

# **CROSS-INDUSTRY DIFFUSION OF B2C VIDEO CALL SERVICES**

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**A QUALITATIVE STUDY EXPLORING THE PHENOMENON OF  
ORGANISATIONS ADOPTING B2C VIDEO CALL SERVICES  
ACROSS INDUSTRY BOUNDARIES**

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## **Cross-Industry Diffusion of B2C Video Call Services**

### **Abstract:**

This study aims to investigate if and why business-to-consumer (B2C) video call services are diffusing across industry boundaries. Prior research has been conducted within the separate areas of video communication, diffusion of innovations, and cross-industry innovation. The study integrates these separate areas in order to explain the new phenomenon of organisations applying video calls to distribute services to consumers. Because diffusion theory is the core of the study, Rogers's Diffusion of Innovations model has steered the research process. A sample of eight case companies from various industries with different applications of B2C video call services was identified. The study's empirical findings supported the cross-industry diffusion of B2C video call services.

Rogers's five attributes of innovations could partly explain the diffusion. The relative advantages, a rather high compatibility, moderate complexity, a high trialability, and a high degree of observability of B2C video call services have contributed to the diffusion. As Rogers's model does not provide sufficient explanatory value when taking an organisational perspective of diffusion research, additional literature and the empirical findings were applied to explain why diffusion has occurred. The identified drivers of diffusion can be categorized accordingly: (1) the benefit of being an imitating organisation, (2) the benefit of cross-industry innovation search within organisations, and (3) the strategic importance of being an innovative organisation.

### **Keywords:**

Diffusion, Innovation, Diffusion of Innovations, Cross-industry innovation search, Cross-industry innovation, B2C services, video calls

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## Definitions

**Cross-industry innovation search:** Activities in organisations aiming to identify sources of innovation across the boundaries of the industry in which the organisation operates (Brunswick and Hutschek 2010).

**Cross-industry diffusion:** When innovations diffuse across industry boundaries.

**Diffusion:** “The process in which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003, p. 5).

**Innovation:** “An innovation is an idea, practice or object that is perceived as new by an individual or other units of adoption” (Rogers, 2003, p. 12).

**MedTech:** An abbreviation for medical technology. MedTech is applied as an umbrella term for technology used in the healthcare industry (Swedish Medtech, n.d.).

**Omnichannel strategy:** Companies striving to merge “touch-and-feel information in the physical world with online content” to improve customer interaction in a digital era (Brynjolfsson, Hu, and Rahman, (2013).

**Rate of adoption:** “The relative speed with which an innovation is adopted by members of a social system” (Rogers, 2003, p. 221).

**S-curve of diffusion:** “If the cumulative number of adopters is plotted, the result is an S-shaped curve”. The curve’s steepness depends on how rapidly an innovation diffuses (Rogers, 2003, p. 272).

**White-label products:** White-label products are produced by a third party and then rebranded to appear as if they were produced by the company that markets the product (Investopedia, 2019).

# 1. Introduction

Spotify changed the way we consume music. Skype made video communication part of everyday life. iZettle revolutionised digital payments. These are only a few examples of disruptive forces with Swedish heritage. In 2015, KRY, another disruptive player, revolutionised the Swedish healthcare industry by changing the way primary care is distributed. KRY enables patients and doctors to meet via video calls. Other players in the healthcare industry have imitated the video call application. Thus, KRY has fundamentally changed the way consumers communicate with healthcare providers. Consequently, an intriguing question emerges: Will organisations from other industries imitate video calls as a distribution channel for services?

## 1.1. Background

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*The background to the video call phenomenon consists of three areas of concern: (1) the video call phenomenon, (2) the history of diffusion research, and lastly (3) cross-industry innovation research. After a review of the areas, they are tied together which ultimately leads to a presentation of the problem area followed by the research questions.*

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### 1.1.1. The video call phenomenon

Video calling is a digital communication tool that allows people in different locations to have a real-time, face-to-face interaction through a visual interface. The technology can be used for personal communication purposes as well as within organisational settings (Wilcox and Gibson, 2005). The history of video calling traces back to the launch of the picturephone in 1964. The picturephone was far ahead of its time and therefore failed to diffuse among consumers. Consequently, the video communication field shifted focus to organisations (ibid). Until 1990, video calls were only used as a conferencing tool in boardrooms. Due to increased standardisation and the development of internet-based video call services, video calls has gained widespread use both among individuals and within organisations (ibid).

Within organisations, video calls are used to communicate with remote colleagues and business clients (White, 2014). However, in 2015 the Swedish MedTech company KRY commercialized video calls as a distribution channel for healthcare services (Goldberg, 2016). Thus, video calls have since then also been applied in a business-to-consumer (B2C) context.

In terms of personal use, video calls have increased with 25 percentage points in the past three years (Internetstiftelsen, 2018). In 2018, 67% of the Swedish population used video calls (ibid).

#### 1.1.2. The history of diffusion research

Diffusion research traces back to the beginning of the 20th century. Initially, the research was applied as a communication study in the anthropology and sociology disciplines (Rogers, 2003, p. 40). However, the innovation diffusion research is distinct from communication research in several areas, such as the novelty of the innovation studied and the consideration of time as an essential variable (Rogers, Singhal and Quinlan, 2009). Gabriel Tarde became the founding father of diffusion research in 1902 with the publication of the book *The Laws of Imitation*. Tarde developed the foundation of essential diffusion concepts which later became established as the S-curve of diffusion and the importance of opinion leadership (ibid). By observing how new slang and clothing styles spread among individuals, Tarde concluded that innovation spread through imitation (Djellal and Gallouj, 2014). He developed two groups of laws that explain why all innovations are not diffused; physical laws - such as the impact of climate or geography, and social laws - which are logical and non-logical laws that influence the imitation process (ibid).

Following Tarde, other influential researchers continued the diffusion research, mainly in the Midwestern United States where new agricultural techniques were developed (Rogers, Singhal and Quinlan, 2009). Wissler studied, in 1923, the diffusion of horses among Native Americans. He concluded that the increased mobility horses generated fuelled warfare among different tribal groups (ibid). Ryan and Cross followed in 1943 with their study of the diffusion of hybrid seed corn in Iowa, which has become an established and well-known study in the field (ibid). Following Ryan and Cross, diffusion studies have been applied in multiple contexts. Everett Rogers, professor in communication studies, wrote the well-known book *Diffusion of Innovation* in 1962. Rogers synthesized earlier research from a broad variety of disciplines and generated a model of the adoption of innovation among individuals and organisations (Rogers, 2003).

“Diffusion research is thus emerging as a single, integrated body of concepts and generalization, even though the investigations are conducted by researchers in several scientific disciplines” (Rogers and Shoemaker, 1971).

Rogers’s name has become the most prominent within the field of diffusion research. His model has been applied in various contexts such as the STOP AIDS project in San Francisco (Rogers, Singhal and Quinlan, 2009). The project was initiated in 1985 to change the sexual behaviour of the gay community. Also, an initiative in 1993 called the National Vitamin A Program of Nepal, used diffusion theory when trying different methods to decrease vitamin A deficiency in Nepal (Dearing, 2009).

