concerning this, the management team planned to target key personnel with high competence in different markets for employment in Norway. The purpose was to incorporate these individuals in the Payr culture for six months before transferring them back to their domestic market for implementation. This method was preferred in contrast to employing people in a market with limited knowledge of Payr`s culture or brand, circumventing the formation of cross-cultural differences in each international subdivision.

"If you are scaling up internationally, it is necessary to partner up with someone familiar with the local market … It is difficult to just replicate accomplishments in Norway and repeat them in European markets."

Espen Einn, Payr

In Norway, Swedbank, DNB, and BankID are strategic infrastructure partners to manage payment operations. When Payr prepared to enter Sweden and Denmark, it was natural to establish a dialogue with Nets. The two actors are former acquaintances, as they joined forces in an interface collaboration that embraced a NAAS (Nets Account Service System) pilot project in 2017 (Nets, 2017). Nets are a Copenhagen-based digital payment service provider, operating in a network connecting merchants, financial institutions, corporate customers, and consumers in Northern Europe (Nets, 2019). Payr recruited several consultants in the concern during a twelve-month period to commence market entry. However, when a Series A funding worth 50-60 MNOK facilitated by DNB Markets collapsed late in 2018, Payr experienced a comprehensive liquidity crisis. This coerced a dramatic shift in strategic focus from the consumer-oriented digital comparison service to the B2B-market, where the firm examined opportunities to license technology or partnering up with large market players.

Payr aspired to enter foreign markets with their own brand but recognized the practical challenges this entailed. Internal managerial discussions incited modifications to this approach, which facilitated European partnerships with white-label technology solutions. A long-term objective with these arrangements was to acquire local distribution assistance of the B2C platform at a later stage in the partner's domestic markets. Consequently, Payr applied for funding via the EU research and innovation program Horizon, whose purpose is to stimulate and accelerate European partnerships (European Commission, 2020). Several European banks were captivated to absorb Payr`s assets, particularly their invoice scanning technology. One undisclosed company delivered a respectable offer, although the negotiations with the promising partner ended with interviews in Brussels. Inadequate resources and high risk terminated further dialogue. Regarding these negotiations, Espen Einn stated that *"from our perspective, it felt risky… The alternative was to rotate the corporate strategy 180 degrees and go all in."*

Payr successfully licensed out technology in the Norwegian market to generate income in 2019. The agreement encompassed licensing of the invoice scanning technology to Bulder Bank, a challenger bank brand operating with the financial permission of Sparebanken Vest. Prior to this, the existing liquidity crisis kept pushing Payr to search for possible strategic partners and position the company to be acquired.

4.5.3 Phase 3 - Payr is acquired by Hudya Group

After six months of negotiations, Hudya Group acquired Payr in June 2019 for 82 MNOK in Hudya-shares. The Nordic-based corporation has formed a vast digital consumer platform through a systematic growth strategy that comprises strategic acquisitions to gather consumer-oriented services related to electricity, telecommunication, insurance, and consumer finances. By offering their complete service portfolio on the same platform, Hudya simplifies monitoring service terms and conditions for the customer.

The acquiring company identified the potential in Payr and sought to develop the platform to become a leading payment-application in Scandinavia. In an official press release, Morten Kvam (CCO, Hudya) expressed that *"we are pleased to acquire Payr´s personnel on our team. They have shown their ability to develop innovative products and services most people need and consequently received* *recognition both in Norway and internationally. Together, we will continue to create services that simplify people's everyday lives while maintaining a steady focus on user growth in the Nordic countries."* From the perspective of Espen Einn and Payr, this was a natural extension of the firm philosophy of scaling up volumes internationally through strategic collaboration, providing a rapid expansion into Sweden and Denmark. He further emphasizes that the two organizations are complementary and share comparable values, referring to their respective slogans *"Life, simplified"* (Hudya) and *"Improving people`s financial lives"* (Payr).

"Hudya was a good match for Payr. They were already present in the countries we desired to enter and expressed the objective of enduring international expansion."

Kyrre Andersen, Payr

The agreement comprises of Hudya obtaining access to know-how and technology developed by Payr, including the digital payment platform exceeding 40,000 active users at the end of 2019. Post-acquisition, the new organization employ 250 people in Norway, Sweden, and Denmark, and was listed on Nasdaq First North (Stockholm) in February 2020.

Integrating Payr strategies in Hudya – positioning for Nordic growth

Payr was intended to become the organization`s fintech-arm because Hudya lacked a fintech-community. Together, the new company`s initial strategic objective is to launch Payr`s application in Sweden and Denmark. Hence, Payr may generate user traction and take advantage of a sizeable Scandinavian customer pool while promoting Hudya`s products on their digital platform. When customer relationships are established, Payr’s technology will be used to analyze invoices to recommend Hudya products at a lower price than current providers for cross-sale. In this way, Payr and Hudya reap mutual benefits based on complementary capabilities.

"Where we are competent at digital product development and design, they are competent at distribution."

Espen Einn, Payr (Johannesen, 2019)

In markets outside Scandinavia, where Hudya and Payr are not present, this approach is reasoned to stimulate a more significant impact than penetration with traditional marketing. The spoken international ambition is to look further than the Nordic countries, although the principal focus at this stage is to gain critical mass in the currently entered markets. This motivation is driven by unexploited opportunities in the Scandinavian markets and the potential to achieve self-generating growth where existing customers provide new customers.

4.5.4 Phase 4 - Road ahead

When the acquisition negotiation process was close to completion, a central contractual term was that Hudya would adopt Payr`s financial permission, a legal requirement that governs organizational financial operations. However, the Norwegian Ministry of Finance declined the request with authority in the financial institutions act § 6-3, first paragraph (Ministry of Finance, 2018). The law specifies that the acquirer must *"assure proper and adequate management of the financial institution and its activities*," where Hudya did not satisfy listed requirements. Accordingly, Payr had to lay off their financial permission to finalize the acquisition, compelling a termination of the payment service in their application.

At the time of writing, Payr and Hudya are continuously working to reactivate the permission, where the objective is to re-launch a new version of the Payr application in Sweden, before expanding to other Nordic countries. Meanwhile, the outcome of a short-term partnership strategy with an unidentified financial institution is close to implementation, whose purpose is to secure payments for Norwegian customers until the re-launch in Norway. Because Hudya became listed on Nasdaq First North in Stockholm after the acquisition, the likelihood of receiving financial permission in Sweden is acknowledged to be higher. When permission is approved, it may be "passported" or transferred to other markets within the EU and EEA. The EU has facilitated this transfer practice to secure open financial opportunities and the flow of services between borders. When launching a service in one market, only minor alterations are required to introduce the same service in another country. According to Payr, this process is already in progress, heading towards a restart in Sweden by the end of 2020.