### 1.1.3. Cross-industry innovation research

Cross-industry innovation is a research segment within the innovation field that aims to describe how innovation diffuses across industry boundaries. In 1988, von Hippel published the book *Sources of Innovation*. The book discusses the concept of open innovation and how actors in the value chain contribute to the generation of innovation in organisations (von Hippel, 1988). von Hippel argues that earlier research concluding that product manufacturers are the only source from which new ideas originate is false. Instead, von Hippel argues that sources of innovation are found throughout the entire value chain, for example, end users and material suppliers (ibid).

Brunswick and Hutschek (2010) suggest that companies purposely have to open their innovation activities in order to profit from innovations. They have developed a framework for cross-industry innovation search in which the search domain, search objective, and the search method enables companies to complement internal ideas with external sources of innovation. This decreases the risks of local search - solely searching within the own industry (ibid). They claim that a supplier of innovative ideas can be found in distant industries. If external search is conducted, it will most likely have a positive impact on a firm's innovation process. Adopting a technology that has already been tested and used in another industry significantly lowers the risk of adoption and increases efficiency in the adoption process (ibid).

Enkel and Gassmann (2010) suggest that companies can use the concept of creative imitation in order to transfer knowledge, technology, and business models between industries. Creative imitation refers to transferring innovations from other industries by creatively adapting them to fit the own organisation. They conclude that companies, to a great extent, tend to solely use knowledge within the boundaries of the own company, value chain or industry to innovate (ibid). This can be explained by the perception of cognitive distance, the degree to which units are heterogeneous, as something negative rather than a chance of learning. Organisations operating in different industries are heterogeneous. Consequently, cross-industry innovation occurs in settings with high cognitive distance (ibid).

## 1.2. Problem area

The three fields introduced have been thoroughly researched as separate entities. However, research is limited when it comes to a combination of the three. Thus, the research gap of the study was identified. By utilising the perspectives of diffusion research and cross-industry innovation, the study aims to conceptualise and understand the phenomenon of using video calls to distribute services to consumers across different industries.

The problem area reflects the researchers' interest in innovations, disruptive methods, and new technology. The foundation of the topic is built on the researchers' observation of the increase in video call services in the Swedish healthcare industry as a consequence of the launch of the MedTech company KRY<sup>1</sup> (Goldberg, 2016). Competitors have since then adopted similar applications of video calls. Thus, the question arose if the adoption trend would spread to other industries as well or if the innovation only fits within the unique environment of the Swedish healthcare industry. With these speculations as a starting point, the research gap was identified which led to the formulation of the research questions.

### 1.3. Purpose and research questions

The purpose of this study is to investigate and conceptualise if and why B2C video call services are diffusing across industry boundaries. Moreover, the study aims to explain possible variations in the implementation of the observed innovation. The study's primary research question and its associated sub-questions are presented below.

- Do B2C video call services diffuse across industry boundaries?
  - Why do or why do not video call services diffuse across industry boundaries?
  - If B2C video call services are adopted, will the implementation vary across companies?

### 1.4. Delimitations

In order to align with the scope of the bachelor thesis, several delimitations were applied.

Initially, the decision to apply a geographical limitation to the Swedish market was made. Thus, only companies operating on the Swedish market could be research objects. The lack of time and resources motivated the geographical limitation. Furthermore, the choice to concentrate on the Swedish market was a consequence of the fact that Sweden is often used as a test market for innovations because it is a forerunner when it comes to adapting to new technologies (Business Sweden n.d.). Thus, Sweden is a relevant market to observe when it comes to the adoption of innovations. The Swede's innovativeness tends to result in quick adoption rates which aligns with the time constraint of the study (ibid). The possibility to derive generalisations from the study can be negatively affected by the limitation as the study may include cultural biases that are not representative of other geographical areas.

The definition of the innovation was narrowed to the application of video calls to distribute services to consumers. Thus, the study only incorporates organisations that distribute B2C services with video calls. Furthermore, the research scope was limited to

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<sup>1</sup> A thorough explanation of KRY's business model is presented in Appendix 7.2

companies who market a branded video call service as a part of the overall customer offering. This limited the case company sample to companies who have committed to adopting the innovation. Consequently, companies that use non-integrated third-party solutions such as Skype were excluded.

The research was conducted during a limited time period between January to May 2019. The time constraint was a consequence of the scope of the course. Furthermore, the study focused on the phenomena of the B2C video call services during a time when the possible diffusion was in its initial phase. Therefore, the study focused on companies that adopt innovations quickly. As a result, the study did not cover the perspectives of late adopters of B2C video call services.

## 2. Theoretical Framework

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*The following section begins with a motivation of the choice of theoretical framework. Thereafter, a thorough presentation of the framework is conducted. Lastly, the framework is reviewed in the context of B2C video call services.*

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### 2.1. Motivation of theoretical framework

The field of diffusion research has emerged into a single collection of concepts and generalisations, even though investigations derive from researchers in various fields of study (Rogers, 2003, p. 45). Consequently, diffusion theory has developed a high degree of robustness through a wide field of application (Dearing, 2009). These characteristics of diffusion theory is why Rogers's Diffusion of Innovation model guides the research of this study. Normally, inductive research begins by observing a phenomenon instead of deriving research from existing theory (Bryman and Bell, 2015). However, Yin (2014) recommends performing comprehensive literature research prior to the collection of empirical data in order to improve the quality of the collection process. Therefore, the study's observation of the phenomena has been steered by Rogers's Diffusion of Innovation model. Consequently, the study used an inductive approach with elements of abduction.

### 2.2. The Diffusion of Innovations model

Diffusion is defined as:

“the process in which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003, p. 5).

The spreading of new ideas enables social change through structural and functional alterations (Rogers, 2003, p. 6). Rogers claims that diffusion is driven by the following: (1) the need to reduce personal uncertainty when presented with new information, (2) the need for individuals to respond to what others are thinking and doing, and (3) social pressure. The diffusion process constitutes of four fundamental elements: the innovation, the communication channels that spread information about the innovation, time, and the social system in which diffusion occurs (ibid). Diffusion research has proven a mathematically consistent S-shape curve (Appendix 7.1) indicating that the rate of adoption tends to begin slow, and accelerate over time through the engagement of informal opinion leaders (Rogers, 2003, p. 300).

## **1. Innovation**

### *Perceived Attributes*

- Relative advantage
- Compatibility
- Complexity
- Trialability
- Observability

## **2. Communication Channels**

### *Channel Types*

- Mass media
- Interpersonal
- Interactive

## **3. Time**

### *The Innovation Process*

1. Agenda-setting
2. Matching
3. Redefining/restructuring
4. Clarifying
5. Routinizing

### *Adopter Categories*

- Innovators
- Early adopters
- Early majority
- Late majority
- Laggards

## **4. A Social System**

### *Dimensions*

- Social structure
- System norms
- Opinion leaders
- Change agents
- Champions

### *Innovation decisions*

- Optional
- Collective
- Authority

## **Diffusion of Innovations**

**Figure 1.** Overview of the components of Rogers's Diffusion of Innovations model

### 2.2.1. The innovation

Innovations can constitute of both hardware, the tool that embodies a technology, and software, the information base for the technology, or a combination of both (ibid). The rate of adoption depends on the innovation's perceived attributes in terms of (1) *relative advantage* - the degree to which the innovation is better than its predecessor, (2) *compatibility* - the degree to which the innovation is consistent with potential adopters' values, experiences, and needs, (3) *complexity* - the degree of difficulty to comprehend and use, (4) *trialability* - the degree to which an innovation can be tested and (5) *observability* - the degree to which the innovation's results are visible to potential adopters. The higher the perceived relative advantage, compatibility, trialability, and observability, and the lower the level of complexity, the quicker the rate of adoption (Rogers, 2003, p. 15).

### 2.2.2. Communication channels

Fundamentally, diffusion is the process of information exchange of new ideas between individuals or other units of adoption (Rogers, 2003, p. 18). Communication channels are defined as the medium in which the information exchange occurs. Exchange through mass media channels is often used to efficiently create awareness among a wide range of potential adopters. Interpersonal channels, where the information exchange takes place face-to-face, are more efficient in terms of persuasion. Additionally, interactive communication via the Internet has over time become increasingly important in the diffusion process (ibid). Diffusion studies show that individuals mainly evaluate innovation on subjective evaluations from similar peers, rather than objective criteria, indicating that diffusion is a highly social process (Rogers, 2003, p. 19). Consequently, the frequency of information exchange about new ideas is correlated to the degree of homophily among potential adopters. Individuals in homophile relationships are similar in characteristics such as values, education, and socioeconomic status. Thus, a main challenge in the diffusion of innovations is overcoming heterophily among members in the social system (ibid).

### 2.2.3. Time

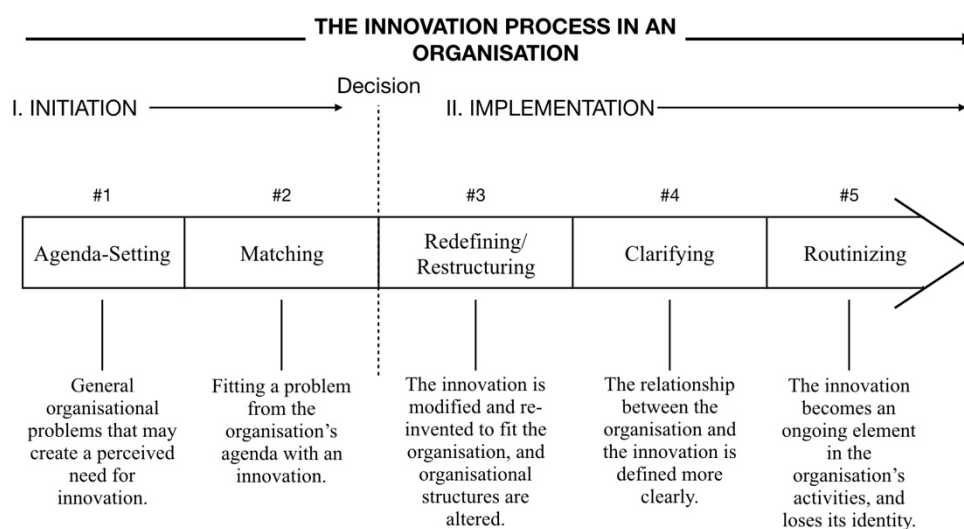
The element of time in the diffusion process incorporates (1) *the innovation-decision process*, (2) *the level of innovativeness* of the adopting unit relative to other system members, and (3) the innovation's *rate of adoption* in a social system (Rogers, 2003, p. 20).

#### **The innovation-decision process**

The decision to accept or reject an innovation varies depending on the characteristics of the unit of adoption. For example, the process varies between individuals and organisations (Rogers, 2003, p. 22). As this study examines the adoption of B2C video

call services among companies, the organisational innovation process is included in the theoretical framework and the innovation-decision process for individuals is excluded.

The innovation process in organisations consists of five sequential stages that are classified into two sub-processes. The initial two stages, (1) *agenda setting*, and (2) *matching*, belong to the initiation process, which incorporates all required information-gathering, planning and conceptualising for the adoption of an innovation. Once the decision has been made, the organisation enters the implementation process which includes the remaining three stages, (3) *redefining/restructuring*, (4) *clarifying*, and (5) *routinizing* (Rogers, 2003, p. 421). A graphical overview of the innovation process is presented in Figure 2. Appendix 7.4 provides a detailed description of the stages in the innovation process.



**Figure 2.** Five stages in the innovations process in organisations (Rogers, 2003, p. 421)

### **Degree of innovativeness/Adopter categories**

Units of adoption in a social system do not adopt an innovation simultaneously. Instead, the time it takes to adopt differs depending on the unit's degree of innovativeness (Rogers, 2003, p. 22). Early diffusion research was characterised by a disarray of different adopter categories and methods of categorisation (Rogers, 2003, p. 279). In 1962, Rogers used evidence from multiple diffusion studies to generalise that the adopter distribution approaches normality. Roger's defines five types of adopter categories: *innovators*, *early adopters*, *early majority*, *late majority*, and *laggards*. Each adopter category consists of adopter units with a similar degree of innovativeness. Rogers divides the innovativeness variable by laying off standard deviations from the average time to adopt (Rogers, 2003,

p. 280). The ideal types of adopter categories are summarized in Table 1. Appendix 7.3 provides a more detailed description of the categories.

**Table 1.** Overview of Rogers’s ideal types of adopter categories

	<b>Innovators</b>	<b>Early Adopters</b>	<b>Early Majority</b>	<b>Late Majority</b>	<b>Laggards</b>
<b>Time of adoption</b>	Are first to adopt an innovation by importing it from outside the boundaries of the social system.	Adopts an innovation after the innovators have imported it.	Adopts after early adopters and just before the average member in the social system.	Adopts an innovation just after the average member in the social system.	Are last to adopt an innovation.
<b>Category size</b>	2.5 % of the members in a social system.	13.5 % of the members in a social system.	34 % of the members in a social system.	34 % of the members in a social system.	16 % of the members in a social system.
<b>Member traits</b>	Venturesome, interested in new ideas, and risk prone.	Respected by peers in the system and therefore holds opinion leadership.	Follow with deliberate willingness in adopting innovation but seldom lead.	Are skeptical and cautious when it comes to the adoption of innovations.	Traditional, isolated within the social system, and sceptical towards innovators and early adopters.
<b>Diffusion</b>	Innovators launch the diffusion process.	Triggers diffusion among the critical mass by reducing uncertainties when adopting an innovation.	Make up an important link between very early and relatively late adopters.	Due to scarce resources, adoption takes place after uncertainties regarding an innovation have been removed.	Adoption of the innovation lags far behind awareness and knowledge of the innovation.

#### 2.2.4. The social system

Rogers defines a social system as:

“a set of interrelated units that are engaged in joint problem solving to accomplish a common goal. The members of units of a social system may be individuals, informal groups, organizations, and/or subsystems” (Rogers, 2003, p. 23).

As diffusion occurs within a social system, the structure of that system will affect the diffusion process. The structure of a social system constitutes of its (1) *social structure*, (2) *social norms*, and (3) *the roles of opinion leaders and change agents* (Rogers, 2003, p. 26). Furthermore, the social system influences the types of innovation-decisions that occur in the diffusion process. There are three categories of innovation-decisions: (1) *optional*, (2) *collective*, and (3) *authority* (Rogers, 2003, p .28).