5.0 Results and discussion

The research conducted in this thesis explores the internationalization strategies of the digital payment platforms of Vipps and Payr, linking prior theory in the field of internationalization with digital platform research (Figure 2). Since the understanding of digital payment platform internationalization is restricted, and little is known about factors that influence a given international strategic approach, this section intends to illuminate our central findings and observations. Hence, a deeper understanding of the research question is provided by discussing significant factors that may lead to differences in the international strategies of digital payment platform organizations. The analysis of the data collected from the in-depth interviews indicates that several factors influence digital platform internationalization, which is reviewed in four categories; financial resources, ownership, networks and reputation, and location.

The model below displays the relationship between the factors, derived from the comparative analysis of Vipps and Payr. To gain insights regarding how they affect digital payment platforms' strategic approach, each one is identified and deliberated in accordance with previous literature to provide a response to the research question.

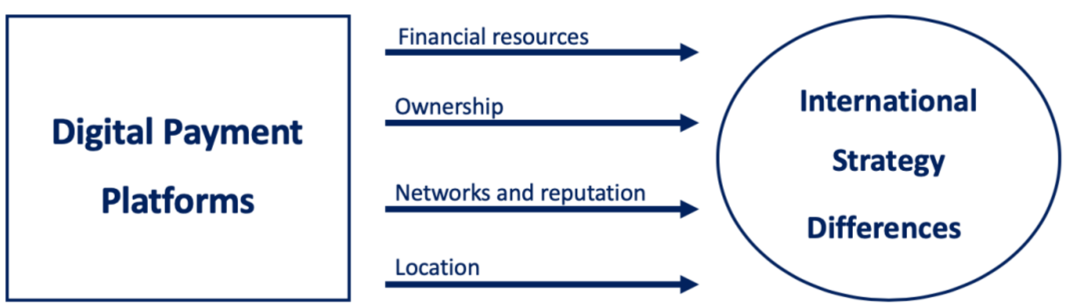

Figure 6: Factors leading to differences in digital payment platform internationalization

5.1. Factors leading to differences in digital payment platform internationalization

5.1.1 Financial resources

Strategic management literature argues that organizational resources do not merely influence firm existence, but likewise shape its internationalization strategies (Chang & Rhee, 2011; Sui & Baum, 2014). Firms select or ought to select a suitable approach for entering a market by considering their resources (Johanson & Vahlne, 2009), as there is considerable difference in resource commitment between equity-based and non-equity-based entries (Pan & Tse, 2000). Yet, there is limited literature on how resources, particularly related to financial capital, impact digital platforms' internationalization strategies. In line with the findings of the interviews with Vipps and Payr, the obtainability and utilization of financial resources are a significant factor that affects digital platforms international strategy.

Financial resources are required for digital platform firms to expand the business beyond domestic borders. The last years, adolescent businesses have become progressively dependent on funding to grow a sufficient research base (Srinivasan & Venkatraman, 2018). For digital payment platform firms operating in competitive environments with fast technological transformations, the capability to differentiate services and assimilate next-generation technology is decisive for success in foreign markets (Morvan, Hintermann, & Vazirani, 2016). However, a dominant challenge, primarily for adolescent platforms, is to rapidly develop and access financial resources to navigate technological change. Furthermore, access to these resources may lead to the development of new services and make new markets accessible with reinventing strategies to serve each market optimally (Knight & Cavusgil, 2004). Pursuant to Srinivasan & Venkatraman (2018), our interviews indicate that a fundamental source of obtaining the financial resources needed for international scale-up and growth, is the access to venture capital funding.

For Payr, the procurement of financial resources in terms of funding was highly influential for their international strategic approach. Since the start-up period, Payr raised 35 MNOK in funding from various actors. When the Series A funding of 50-60 MNOK provided by DNB Ventures failed to be completed, Payr`s strategic focus was altered from B2C to B2B, with the emphasis on licensing technology and acquisition by other actors on the market. According to Payr`s managers, the firm possessed the technology and know-how to expand successfully in B2C markets outside Scandinavia with strategic partnerships. However, the high local establishing costs were considered as a barrier to entry in light of the current liquidity. Consequently, Payr entered Sweden and Denmark by being acquired. In contrast, Vipps has access to capital through financially stable and robust owners like DNB and Sparebank 1-alliansen, opening to acquire firms and establish local subsidiaries in foreign markets. This implies that, during an international scale-up, the obtainability of financial resources is a significant factor that influences digital platform internationalization distinctiveness. The relationship is supported and empirically shown by Hitt, Bierman, Uhlenbruck & Shimizu (2006), which illustrate the direct link between specific and vital resources and the organization's internationalization strategy. Financial resources may affect the firm's strategic choice and impact their abroad survival (Efrat & Shoham, 2012).

5.1.2 Ownership and the role of managers

Some of the differences in internationalization strategies found in the cases of Vipps and Payr are derived from distinctions in ownership, though both have quite similar and dispersed ownership structures. Vipps have some principal shareholders such as DNB (44.49%) and Sparebank 1-alliansen (20.04%), with the rest being distributed between other Norwegian banks, leading to 106 owners in total. Payr has, from the beginning, been an entrepreneurial adventure with no significant owners, other than the founders. This changed over the years as Payr required funding to increase their commitment and develop their digital platform solution. At the most, before Hudya acquired the company, Payr had 115 different shareholders due to extensive fund-raising throughout the last years. Distinctions in ownership between Vipps and Payr is mostly related to the financial capabilities of the Norwegian banks supporting Vipps, enabling them to make decisions and attempt new directions otherwise restricted by the lack of capital, such as establishment of subsidiaries in foreign markets (Pan & Tse, 2000). Such decisions could also be investments in technology or hiring of people with specialized backgrounds and experience. Payr, on the other hand, was forced to sell components of their technology early on to make money, while Vipps has lost more than 500 MNOK since their start-up in 2015 (Trumpy, 2020) and are still going forward with their original plans of international expansion. This can be directly linked back to their financially capable owners.