##### **Social structure**

Patterned social relationships between the units of a social system make up the system's social structure (Rogers, 2003, p. 24). It creates behavioural predictability and stability in the social system. Consequently, the greater the heterogeneity among units, the more social structure is required. Social structures can be either formal, i.e., an organisation's hierarchical structure, or informal, i.e., interpersonal networks. The informal structure traces how communication flows in the system and between which units. Members tend to interact and maintain relationships with other members that are similar to themselves. The social structure in a system can boost or hinder the diffusion of innovation as the innovativeness of a unit in the system depends both on the characteristics of the unit and the nature of the social system it belongs to (ibid).

##### **Social norms**

Norms are established behaviours that function as informal guidelines defining what behaviour is considered to be correct within the boundaries of a social system. Consequently, norms will affect the diffusion process. Often, norms create barriers to change, which hinders the diffusion process (Roger, 2003, p. 26).

##### **Opinion leadership, change agents and champions**

Opinion leadership occurs when an individual member of a social system has the ability to influence the attitudes and behaviour of other members. Opinion leadership is an informal leadership type that is earned by the members' universal accessibility, technical competence, and conformity to social norms (Rogers, 2003, p. 27). Opinion leaders are essential for the diffusion process as they provide advice and information about an innovation to the many within a system. However, some opinion leaders may oppose change. Opinion leaders tend to be more exposed to external communication, have a relatively high socioeconomic status, and be more innovative (Rogers, 2003, p. 315).

Change agents also contribute to the diffusion process. Change agents are professionals who influence clients' innovation-decisions on behalf of a change agency. Normally, change agents promote diffusion. However, they may also try to prevent the adoption of undesirable innovations. They are often characterised by high competence within a technical field which often makes them heterophilous from their clients which prevents efficient client communication. Therefore, change agents often refer to opinion leaders to facilitate diffusion activities (Rogers, 2003, p. 365).

Diffusion research has shown that opinion leaders are an essential component in the diffusion process among individuals in a social system. However, evidence also supports organisational opinion leadership in conjunction with the diffusion of innovation between organisations (Rogers, 2003, p. 321). In organisations, champions are essential in driving the innovation process. The role of the champion in an organisation is similar to the role of an opinion leader in a social system. Roger defines a champion as:

“a charismatic individual who throws his or her weight behind an innovation, thus overcoming indifference or resistance that the new idea may provoke in an organisation” (Rogers, 2003, p. 414).

To successfully implement an adopted innovation, the champion must (1) occupy a linking position within the organisation, (2) be able to analyse and understand the aspirations of various organisational members, and (3) possess well-developed interpersonal and negotiation skills (ibid).

### **Types of innovation-decisions**

There are three categories of innovation-decisions: (1) *optional* - when the choice to adopt is made by an individual member in the social system, (2) *collective* - when the choice to adopt is made by consensus among members in the social system, and (3) *authority* - when the choice to adopt is made by a few individuals who possess power or technical expertise. Individual members have little to no influence in authority innovation-decisions and must comply accordingly. In organisations, collective and authority innovation-decisions are most common. In general, the more people involved in making the innovation-decision, the slower the rate of adoption (Rogers, 2003, p. 28).

## **2.3. The Diffusion of Innovations model applied in the context of B2C video call services**

As the study was conducted within the boundaries of diffusion research, the observed innovation and the social system in which diffusion occurs has been defined. Moreover, comments regarding the communication channels, the innovation process and adopter categories in the context of B2C video call services are presented.

## **The innovation**

The study examines the technological innovation of video calls. As discussed in the background, video calls in themselves are not a new phenomenon. Rather, the new phenomenon is the application of video calls among businesses as a method to distribute services to consumers. The application became known in Sweden with the Swedish MedTech company KRY in 2015 (Goldberg, 2016). Since then, other applications of B2C video call services have arisen. However, the adoption is far from widespread which implies that the practice can still be perceived as new. An innovation is an idea, object or practice that units of adoption perceive as new (Rogers (2003, p. 12). As the application of B2C video call services is a new practice one can conclude that video calls in a B2C context can be classified as an innovation. Furthermore, the study investigates the adopting organisations' view of the innovation's perceived relative advantage, compatibility, trialability, observability, and level of complexity.

## **Communication channels**

As the study aimed to take an organisational perspective, the communication channels observed focused on the channels from which organisations received information about the application of video call services, rather than the channels the companies use to market the innovation towards consumers. Examples of mass media channels are marketing activities from other companies who adopted the innovation and associated media coverage. Interpersonal channels could be entrepreneurial networks and discussions with current and potential investors. Lastly, examples of interactive channels could be online communities for industry professionals.

## **Time**

To incorporate the element of time in the diffusion of B2C video call services, the stage an adopter belongs to in the innovation process and why, has been investigated. Furthermore, the need to classify the adopter categories among adopters of B2C video call services arose.

## **The social system**

The social system in which diffusion is studied is the Swedish market. The European Court of Justice (ECJ) defines the relevant geographical market as the supply and demand of products and services in areas where conditions of competition are homogenous and distinguished from neighbouring areas (Fletcher and Lyons, 2016, p. 8). Consequently, the ECJ often defines individual EU Member States as separate geographic markets (ibid). As Sweden's, an EU Member State, corporate law and competition law varies from the rules and regulations in neighbouring countries, it can be concluded that the Swedish market can be defined as the relevant geographical market for this study. Thus, the members of the social system consist of all organisations that are currently operating on the Swedish market.

The organisations operating on the Swedish market can be categorised into different industries. The Oxford Dictionary of English (2019) defines an industry as economic or commercial activity within a specific branch or form. Industries are the subsystems that together constitute the Swedish market. Members of the same subsystems are operating in the same industry and are therefore competitors.

### 3. Methodology

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*In this section, the methodical approach is described, argued for and critiqued. This is followed by a discussion regarding the quality of the study.*

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#### 3.1. Scientific approach

Due to the rather unexplored research area of B2C video call services, the study was conducted with an inductive approach, starting with investigating the phenomenon and then generating theory to explain the observations (Bryman and Bell, 2015). However, as the study was executed in close connection to Rogers's Diffusion of Innovation model, the approach incorporated abductive elements. Furthermore, the study was conducted through a qualitative approach which is appropriate when a study tries to capture the perspectives of the studied entities, in our case the participating companies (Alvesson and Sköldbberg 2008, p. 17). A quantitative approach is applicable on studies in areas with extensive prior research, which is not suitable in this study as it observes a new phenomenon (ibid). Furthermore, as a qualitative approach tries to understand and interpret the surrounding world in its natural habitat, it reasons well with the purpose of this study (ibid).

Moreover, it was determined that a case study was the most appropriate approach for the study's data collection. A case study is an appropriate method when:

“how or why questions are asked about a contemporary set of events over which the investigator has little or no control” (Yin, 2014, p. 14).

This reasoning correlated well with the study's descriptive and exploratory objectives. Jensen and Sandström (2016, p. 42) argue that case studies are suitable when the research area is complex, dependent on its social context, and unexplored. These characteristics reflects this study as it centres around innovation. In addition, Bryman (2011, p. 365) argues that qualitative studies often focus on change and development which is accurate when trying to describe the diffusion of an innovation. Furthermore, Andersen (2012, p. 127) suggests that case studies are appropriate when analysing social systems, which aligns with this study's organisational perspective.

#### 3.2. Study design

The study design is based on Yin (2014) due to his well-renowned research within the field. Jensen and Sandström (2016) has also been used.

Before initiating the data collection, a robust literature review was conducted. The review generated the required knowledge in the research area to avoid naïve interpretations of

the empirics (Jensen and Sandström, 2016, p. 52). The study is based on multiple data collection methods with a variety of sources, which according to Jensen and Sandström (2016, p. 58), strengthens the quality of the case study. Empirical evidence has been collected partly through desktop search and partly through interviews with representatives from companies that offer B2C video call services. Interviews as a data collection method was chosen due to its flexible approach that is suitable when the researchers' knowledge of the studied phenomenon is limited. The usage of multiple sources of empirical data, both primary and secondary, resulted in corroborating evidence. This has helped the study reach objectivity and neutrality (Jensen and Sandström, 2016, p. 59). Secondary sources such as literature and articles were primarily found by searching for relevant keywords<sup>2</sup> in the Stockholm School of Economics's library database.

As the study focused on diffusion across industry boundaries, it was natural to choose a multiple case study approach where the individual case companies represented different industries. Multiple case studies are preferred as they result in more accurate and robust conclusions (Yin, 2014, p. 63). Single case studies can be justified when having a significantly particular or unique case, something that does not apply to this study (Rowley, 2002). Furthermore, a holistic approach of the case study was applied in order to understand the video call phenomenon as a whole, rather than specific parts of it, as an embedded approach suggests (Yin, 2014, p. 50).

### 3.2.1. Interview design

Semi-structured interviews were conducted with the selected case companies due to the method's flexibility compared to structured interviews (Bryman, 2011, p. 206). In order to gain a deeper understanding of the B2C video call phenomenon, the importance of being able to ask clarifying or follow-up questions was recognised. Yin advocates that being adaptive is vital when collecting empirics (Yin, 2014, p. 73). Unstructured interviews are applicable when the theoretical and empirical knowledge about the research area is minimal or non-existent (Andersen, 2012, p. 183). Although the area of B2C video call services is unexplored, the fundamental diffusion theory guiding the study is extensive. Thus, a semi-structured interview method was an adequate choice. The questions in the interview guide (Appendix 7.6) was based on the four elements of Rogers's Diffusion of Innovation model. This generated a consistent structure through the interviews which made comparisons between cases possible when performing data analysis.

To assess the quality and relevance of the interview questions two pilot interviews were conducted (Jensen and Sandström, 2016, p. 58). The respondents were chosen with regard to time and convenience. After the pilot interviews, new knowledge and insights were

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<sup>2</sup> Key words: diffusion, innovation, diffusion of innovations, cross-industry, cross-industry innovation, innovation search, video communication, video calls

gained and the interview guide was altered accordingly. For example, some questions were removed due to the fact that they were incorporated into the answers to other questions.

### 3.2.2. Case selection

The case companies were selected with regard to our research questions, which Bryman refers to as purpose sampling (Bryman, 2011, p. 350). The selection of case companies was based on several factors. These included (1) presence on the Swedish market, (2) that the company offers video call services to consumers, and (3) that the company markets a branded video call solution as a part of its overall customer offering. Thus, the sample aligns with the delimitations of the study. Furthermore, as the study aims to incorporate a cross-industry perspective, the companies had to represent different industries. To be able to achieve increased depth in the analysis of the empirical data, companies in different sizes were included in the sample.

According to Eisenhardt (1989), a multiple case study should include between four and ten cases, less being less likely to generate significant theory and more being challenging to handle. The sample size was initially not limited to a specific number of case companies. Rather, the sampling of case companies was terminated when theoretical saturation was reached (Glaser and Strauss, 1967). Eisenhardt (1989) defines theoretical saturation as the point where incremental learning from a larger sample size is minimal. Furthermore, snowball sampling was conducted where interviewees recommended other companies that offer B2C video call services (Bryman and Bell, 2015). In addition, case companies were found through mass media marketing campaigns and desktop search. The sample consisted of eight companies with different industrial heritage. Eight interviews were conducted, one interview with representatives from each case company (Table 1). All interviewees were the champions driving the implementation of B2C video calls services (Rogers, 2003, p. 414).

As the MedTech company KRY was a source of inspiration for the research subject, the desire of including them in the case sample arose. However, despite multiple attempts to contact KRY, they have not responded. Moreover, the digital animal health company FirstVet, the Swedish bank Nordea, and the educational staffing company Lärarjouren declined to participate.

**Table 2.** Overview of case companies and interviewees

<b>Company</b>	<b>Industry</b>	<b>Description</b>	<b>Interviewee</b>	<b>Employees</b>
Doktor.se	Healthcare	Offers healthcare services via their digital and physical health centres.	CEO & Founder	250
IKEA	Furniture retail	Designs and sells furniture, kitchen appliances and home accessories.	Project Leader Customer Experience	208 000
iKlinik	Physiotherapy	Offers physiotherapeutic consultations at their physical clinics and online.	CEO & Founder	15
Vet Company	Animal healthcare	Provides veterinary care services for small animals and horses at their local clinics, animal hospitals and virtual clinic.	Business Manager	1500
Orio	Auto parts manufacturing	Exclusive supplier of SAAB original automobile parts.	Head of Business Development	200
Qleo	Legal	App-based digital law firm that provides legal services for consumers.	CEO & Founder	5
Virkesbörsen	Timber	An independent digital marketplace for buying and selling timber in Sweden.	Founder	10
Wayke	Automobile	One of Sweden's largest independent digital marketplaces for cars.	CEO	40

### 3.2.3. Execution

The initial contact with the case companies was through email with a member of the management team. The email contained a description of the study, the purpose of the interview and the fact that the study was to be conducted by bachelor students at the Stockholm School of Economics. Before each interview, the interview guide was sent to the interviewee along with information about the study's guidelines regarding ethics and anonymity, including a request to record the interview (Andersen, 2012, p. 156). Eight interviews were conducted between the 3rd and 15th of April 2019. At five occasions, the interviews were held at the company's office in Stockholm and the remaining interviews were conducted via video call due to geographical distances. No differences were noted

between the quality of the video call interviews and the physical interviews that could have affected the empirics negatively.

During the interviews, the interviewee initially received background information about the themes in the interview guide and the objectives of the interview (Bryman, 2011, p. 215). With the permission to audio record all interviews, there was no need to take extensive notes during the interviews which contributed to a trusting and attentive environment (Bryman, 2011, p. 213).

Parallel with conducting interviews, a desktop search was conducted to find archival records that corroborated the empirics collected via interviews (Yin, 2014, p. 109). The multiple sources used in the data collection strengthens the validity of the research.

#### 3.2.4. Data analysis

The process of data analysis began parallel to the data collection. This was done to utilise a fresh memory and thereby improve the quality of the analysis. Firstly, the audio recordings were transcribed, resulting in 62 pages of empirical findings. Thorough data analysis followed the transcription process, with Eisenhardt and Yin as guidance for building theory from the case study. Glaser and Strauss's (1967) Grounded Theory was neglected since Yin's methodological approach is more guided by theory which suited this research as it's based on Rogers's Diffusion of Innovation model. The choice to include a theoretical background despite the inductive approach is based on Jensen and Sandström's (2016, p. 54) argument that thorough background research needs to be done before the empirical collection to avoid confusion regarding the usefulness of the data. In addition, Yin (2014, p. 40) argues that a theoretical background is needed to increase the generalisability of the study.