Even though the ownership structures of Vipps and Payr have been similar on paper, the companies exhibited significant differences in reality. Payr expressed entrepreneurial decision-making (Andersson, 2000) and did not need the same level of compliance from owners as executives at Vipps, meaning that the founders of Payr made decisions on the expansion plans and which criteria to look for in the markets. Managers also tend to have more actionable freedom when ownership is dispersed as in Payr, rather than a higher concentration of major shareholders (Liu, Li & Xue, 2011; Oesterle, Richta & Fisch, 2013). Payr almost had the same number of shareholders as Vipps, but none of the shareholders at Payr exceeded any significant percentage of ownership in contrast to DNB (44.49%) and Sparebank 1-alliansen (20.04%) at Vipps.

In terms of internationalization strategies, both companies have had ambitious plans of foreign market entries. Intentions of foreign expansion have been affected by the owners with regards to how they should enter these markets, while the rationale behind expansion has been different between each company. Payr initially wanted to seek Greece and Spain as the first steps due to these markets’ potential based on their checklist of criteria. However, their focus shifted to the Nordic countries due to language barriers and the lack of financial capital from owners. In comparison, employees at the international department of Vipps has expressed a desire to enter South America, because of the technological maturity and potential of some selected countries but has been held back by conservative owners. The owners have set their eyes on the European market as they conclude it involves less risk than other markets and can be an adequate starting point.

A study performed by George, Wiklund and Zahra (2005) indicates that executives are more risk-averse and have a lower tendency to increase the scale of internationalization when external ownership is present. They argue that owners often are more prone to risk and that managers would disperse risk, but we found that managers would make riskier choices than the owners, often due to time constraints in the rapidly developing markets of digital payment platforms. The risk from Vipps´ managers was directed at specific locations to consider for expansion and not the form of entry mode, as they all agree that collaboration would be most applicable. Time constraints and pressure of delivering a service in foreign markets may lead managers to seek riskier solutions, but in the case of Vipps and Payr, it did not alter their internationalization strategies as these were already supported by the owners.

5.1.3 Networks and reputation leading to new opportunities

Essential activities for digital platforms embrace various tasks, such as market research, technological improvement, expanding the management team, and creating legitimacy with several stakeholders. Hence, the relationships and network relations digital firms establish with other organizations, foundations, and partners can act as pathways whereby they can acquire resources and opportunities (Srinivasan & Venkatraman, 2018). Johanson & Vahlne (2009) explain that these relationships, since they provide the identification and utilization of business opportunities, significantly influence the geographical market a company chooses to enter, and the specific entry mode applied. This is consistent with Cavusgil & Knight (2015), which furthermore argue that internationalization is reflected to considerably benefit from network relationships and social capital, serving a key role in forming alliances and strategic partnerships, enabling internationalization and international performance.

Our findings support the view of international networks' importance and demonstrate its significance for digital platform strategy. Vipps recognize these networks as exceptionally useful, which value is created over time with involvement in foundations and collaborative associations such as World Economic Forum, The World Bank, Bill & Melinda Gates Foundation, Better Than Cash Alliance (UN), and United Nations Capital Development Fund. Vipps internally label these Business Development Forums, where it is possible to grasp local business opportunities. Consistent with Zhou, Wu, & Luo (2007), the networks were found to offer local knowledge of foreign market opportunities, know-how, access to technology, and increased level of trust. Comparably, Payr participated in several international payment conferences to promote the company and shape business relations. Former CEO, Espen Einn, was a member of Norsk Standard, a part of the European Committee for Standardization (CEN) and ISO (International Organization for Standardization), working globally on SEPA with Swish and other international actors. Furthermore, global forums hosted by MasterCard and the pan-European standards initiative, Berlin Group, were attended. In line with Johanson & Vahlne (2009), these networks provided valuable commercial references for Vipps and Payr, which led to strategic opportunities and new relationships internationally.

According to Vipps, the positive references from these collaborative forums brought forth agreements with current strategic partners in foreign markets, for instance, Gemalto (Tales) in France, Italy, and Nigeria. This demonstrated that Vipps may play a role in an international B2B-chain and is considered among the most imperative collaborations for Vipps. Additionally, the membership in EMPSA secures Vipps a central position in the European payment B2C-market. The collaboration fosters cross-border cooperation and aims to enable the use of Vipps systems in thirteen countries. These networks, with interrelated flows of information and know-how, shaped their international strategy and eased the establishment of strategic partners. In line with Rugman and Verbeke's (2003) firm-specific advantages, this enables Vipps to acquire intangible resources related to technological know-how and digital platform management, which can alter their mode of entry into foreign markets. Likewise, Payr used their networks and relationships to pitch their business model and technology and promote the brand to international actors. However, Payr reported lacking the capacity and resources to reap the benefits and widen their networks to a more considerable extent. The findings indicate that digital payment platforms may increase their chance of international scale-up with a diversified network of relationships, influencing their international strategic approach (Srinivasan & Venkatraman, 2018).

5.1.4 Location as a means to reach critical mass

International business literature state that choice of location is one of the key decisions when firms pursue internationalization, and that the choice of foreign market location is one of the most complex decisions managers have to make (Galan, Gonzalez-Benito & Zuniga-Vincente, 2007). There are certain aspects indicating a favorable location, but for digital platforms it is crucial to achieve critical mass (Parker & Van Alstyne, 2012; Ruutu, Casey & Kotovirta, 2017). Assessing where to reach these numbers is why the choice of location is an important factor for their internationalization process. It has already been established that Vipps and Payr considered collaboration as their most viable option to reach their goals of critical mass in foreign markets. Vipps stated that their most likely approach would be to find a local company that holds a large user base, preferably in a country located in Europe. With their membership in EMPSA, Vipps would also seek countries where it can best utilize its technical capabilities to create a common payment solution in Europe.

Dunning (1988) argues that location-specific advantages are important to consider in the process of foreign direct investment. Even though the liability of foreignness (Zaheer, 1995) differs between locations, advantages in host countries must be stronger than the disadvantages of entering foreign markets. For digital payment platforms, these advantages can, among other factors, be a technologically mature population, non-complex banking infrastructure, and governments promoting digitalization. Payr had criteria directly linked to the population of potential countries, such as the number of individuals between the age of 18-70 and the number of people with access to online banking and credit cards. Likewise, Vipps made considerations towards banking infrastructure in potential countries and has so far excluded Germany, a high potential market, due to its complex banking infrastructure.

Location disadvantages, such as disadvantages related to language differences, foreign rules and regulation and gathering of viable market research are all important variables when choosing a location for the operations of a firm (Chen & Chen, 1998). Payr conducted market research and concluded early that Greece and Spain were attractive markets in terms of their established criteria. Language barriers were one of the main reasons the firm did not choose these markets, along with the thought of establishing call centers and adapting to local regulations. Vipps, on the other hand, holds specialized knowledge with regards to EU regulation and is therefore fit to set up business in a country compliant with these regulations. Locations outside of these territories imply increased uncertainty and risk, though managers´ perceptions of these variables are different due to variations in experience and individual biases (Agarwal & Ramaswami, 1992).

Location-specific investment risk and uncertainty are often reflected in the political and economic conditions of the host country. In countries with perceived instability, it would be favored not to enter, though firms are likely to select non-equity-based modes if entry is enticing (Agarwal & Ramaswami, 1992; Benito & Welch, 1994; Pan & Tse, 2000). This is why both Vipps and Payr considered collaboration as the most viable option to venturing abroad. The interviewees stated that in terms of local uncertainties and lack of local knowledge, they would preferably enter with either another international player or a local company of considerable size. Payr wanted to seek the Nordic countries instead of more complex markets in Europe to reduce uncertainty related to location and due to the lack of previous market knowledge. Comparably, the interviewees have stated that Vipps would go to great lengths in making local adaptions to reach favorable agreements only located in foreign markets. In line with Dunning (1980; 1988), our findings indicate that advantages related to location could affect internationalization strategies of digital payment platforms.

6.0 Conclusion

6.1 Key findings and managerial implications

6.1.1 Key findings

The emergence of digital platforms has disrupted and revolutionized industries at a rapid pace, leaving presumed solid companies in the dust. Innovative technology, a shift in consumer behavior, and regulations like PSD1 and PSD2 have led to the evolution of digital platforms, providing us with digital payment platforms. In the later years, digital platforms have been gaining traction among researchers, but little is still known of how and why digital payment platforms internationalize. During in-depth interviews with executives at Vipps and Payr, we explored their rationale behind global ambitions and how they seek to fulfill their goals of foreign market expansion. We identified four factors that are apparent in creating differences in the international strategic approaches among the two digital payment platform organizations; financial resources, ownership, networks and reputation, and location, displayed in Figure 7.

	Firms	
Factors	**Vipps**	**Payr**
Financial resources	Financial resources from financially robust owners (e.g., DNB and Sparebank 1-alliansen) enables Vipps to acquire firms and establish local subsidiaries.	Limited sources of financial capital altered the focus from B2C to B2B, with the emphasis on licensing technology and being acquired by other market actors. Highly dependent on funding (e.g., venture capital).
Ownership	Desire to enter South America, due to the technological maturity and potential of some selected countries but has been held back by conservative and risk-averse owners. High level of interference from owners in decision-making.	Founders made decisions on the expansion plans and which criteria to search for in foreign markets (entrepreneurial decision-making). Low level of interference from owners in decision-making.

Networks and reputation	References from collaborative forums brought forth agreements with current strategic partners in foreign markets. The membership in EMPSA secures Vipps a central position in the European payment B2C-market.	Utilized networks (e.g., international payment conferences) and relationships to pitch their business model, technology and international brand promotion. Regardless, Payr lacked the capacity and resources to exploit their networks to a greater extent.
Location	Sought to find a local company holding a large user base, preferably in a country located in Europe. Possess specialized knowledge with regards to EU regulation, favoring involvement in Europe.	Sought to enter the Nordic countries rather than more complex and distant European markets to reduce uncertainty related to location and the lack of previous market knowledge.

Figure 7: Comparative summary of influencing factors

Our findings and discussion found that resources may affect a firm's strategic choices during international expansion. Observed in Vipps, strong financial capital can help overcome local establishing costs considered barriers to entry, while also allowing the firm to assimilate necessary next-generation technology for the rapidly changing environments and possibly enable the establishment of local subsidiaries. However, in the case of Payr, limited sources of financial capital altered international expansion plans, as the firm had to allocate time on raising capital, while also being dependent on licensing its technology to endure. Ownership and the role of managers can impact the internationalization strategies due to differences in experience and risk preference. We noticed that managers in Vipps would like to take riskier approaches than the owners but were held back by the influence and final preferences of these owners. In contrast, the entrepreneurial decision-making displayed in Payr is considered different from Vipps, as the level of interference from the many owners of Payr was significantly lower. Networks and reputation influenced international strategic approaches so that a diversified network of relationships may increase the chances of international scale-up. For instance, the membership in EMPSA for Vipps and international payment conferences for Payr, indicated that interrelated flow of information through networks shaped internationalization strategies and eased the establishment of strategic partners. The results also showed that the choice of location could affect internationalization strategies, as Vipps possess specialized knowledge of EU regulations, favoring involvement in Europe. Comparably, Payr sought to enter the Nordic countries as the first step, due to the lack of previous market knowledge. Furthermore, the findings indicate that some will go to great lengths in making local adaptions to reach a population with the most potential for achieving critical mass. These factors, both individually and interconnectedly, may lead to differences in international strategic approaches among digital payment platforms.

6.1.2 Managerial implications

The notion that digital platforms are spreading through industries is already established in the literature, but many neglect their ability to expand from one market to another due to its many possibilities of digitalization. On the other hand, the results indicate that digital platforms, with the specifics of digital payment platforms, face challenges hampering foreign market entries. It is easy to think that digital payment platforms are spread in foreign markets without difficulties due to digitalization. However, digital payment platforms face a whole other set of banking regulations and require a more technologically mature population to function and gain critical mass. Other factors that could affect internationalization strategies were financial capital for overcoming establishment costs and owners' decisions based on different risk preferences. The findings also suggest that digital payment platforms should seek collaboration before any modes of entry and that network and location are imperative in reaching critical platform mass.

6.2 Theoretical implications

This thesis contributes to the limited literature on digital payment platforms by offering an exploration of the internationalization strategies of digital platform firms and how different factors influence their international strategic approach.

Our findings are unique and novel in bridging digital payment platforms and previous research within the field of international business and foreign direct investment. While digital platform internationalization has been investigated to some extent (Srinivasan & Venkatraman, 2018; Stallkamp & Schotter, 2019), the international strategies of digital payment platforms are, to our knowledge, unexplored territory. To shed light on this area, we identify separate and interconnected factors that may influence digital payment platforms' entry mode, international strategic posture, and foreign market selection. Hence, this thesis provides a theoretical contribution to improving the understanding of how digital payment platforms internationalize, either through network scale-up, to reach critical mass or the licensing of central, firm-specific technology. The insights from our findings may also improve the knowledge of how factors like financial resources and the role of managers and owners hinder, support, or shape this process. Furthermore, considering that this study is restricted to a single-country context, we portray how digital payment platform firms and their international strategies can differ within the same domestic market due to these factors. This work provides a foundation for further research on digital payment platform internationalization.