Two methods were applied to analyse the empirical data. First, a within-case analysis was conducted on each interview (Eisenhardt, 1989). A categorisation process was conducted where the data were categorised according to Rogers's Diffusion of Innovation model. The observations that could not be explained by Rogers's model were categorised as other observations and analysed with additional literature that contributed with explanatory value. Second, a cross-case comparison was conducted. The same categories as the within-case analysis were used but the analysis aimed to find patterns, similarities, and differences across the case companies (Yin, 2014, p. 143). The empirical findings and the analysis were summarised and sent to the interviewees to confirm its consistency and to affirm that they were comfortable with quotations and citations. An iterative process led to a generation of theory that explained the empirical data. According to Jensen and Sandström (2016, p. 119), multiple theoretical perspectives are often needed to explain complex phenomena.

### 3.3. Quality of research design

According to Yin (2014, p. 45), four tests are appropriate for quality assurance in case study research. These tests are: construct validity, internal validity, external validity, and reliability.

The construct validity concerns the relevance and accuracy of the measures applied on a studied phenomenon (Yin, 2014, p. 46). By using multiple sources when gathering empirical evidence, the construct validity increased. Throughout the data collection process, the empirical data collected during the interviews was corroborated with additional sources such as literature and publications (ibid). Consequently, the influence of the interviewees' subjectivity was limited.

When performing data analysis, patterns and similarities were found between the case companies, which strengthens the internal validity as it supports causality (Yin, 2014, p. 45). Furthermore, the choice to terminate the sampling of case companies when theoretical saturation was reached is according to Eisenhardt (1989) in favour of internal validity.

The external validity of the case refers to if the empirical findings are generalizable in another context. Generalisability is generally difficult to achieve due to the nature of a case study (Yin 2014, p. 48). However, the fact that the conducted case study included multiple companies from various industries increases the generalisability of the research, compared to a single case study or a study limited to a single industry. Furthermore, following replication logic, empirics from cases showed similar results or different results but for awaited reasons. Where empirics diverged, additional literature was reviewed, to explain the difference (Eisenhardt, 1989).

Regarding reliability, to what extent the research can be replicated, the robust documentation process presented above assured a reliable case study. Upon Yin's recommendation (2014, p. 84), a case study protocol was conducted in the early process of the study, including a theoretical overview, the data collection method, and the interview guide. Moreover, a structured case study database was established, including notes, archival data and transcribed material (Yin 2014, p. 123). Consequently, potential biases and errors in the collection process were limited.

#### 3.3.1. Conclusion

Since the validity is strengthened in multiple ways, the validity is judged to be reasonable. Furthermore, the reliability is considered sufficient because the execution of the study aligns to a high degree with existing methodological literature. One could argue that the robustness of the study and its contribution would improve with an increased number of case companies. However, because theoretical saturation was reached and multiple data sources were used, the method is considered robust and relatively easy to replicate.

## 4. Empirical findings

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*In the following section, empirical findings are presented and analysed. The structure is based on the three research questions. First, the case companies and their respective applications of B2C video call services are described. Second, empirical data supporting if B2C video call services diffuse across industries are presented. Third, empirical findings explaining why diffusion occurs are reviewed. Lastly, other observations found in the data collection process are presented and analysed.*

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### 4.1. If B2C video call services are diffusing across industries and how the implementation differs

In Table 3, a description of the case companies and their application of video call services is presented. A more thorough description is provided in Appendix 7.5. The case companies are presented in the order of adoption. Furthermore, the companies are categorised into the two components of the time variable in Rogers's Diffusion of Innovation model: (1) *the innovation process* and (2) *the adopter categories* (Rogers, 2003). Thereafter, findings regarding the diffusion of B2C video call services is presented and analysed.

#### 4.1.1. The case companies and their applications of B2C video call services

**Table 3.** Overview of the case companies and their application of B2C video call services

<b>Company</b>	<b>Description</b>	<b>Video call application</b>	<b>Time of adoption</b>
Doktor.se	Offers healthcare services via their digital and physical health centres.	Video calls are applied as one of three possible ways to receive digital health consultations via the company's mobile application.	July 2016
iKlinik	Offers physiotherapeutic consultations at their physical clinics and online.	Video calls are one of two possible ways to receive digital physiotherapeutic consultations online.	Sept. 2017
Wayke	One of Sweden's largest independent digital marketplaces for cars.	Video calls are applied in their "Wayke Buddy" service which provides consumers with assistance during the extensive pre-purchase process of buying a car.	Jan. 2018
Virkesbörsen	An independent digital marketplace for buying and selling timber in Sweden.	Virkesbörsen offers a free forest advisory service that is distributed through video calls. The advisory service is called Skogskompis (translation: Forest Buddy).	Mar. 2018
Orio	Exclusive supplier of SAAB original automobile parts.	Orio's mobile application MySaabCar has an integrated video call service that car-owners use to ask simple car-related questions that do not necessary require a visit to a car workshop.	Sept. 2018
IKEA	Designs and sells furniture, kitchen appliances and home accessories.	IKEA Samsyn is IKEA's branded mobile application used by customers to access video call services within the following areas: (1) customer service, (2) product claims, (3) kitchen-sales, (4) consultations with interior designers, and (5) in-store assistance and sales.	Nov. 2018
Vet Company	Provides veterinary care for small animals and horses at their local clinics, animal hospitals and virtual clinic.	The virtual veterinary clinic is accessed through a mobile application and the animal health consultations are distributed via video calls.	Feb. 2019
Qleo	App-based digital law firm that provides legal services for consumers.	Video calls are one of two possible ways to receive legal consultations, including advisory and contract preparations, on Qleo's mobile application.	Aug. 2019

## **Doktor.se**

The healthcare provider Doktor.se has entered the final stage of the innovation process, routinizing, as video calls have become a fully integrated part of their digital healthcare offering. The innovation has thus become an ongoing element in the company's activities. Consequently, the innovation as a separate entity has disappeared.

“It's a full-service offering. We never talk about video calls specifically, the entire epithet of video calls has disappeared” (CEO Doktor.se, interview, 2019-04-11).

Moreover, the company categorises itself as an early adopter in the healthcare industry as the concept of B2C video calls was known when they entered the market (ibid).

## **iKlinik**

The physical therapy clinic iKlinik uses video call services to distribute diagnostics, treatments, and rehabilitation online. The clinic has entered the clarifying stage of the innovation process, as video call services have been put into more widespread use within the organisation. Within the physiotherapy industry, iKlinik is categorised as an innovator because the company was one of the first physiotherapy clinics to implement video call services (CEO iKlinik, interview, 2019-04-12).

“If we are just talking about physiotherapy, I would probably say that we are innovators” (ibid).

## **Wayke**

Wayke, a digital marketplace for cars, had recently completed a pilot test of their video call service Wayke Buddy.

“Wayke Buddy is on a break. We have gained a lot of insights on what we need to improve and change until we launch it permanently” (CEO Wayke, interview, 2019-04-15).

Thus, Wayke is currently in the redefining/restructuring stage of the innovation process. Wayke's CEO describes B2C video call services as very innovative within the car industry (ibid). As Wayke is the first to apply the innovation within the boundaries of the car industry, the company belongs to the adoption category innovators.