6.3 Limitations and directions for future research

Despite that this study emphasizes areas with limited preceding research to draw on, it is still characterized by evident limitations that provide a roadmap for future research. As previously outlined, this research is exploratory and applied a comparative case study with Vipps and Payr. Therefore, the collected data is restricted to two firms. Future research should include more companies to access a greater variety of data, which may lead to contrasting findings. In part, there exists a potential for investigations of digital payment platform internationalization in other contexts, including emerging and developed markets. Furthermore, the exploration of the international strategic approaches in this study is limited to a single-country setting. The implementation of a cross-country scope in forthcoming analyses could arguably shed light on differences in internationalization and progression if the given platform were based in a distinct geographical market. This can stimulate new understandings with more profound theoretical scrutiny into digital platform internationalization in diverse markets and payment industries.

Accordingly, digital platform research is in the position to form new theories as opposed to exclusively adopting current theories (Stallkamp & Schotter, 2018).

The research conducted in this study identified that factors like financial resources, ownership, networks and reputation, and location are influencing the strategic international approach of digital platform payment firms. Implementation of several organizations in future research may discover other factors that drive strategic distinctions over time or offer more in-depth knowledge regarding the factors presented in this study. For instance, the existing insights of successful platform governance described by de Reuver, Sørensen, & Basole (2018) and Wareham, Fox, & Cano Giner (2014) is limited, and require additional scrutiny. Moreover, insights from our findings may be used to understand how digital payment platforms can derive value from embeddedness in international relationship networks, bringing forward the work of Srinivasan & Venkatraman (2018).

7.0 References

Afuah, A. (2001). Dynamic boundaries of the firm: Are firms better off being vertically integrated in the face of a technological change? *Academy of Management Journal*, 44(6), 1211-1228.

Agarwal, S. & Ramaswami, S. N. (1992). Choice of foreign market entry mode: Impact of ownership, location and internalization factors. *Journal of International Business Studies*, 23(1), 1-27.

Alexander, N., Myers, H. & Rhodes, M. J. (2007). International market selection: Measuring actions instead of intentions. *Journal of Services Marketing*, 21(6), 424-434.

Anderson, E. & Gatignon, H. (1986). Modes of foreign entry: A transaction cost analysis and propositions. J*ournal of International Business Studies*, 17(3), 1-26.

Andersson, S. (2000). The internationalization of the firm from an entrepreneurial perspective. *International Studies of Management & Organization*, 30(1), 63-92.

Armstrong, M. (2006). Competition in two-sided markets. *The RAND Journal of Economics*, 37(3), 668-691.

Bakken, J. B. (2018, 23. January). Taper på første tjeneste – skal tjene på å kutte regninger. Dagens Næringsliv. Retrieved from https://www.dn.no/handel/payr/espen-einn/kyrre-overland-andersen/taper-pa-forste-tjeneste-skal-tjene-pa-a-kutte-regninger/2-1-256748?fbclid=IwAR2ld_98JsgxRn8_cdMxUzDe_VeXWzS4QaIvc3HYzorax0x3Acdc6dBKEz4

Bakken, J. B. (2018, 28. May). Her investerer DNB Venture de første av sine 250 millioner. Dagens Næringsliv Gründer. Retrieved from https://www.dn.no/handel/payr/morgendagensnaringsliv/teknologi/her-investerer-dnb-venture-de-forste-av-sine-250-millioner/2-1-339862

Banalieva, E. R. & Dhanaraj, C. (2019). Internalization theory for the digital economy. *Journal of International Business Studies*, 50(8), 1372-1387.

Bell, E., Bryman, A. & Harley, B. (2019). *Business research methods* (5th ed.). Oxford: Oxford University Press.

Benito, G. R. G. & Welch, L. S. (1994). Foreign market servicing: Beyond choice of entry mode. *Journal of International Marketing*, 2(2), 7-27.

Bharadwaj, A., El Sawy, O. A., Pavlou, P. A. & Venkatraman, N. (2013) Digital business strategy: Toward a next generation of insights. *MIS Quarterly*, 37(2), 471-482.

Bits. (2020). About Bits. Bits AS. Retrieved from https://www.bits.no/en/about-bits/

Bjerknes, C. (2017, 26. October). DNB vippset inn 754 millioner. Dagens Næringsliv. Retrieved from https://www.dn.no/marked/finansdepartementet/dnb-dnb/rune-bjerke/dnb-vippset-inn-754-millioner/2-1-195725

Brouthers, K. D., Geisser, K. D. & Rothlauf, F. (2016). Explaining the internationalization of ibusiness firms. *Journal of International Business Studies*, 47(5), 513-534.

Brouthers, K. D. & Hennart, J. F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management*, 33(3), 395-425.

Bruno, P., Denecker, O. & Niederkorn, M. (2020). Global payments report 2019: Amid sustained growth, accelerating challenges demand bold actions. McKinsey & Company. Retrieved from https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/tracking%20the%20sources%20of%20robust%20payments%20growth%20mckinsey%20global%20payments%20map/global-payments-report-2019-amid-sustained-growth-vf.ashx

Buckley, P. J. (1988). The limits of explanation: Testing the internalization theory of the multinational enterprise. *Journal of International Business Studies*, 19(2), 181-193.

Buckley, P. J. (2016). The contribution of internalization theory to international business: New realities and unanswered questions. *Journal of World Business*, 51(1), 74-82.

Buckley, P. J. & Casson, M. (1976). *Future of the multinational enterprise*. London: Macmillan.

Buckley, P. J. & Ghauri, P. N. (1999). *The internationalization of the firm* (2nd ed.). London: Thompson Learning.

Bughin, J. & van Zeebroeck, N. (2017). New evidence for the power of digital platforms. Mckinsey Quarterly. Retrieved from https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/new-evidence-for-the-power-of-digital-platforms

Bughin, J., Catlin, T. & Dietz, M. (2019). The right digital-platform strategy. McKinsey Quarterly. Retrieved from https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-right-digital-platform-strategy

Bughin, J., Manyika, J. & Woetzel, J. (2019). Globalization in transition: The future of trade and value chains. McKinsey Global Institute. Retrieved from https://www.mckinsey.com/~/media/mckinsey/featured%20insights/innovation/globalization%20in%20transition%20the%20future%20of%20trade%20and%20value%20chains/mgi-globalization%20in%20transition-the-future-of-trade-and-value-chains-full-report.ashx

Caillaud, B. & Jullien, B. (2003). Chicken & egg: Competition among intermediation service providers. *RAND Journal of Economics*, 34(2), 309-328.

Cavusgil, S. T. & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3-16.

Chang, S. J. & Rhee, J. H. (2011). Rapid FDI expansion and firm performance. *Journal of International Business Studies*, 42(3), 979–994.

Chen, H. & Chen, T. J. (1998). Network linkages and location choice in foreign direct investment. *Journal of International Business Studies*, 29(3), 445-467.

Clement, J. (2019). Apple Pay – statistics and facts. Statista. Retrieved from https://www.statista.com/topics/4322/apple-pay/

Cusumano, M.A., Yoffie, D.B. & Gawer, A. (2020). The future of platforms. MIT Sloan Management Review. Retrieved from https://sloanreview.mit.edu/article/the-future-of-platforms/

Davidson, W. H. (1983). Market similarity and market selection: Implications for international marketing strategy. *Journal of Business Research*, 11(4), 439-456.

Deloitte. (2016). PSD2 – Payment Services Directive 2. Deloitte Luxembourg. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/lu/Documents/financial-services/Banking/lu_psd2-payment-services-directive2.pdf

Deloitte. (2019). Chasing cashless? The rise of mobile wallets in the Nordics. Monitor Deloitte. Retrieved from https://www2.deloitte.com/content/dam/Deloitte/dk/Documents/financial-services/Downloads/Chasing_Cashless-The_rise_of_Mobile_Wallets_in_the_Nordics.pdf

Diener, E. & Crandall, R. (1978). *Ethics in social and behavioral research.* Chicago: University Chicago Press.

DNB. (2020). SEPA – Single European Payment Area. DNB. Retrieved from https://www.dnb.no/en/business/transaction-banking/international-payments/sepa.html?la=EN&site=DNB_NO

Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of International Business Studies*, 11(1), 9-31.

Dunning, J. H. (1988). The eclectic paradigm of international production: A restatement and some possible extensions. *Journal of International Business Studies*, 19(1), 1-31.

Dyer, W. G. & Wilkins, A. L. (1991). Better stories, not better constructs, to generate better theory: A rejoinder to Eisenhardt. *Academy of Management Review*, 16(3), 613-619.

Edelman, B. (2015). How to launch your digital platform. *Harvard Business Review*, 93(4), 90–97.

Efrat, K. & Shoham, A. (2012). Born global firms: The differences between their short-and long-term performance drivers. *Journal of World Business*, 47(4), 675-685.

Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-55.

Eisenmann, T., Parker, G. & Van Alstyne, M. W. (2006). Strategies for two-sided markets. *Harvard Business Review*, 84(10), 92-101.

Elia, S., Larsen, M. M. & Piscitello, L. (2019). Entry mode deviation: A behavioral approach to internalization theory. *Journal of International Business Studies*, 50(8), 1359-1371.

European Central Bank. (2020). What are retail payments? European Central Bank. Retrieved from https://www.ecb.europa.eu/paym/integration/retail/html/index.en.html

European Commission. (2019). Implementation by EU countries – national implementing measures for directive 2007/64/EC on payment services. European Commission. Retrieved from https://ec.europa.eu/info/law/payment-services-psd-1-directive-2007-64-ec/implementation/implementation-eu-countries_en

European Commission. (2020). What is Horizon 2020? European Commission. Retrieved from https://ec.europa.eu/programmes/horizon2020/what-horizon-2020

European Commission (2020). Payment Services (PSD2) - Directive (EU) 2015/2366. European Commission. Retrieved from https://ec.europa.eu/info/law/payment-services-psd-2-directive-eu-2015-2366_en

European Mobile Payment Systems Association. (2019). Unifying European mobile payment across borders and technologies. EMPSA. Retrieved from https://empsa.org/

European Payments Council. (2020) Schemes rely on global open standards. European Payments Council. Retrieved from https://www.europeanpaymentscouncil.eu/what-we-do/sepa-payment-scheme-management/schemes-rely-global-open-standards

Evans, D. S. & Schmalensee, R. (2008). Markets with two-sided platforms. *Issues in Competition Law and Policy (ABA Section of Antitrust Law)*, 1(28), 667-693.

Finance Norway. (2016). Bits AS i drift fra 1. april. Finance Norway. Retrieved from https://www.finansnorge.no/aktuelt/nyheter/2016/03/bits-i-drift-fra-1.-april/

Finance Norway. (2019, 26. June). PSD2 eller betalingstjenestedirektivet. Finance Norway. Retrieved from https://www.finansnorge.no/tema/bank/psd2-eller-betalingstjenestedirektivet/

Finance Norway. (2020). Finansnæringens etikkplakat. Finance Norway. Retrieved from https://www.finansnorge.no/siteassets/politikk/finansnaringens-etikkplakat-oppdatert-aug2018.pdf

Galan, J. I., Gonzalez-Benito, J. & Zuñiga-Vincente, J. A. (2007). Factors determining the location decisions of Spanish MNEs: An analysis based on the investment development path. *Journal of International Business Studies*, 38(6), 975-997.

Gawer, A. (2014). Bridging differing perspectives on technological platforms: Toward an integrative framework. *Research Policy, 43*(7), 1239-1249.

Gawer, A. (2009). *Platforms, markets and innovation*. Cheltenham: Edward Elgar Publishing Limited.

George, G., Wiklund, J. & Zahra, S. A. (2005). Ownership and the internationalization of small firms. *Journal of Management*, 31(2), 210-233.

Giske, M.E. (2019, 27. February). Samarbeidet med Alipay gir vippserne nye muligheter. DNB Nyheter. Retrieved from https://www.dnbnyheter.no/privatokonomi/samarbeidet-med-alipay-gir-vippserne-nye-muligheter/

Goodrick, D. (2014). Comparative case studies, methodological briefs: Impact evaluation 9, UNICEF Office of Research, Florence.

Grøgaard, B., Rygh, A. & Benito, G. R. G. (2019). Bringing corporate governance into internalization theory: State ownership and foreign entry strategies. *Journal of International Business Studies*, 50(8), 1310-1337.