## **Virkesbörsen**

Virkesbörsen, a digital marketplace for timber, offers their forest advisory service Skogskompis via video calls. Despite that parts of the forest owners using Skogskompis are businesses, Virkesbörsen fulfils the B2C sample limitation as private individual forest owners can, according to Virkesbörsen's co-founder (interview, 2019-04-03), be classified as consumers. In terms of the innovation process, Virkesbörsen is entering the clarifying stage where the use of video call services increases.

“We will advocate more video calls as it is more time efficient and cost reducing because we don’t need to spend time on traveling to our customers” (ibid).

Moreover, as Virkesbörsen was the first to offer a digital advisory service in the timber industry, the company belongs to the innovator adopter category in the timber industry.

### **Orio**

Orio’s MySaabCar mobile application has been put to more widespread use within the organisation but yet not become an ongoing element in Orio’s activities. Therefore, the clarifying stage of the innovation process has been entered. Furthermore, within the auto parts manufacturing industry, Orio position themselves as innovative.

“Because of our size, we can never compete with price or delivery times. Therefore, we must be agile and have better solutions for both the workshops and the end customer. Therefore, we try to be very innovative when it comes to services” (Head of Business Development Orio, interview, 2019-04-10).

As Orio is the first to adopt B2C video call services in their industry, Orio belongs to the innovator category (ibid).

### **IKEA**

IKEA’s experiment with the mobile application IKEA Samsyn proved the feasibility of applying video calls to improve customer experience and streamlining operations. Consequently, IKEA plans to implement video calls globally. Thus, IKEA has entered the redefining/restructuring stage in the innovation process in which an innovation is re-invented and modified to fit the organisation. In terms of the furniture retail industry, IKEA has been at the forefront of adopting video call services. Consequently, IKEA is classified as an innovator within the boundaries of its industry (ibid).

### **Vet Company<sup>3</sup>**

As Vet Company’s virtual veterinary clinic recently launched and is, according to the Business Manager gaining much traction and growing fast, Vet Company has entered the clarifying stage of the innovation process (Business Manager Vet Company, interview, 2019-04-11). In terms of innovativeness, Vet Company was not the first to implement virtual veterinary consultations via video calls; rather they belong to the early adopter category.

“As we saw a general trend with video services and that other animal health care players were quick to implement it, we realized that it would be a straightforward thing for us to implement” (ibid).

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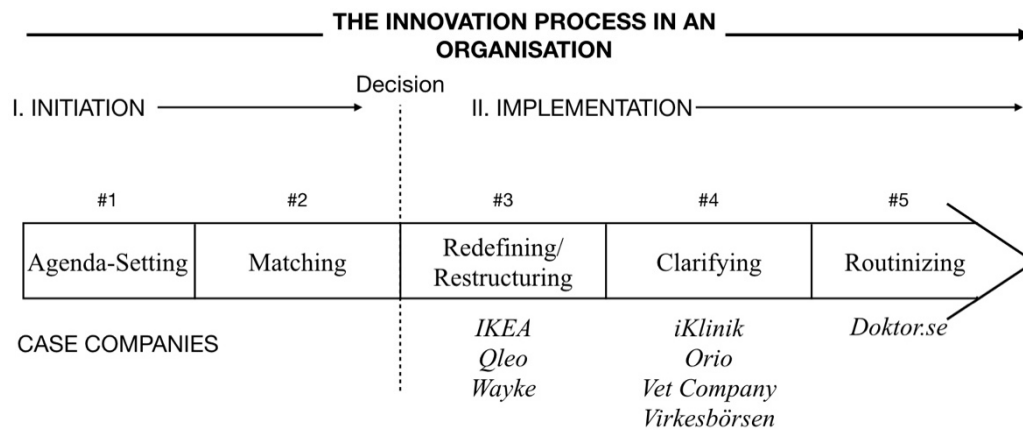
<sup>3</sup> Vet Company is an allonym as the company wished to be anonymous

## Qleo

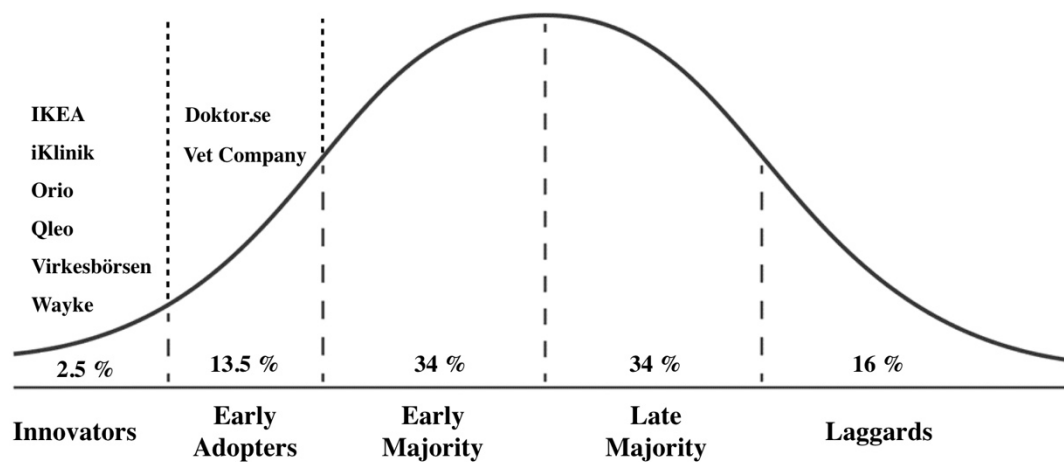
As the digital law firm Qleo is in the process of finishing the development of their mobile application and the integrated video call software, the firm is currently in the redefining/restructuring stage of the innovation process. Furthermore, Qleo is the first adopter of B2C video call services in the legal industry.

“It is an incredibly conservative industry that is generally opposed to digitalisation”  
(CEO Qleo, interview, 2019-04-09).

Consequently, Qleo’s high level of innovativeness within the industry aligns with the innovator category.



**Figure 3.** Overview of the case companies’ positions in the innovation process



**Figure 4.** Overview of the case companies’ adopter categories within their industries

#### 4.1.2. Diffusion of B2C video call services across industry boundaries

The case study generated a sample of eight companies, operating in Sweden, who in the recent years have started, or are in the process of starting, to offer B2C video call services. As the individual case companies operate in different industries, the research indicates that the application of B2C video call services is in fact diffusing across industries on the Swedish market. This is further strengthened by the fact that the sample does not contain the entire population of companies in Sweden that have adopted B2C video call services. Also, all interviewees predicted that additional companies, both within their own industry and on the Swedish market in general, will adopt the innovation of B2C video call services:

“I hear about new players applying B2C video call services all the time” (CEO Qleo, interview, 2019-04-09).

“I believe it will continue to diffuse” (Head of Business Development Orio, interview, 2019-04-10).

The Project Leader at IKEA (interview, 2019-04-12) explained that their white-label video call software supplier is currently working with several large Swedish corporations looking to adopt B2C video call services. Thus, multiple sources support that the application of B2C video call services is diffusing and will continue to diffuse.

The data collected through interviews support the fact that companies find sources of innovation across industry boundaries. When innovation activities were discussed, all interviewees explained that they monitor activities in other industries to find ideas for innovation and improvement in their business offering.