Havnes, H. (2017, 13. February) Over 100 banker inngår Vipps-samarbeid med DNB. Dagens Næringsliv. Retrieved from https://www.dn.no/marked/dnb-dnb/vipps/over-100-banker-inngar-vipps-samarbeid-med-dnb/2-1-41067

Hill, C. W., Hwang, P. & Kim, W. C. (1990). An eclectic theory of the choice of international entry mode. *Strategic Management Journal*, 11(2), 117-128.

Hitt, M. A., Bierman, L., Uhlenbruck, K. & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, 49(6), 1137-1157.

Hokholt Bjerve, G. (2017, 17. November). Norske banker tar opp kampen mot nettgigantene: Slår sammen Vipps, BankID og BankAxept. Shifter. Retrieved from https://shifter.no/bankaxept-bankid-vipps/norske-banker-tar-opp-kampen-mot-nettgigantene-slar-sammen-vipps-bankid-og-bankaxept/106188

Hollensen, S. (2007). *Global marketing: A decision-oriented approach*. Harlow: Pearson education.

Hudya. (2019). Velkommen til Hudya. Hudya. Retrieved from https://hudya.no/

Ilic, J. (2020, 23. March). Digital payments in Europe to surpass $802bn transaction value this year. Finanso.se. Retrieved from https://finanso.se/digital-payments-in-europe-to-surpass-802bn-transaction-value-this-year/

Jacobsen, S. (2018, 19. January). Vipps lanseres internasjonalt i år. Finansavisen. Retrieved from https://finansavisen.no/nyheter/naeringsliv/2018/01/vipps-lanseres-internasjonalt-i-aar

Johanson, J. & Vahlne, J. E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23-32.

Johanson, J. & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40(9), 1411-143.

Jorgensen, D. L. (1989). *Participant observation: A methodology for human studies.* London: Sage Publications, Inc.

Kenney, M. & Zysman, J. (2015). Choosing a future in the platform economy: The implications and consequences of digital platforms, *Kauffman Foundation New Entrepreneurial Growth Conference*, Amelia Island, Florida.

Keyes, D. & Magana, G. (2019, 18. December). REPORT: Chinese fintechs like Ant Financial's Alipay and Tencent's WeChat are rapidly growing their financial services ecosystems. Business Insider. Retrieved from https://www.businessinsider.com/china-fintech-alipay-wechat?r=US&IR=T

Knight, G. A. & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies,* 35(2), 124-141.

Knight, G. A. (2000). Entrepreneurship and marketing strategy: The SME under globalization. *Journal of International Marketing*, 8(2), 12-32.

Koetiser, J. (2020, 12. February). Apple will manage 10% of global credit card transactions by 2025, analyst says. Forbes. Retrieved from https://www.forbes.com/sites/johnkoetsier/2020/02/12/apple-will-manage-10-of-global-credit-card-transactions-by-2025-analyst-says/#936d98f369cb

Koh, T. K. & Fichman, M. (2014). Multihoming users' preferences for two-sided exchange networks. *MIS Quarterly,* 38(4), 977-996.

Kumar, V. & Subramanian, V. (1997). A contingency framework for the mode of entry decision. *Journal of World Business*, 32(1), 53-72.

Lee, J., Song, J. & Yang, J. S. (2016). Network structure effects on incumbency advantage. *Strategic Management Journal*, 37(1), 1632–1648.

Lewis-Beck, M. S., Bryman, A. & Liao, T. F. (2004). *The SAGE encyclopedia of social science research methods* (Vols. 1-3). Thousand Oaks, CA: SAGE Publications, Inc.

Liu, Y., Li, Y. & Xue, J. (2011). Ownership, strategic orientation and internationalization in emerging markets. *Journal of World Business*, 46(3), 381-393.

McIntyre, D. P. & Srinivasan, A. (2017). Networks, platforms, and strategy: Emerging views and next steps. *Strategic Management Journal*, 38(1), 141-160.

Melin, L. (1992). Internationalization as a strategy process. *Strategic Management Journal*, 13(2), 99-118.

Ministry of Finance. (2018, 01. December). Act on financial institutions and financial groups 2015 (Financial Institutions Act 2015). Ministry of Finance Norway. Retrieved from https://www.finanstilsynet.no/globalassets/laws-and-regulations/laws/financial-institutions-act-2015.pdf

Morvan, L., Hintermann, F. & Vazirani, M. (2016). Five ways to win digital platforms. Accenture. Retrieved from https://www.accenture.com/us-en/_acnmedia/pdf-29/accenture-five-ways-to-win-with-digital-platforms-full-report.pdf

Nair, R.D. & Prabhu, P. (2018). Payments in the digital age. Accenture Payments. Retrieved from https://www.accenture.com/_acnmedia/PDF-81/Accenture-Payments-in-the-Digital-Age.pdf

Nets. (2017, 5. July). Payr samarbeider med Nets i innovasjonsprosjekt. Nets. Retrieved from https://www.nets.eu/no-nb/nyheter/Pages/Payr-samarbeider-med-Nets-i-innovasjonsprosjekt.aspx

Nets. (2019, 23. October). Payr velger open banking fra Nets. Nets. Retrieved from https://www.nets.eu/no-nb/nyheter/Pages/Payr-velger-Open-Banking-fra-Nets.aspx

Ng, Y. S. E., Muthukannan, P., Tan, B. & Leong, C. (2017). Fintech platform development: A revelatory case study of a Chinese microloan startup, *International Conference on Information Systems*. Seoul, Korea.

Nikolaisen, P. I. (2018, 12. March). Payr når 120 millioner i "omsetning", og kjøper opp konkurrent. Shifter. Retrieved from https://shifter.no/conversionist-espen-einn-payr/payr-nar-120-millioner-i-omsetning-og-kjoper-opp-konkurrent/110040

Nordea. (2020). SEPA – Et Eurobetalingsområde i Europa. Nordea. Retrieved from https://www.nordea.no/bedrift/vare-produkter/konto-og-betalinger/inn-og-utbetalingstjenester/eurobetalingsomrade-i-europa-sepa.html

Norges Bank. (2018). Retail payment services 2017 (no. 2). Norges Bank. Retrieved from https://www.norges-bank.no/en/news-events/news-publications/Reports/Norges-Bank-Papers/2018/norges-bank-memo-22018/

Norwegian National Committees for Research Ethics. (2014). General guidelines for research ethics. NNCRE. Retrieved from https://www.etikkom.no/forskningsetiske-retningslinjer/veileder-for-internettforskning/

NSD. (2019). Må jeg melde prosjektet mitt? Norsk senter for forskningsdata. Retrieved from https://nsd.no/personvernombud/hjelp/forskningsmetoder/nettbaserte_sporreundersokelser.html

Oesterle, M. J., Richta, H. N. & Fisch, J. H. (2013). The influence of ownership structure on internationalization. *International Business Review*, 22(1), 187-201.

Ojala, A., Evers, N. & Rialp, A. (2018). Extending the international new venture phenomenon to digital platform providers: A longitudinal case study. *Journal of World Business*, 53(5), 725-739.

Pan, Y. & Tse, D. K. (2000). The hierarchical model of market entry modes. *Journal of International Business Studies*, 31(4), 535-554.

Papadopoulos, N. G. & Martín, O. M. (2011). International market selection and segmentation: Perspectives and challenges. *International Marketing Review*, 28(2), 132-149.

Parker, G. G. & Van Alstyne, M. W. (2012). A digital postal platform: Definitions and a roadmap. Technical report, *MIT Center for Digital Business*. Retrieved from http://ebusiness.mit.edu/research/papers/296_parker_vanalstyne_adigitalpostalplatformdefinitionsandaroadmap.pdf

Parker, G. G., Van Alstyne, M. W. & Choudary, S. P. (2016). *Platform revolution: How networked markets are transforming the economy and how to make them work for you*. New York: WW Norton & Company.

Pavlou, P. A., & El Sawy, O. A. (2006). From IT leveraging competence to competitive advantage in turbulent environments: The case of new product development. *Information Systems Research*, 17(3), 198-227.

Payr. (2019). Om Payr. Payr. Retrieved from https://www.payr.no/om-payr

Reuters. (2018) Norway approves merger of payments services Vipps, BankID, BankAxept. Retrieved from https://www.reuters.com/article/norway-banks-vipps/norway-approves-merger-of-payments-services-vipps-bankid-bankaxept-idUSL8N1TH0DA

Reuver, M.D., Sørensen, C. & Basole, R.C. (2018). The digital platform: A research agenda. *Journal of Information Technology*, 33(2), 124-135.

Root, F. R. (1994). *Entry strategies for international markets* (2nd ed.). San Francisco, CA: Jossey-Bass.

Rugman, A. M. (2010). Reconciling internalization theory and the eclectic paradigm. *Multinational Business Review*, 18(2), 1-12.

Rugman, A. M. & Verbeke, A. (2003). Extending the theory of the multinational enterprise: Internalization and strategic management perspectives. *Journal of International Business Studies*, 34(2), 125-137.

Rugman, A. M. & Verbeke, A. (2008). Internalization theory and its impact on the field of international business. In *International Business Scholarship*: *AIB* *fellows on the first 50 years and beyond* (pp. 155-174). Emerald Group Publishing Limited.

Ruutu, S., Casey, T. & Kotovirta, V. (2017). Development and competition of digital service platforms: A system dynamics approach. *Technological Forecasting and Social Change*, 100(117), 119-130.

Srinivasan, A. & Venkatraman, N. (2018). Entrepreneurship in digital platforms: A network-centric view. *Strategic Entrepreneurship Journal*, 12(1), 54-71.

Stallkamp, M. & Schotter, A. P. (2019). Platforms without borders? The international strategies of digital platform firms. *Global Strategy Journal*, https://doi.org/10.1002/gsj.1336

Statista. (2019). Digital payments worldwide. Statista. Retrieved from https://www.statista.com/outlook/296/100/digital-payments/worldwide

Sui, S. & Baum, M. (2014). Internationalization strategy, firm resources and the survival of SMEs in the export market. *Journal of International Business Studies*, 45(7), 821-841.

Sun, M. & Tse, E. (2007). When does the winner take all in two-sided markets? *Review of Network Economics*, 6(1), 16-40.

Swift. (2018, 17. October). The transformation of the European payments landscape. Swift White Paper. Retrieved from https://www.swift.com/news-events/news/the-transformation-of-the-european-payments-landscape

Thales. (2019, 2. April). Thales completes acquisition of Gemalto to become to become a global leader in digital identity and security. Thales. Retrieved from https://www.thalesgroup.com/en/group/journalist/press-release/thales-completes-acquisition-gemalto-become-global-leader-digital

Thomas, L. D., Autio, E. & Gann, D. M. (2014). Architectural leverage: Putting platforms in context. *Academy of Management Perspectives*, 28(2), 198-219.

Tiwana, A., Konsynski, B. & Bush, A. A. (2010). Research commentary—platform evolution: Coevolution of platform architecture, governance, and environmental dynamics. *Information Systems Research*, 21(4), 675-687.

Trumpy, J. (2020, 26. May). Rune Bjerke gir seg etter fem år som Vipps-styreleder: Nå kommer den virkelige testen. Dagens Næringsliv. Retrieved from https://www.dn.no/marked/dnb/vipps/rune-bjerke/rune-bjerke-gir-seg-etter-fem-ar-som-vipps-styreleder-na-kommer-den-virkelige-testen/2-1-814285

Van Alstyne, M. & Parker, G. (2017). Platform business: From resources to relationships. *Marketing Intelligence Review*, 9(1), 24-29.

Vipps. (2019). Om oss. Vipps. Retrieved from https://www.vipps.no/om-oss/

Vipps. (2019). Ta betalt med Alipay. Vipps. Retrieved from https://www.vipps.no/produkter-og-tjenester/bedrift/ta-betalt-i-butikk/ta-betalt-med-vipps/ta-betalt-med-alipay/

Wan, X., Cenamor, J., Parker, G. G. & Van Alstyne, M. (2017). Unraveling platform strategies: A review from an organizational ambidexterity perspective. *Sustainability*, 9(5), 734-752.

Wareham, J., Fox, P. B. & Cano Giner, J. L. (2014). Technology ecosystem governance. *Organization Science*, 25(4), 1195–1215.

Welch, L. S. & Luostarinen, R. (1988). Internationalization: Evolution of a concept. *Journal of General Management*, 14(2), 34-55.

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, 38(2), 341-363.

Zhao, Y., Von Delft, S., Morgan-Thomas, A. & Buck, T. (2019). The evolution of platform business models: Exploring competitive battles in the world of platforms. *Long Range Planning*, https://doi.org/10.1016/j.lrp.2019.101892

Zhou, L., Wu, W. P. & Luo, X. (2007). Internationalization and the performance of born-global SMEs: The mediating role of social networks. *Journal of International Business Studies*, 38(4), 673-690.

Zhuplev, A. (2018). *Disruptive technologies for business development and strategic advantage*. Hershey: IGI Global.