“We definitely look across industry boundaries. We know that the consumer to some extent expects the same simplicity when booking their animal hospital visit as when booking a taxi” (Business Manager Vet Company, interview, 2019-04-11).

All case companies except IKEA highlighted that their industry’s tendency to be traditional in terms of digitalisation was the main reason for using a cross-industry innovation search. The empirical findings indicate that the case companies recognise the value of utilising external sources of innovation. The recognition aligns with Nambisan and Sawhney’s case study (2007) that found that an increasing number of companies are recognising the value of finding inspiration from external sources.

## 4.2. Why B2C video call services diffuse across industry boundaries

In order to explain why the diffusion of B2C video call services occurs, different attributes of the studied innovation are reviewed. Thereafter, empirical findings regarding communication channels and the social system in which diffusion occurs are presented.

#### 4.2.1. Attributes of B2C video call services

##### **Relative advantage**

The relative advantage is defined as in what way the innovation is perceived to be better than the idea it supersedes (Rogers, 2003, p. 15). The relative advantages of using video calls to distribute B2C services discussed by the interviewees can mainly be categorised into three categories: (1) ease for the customer, (2) efficiency, and the (3) relational and emotional advantages. All companies highlighted ease for the customer in terms of quicker access to services as well as the convenience of a remote solution.

“The patient gets an appointment very quickly, they don’t need to transport themselves to a physical clinic, and they get faster assistance” (CEO iKlinik, interview, 2019-04-12).

The interviewees discussed a variety of different efficiency gains from distributing services through video calls. IKEA’s Project Leader highlighted the possibility to optimise resource allocations between department stores.

“We tried selling beds to customers in the department store in Helsingborg via video calls with employees at the department store in Gothenburg. This is interesting for retail as it enables us to handle differences in peak-hours at different department stores” (Project Leader IKEA, interview, 2019-04-12).

Wayke’s CEO discussed how their independent car purchase advisory service could make the customer journey more efficient by shortening the pre-purchase process (interview, 2019-04-15). Furthermore, Virkesbörsen’s co-founder talked about how the application of video calls has increased time efficiency and reduced the company’s travel expenses (interview, 2019-04-03).

75 % of the interviewees brought forth the emotional and relational advantage of video call services. In contrast to other means of distant communication, video call services allow the customer and the service provider to see each other. When discussing the importance of the visual feature when using digital platforms, IKEA’s Project Leader said:

“It's incredibly relationship-building” (Project Leader IKEA, interview, 2019-04-12).

This statement is supported by research on trust development through digital communication channels in which video calls developed the highest level of trust (Bos et al., 2002). The Co-founder of Virkesbörsen highlights that the level of trust becomes increasingly important for firms that only provide digital services.

“It is important for us as a digital platform to be able to show our customers that we are people behind the business, flesh and blood” (Co-founder Virkesbörsen, interview, 2019-04-03).

The CEO of the digital law firm Qleo emphasises that how services traditionally have been distributed affected their choice to implement video calls to distribute legal services:

“Traditionally, people have always met their lawyer face-to-face. By applying video calls, we can still offer this personal meeting” (CEO Qleo interview, 2019-04-09).

The CEO of Doktor.se, on the other hand, argues that the application of video calls does not fully solve issues with trust.

“Just because we have a video call function on our digital platform does not mean that the trust issues regarding online doctors go away” (CEO Doktor.se, interview, 2010-04-11).

In conclusion, the empirics indicate that multiple relative advantages of video call services prevail.

### **Compatibility**

An innovation is characterised by a high degree of compatibility if it is consistent with the values, experiences, and needs of a potential adopting unit. The more compatible an innovation is with a potential adopter, the larger the likelihood of adoption (Rogers, 2003, p. 15). When discussing compatibility between the innovation and the case companies, a majority of the interviewees highlighted the need to meet customer needs and adapt the organisation with changing customer behaviour.

“I believe that all companies, no matter in which industry they operate, must be where the customer is. Today, all customers have smartphones, and it has changed the way people communicate with each other and with organisations” (Head of Business Development Orio, interview, 2019-04-10).

Furthermore, the CEO of Wayke mentioned that the implementation of their video call services aligned with their customers’ values as they have a digital customer base (interview, 2019-04-15). In summary, the data indicate a rather high level of compatibility.

### **Complexity**

If an innovation is perceived as difficult to understand and use, it is categorised as complex. The simpler an innovation is, the higher the likelihood of adoption (Roger, 2003, p. 15). The complexity of adopting B2C video call services is mainly determined by the process of developing the required video call software. Six of eight case companies had or intended to apply a white-label solution. Time efficiency, decreased complexity,

lower cost, and less risk were the interviewees' main reasons to choose white-label over in-house software development.

Doktor.se and Orio, who did not use a white-label solution, still purchased parts of the video call software to simplify the software development. Consequently, the empirics indicate that the availability of white-label solutions and software suppliers has decreased the difficulty to adopt video calls to distribute B2C services. However, integrating the B2C video call solution into the organisation adds some complexity to the adoption process.

“The software in itself was not complicated. However, the integration became more complex as we needed to connect the software with a personal identity verification function (CEO iKlinik, interview, 2019-04-12).

Moreover, IKEA is currently in the process of implementing B2C video call services globally. Geographical expansion reflects another dimension of complexity in the adoption process. In summary, the empirics imply that a moderate level of complexity characterises the innovation.

### **Trialability**

Trialability is the degree an innovation can be tested in a closed environment (Rogers, 2003, p. 16). If a unit of adoption can try the innovation before the adoption decision, the likelihood of adoption increases (ibid). Common throughout all cases was the high degree of trialability. The companies had all managed to test or were in the process of testing the innovation. Qleo, Doktor.SE, Orio, and IKEA tested the video call software on a test beta application. Vet Company was able to run pilot video calls with the white-label supplier's software before deciding to purchase it. iKlinik, tested their physiotherapists' ability to diagnose their patients remotely through questionnaires before deciding to adopt video call services. By comparing the remote diagnoses from questionnaires with the diagnoses given during the patient's physical visit, the management team at iKlinik could confirm that providing physiotherapeutic services through video calls was feasible. Consequently, the data implies that the innovation is characterised by a high degree of trialability.

### **Observability**

Rogers (2003, p. 16) defines observability as how visible the results of adopting an innovation are. High levels of observability increase the likelihood of adoption increases (ibid). When asked questions regarding the observed success of the B2C video call services in other companies, all interviewees referred to the MedTech company KRY.

“Parallel to the initial discussion of developing the MySaabCar app, other players on the market had launched B2C video call services. KRY, the first to implement the innovation in Sweden, had at the time recently appeared on my radar” (Head of Business Development Orio, interview, 2019-04-10).

The CEO of the digital law firm Qleo emphasised that many investors he came in contact with when raising initial funding had recognised the success of B2C video call services.

“When meeting investors, the video call discussion was recurring. The discussions emphasised how incredibly fast consumers have adapted their behaviour in terms of communicating with organisations through video calls” (CEO Qleo, interview, 2019-04-09).

Thus, the empirics imply a high degree of observability.

**Table 4.** Overview of the attributes of B2C video call services

	<b>Relative Advantage</b>	<b>Compatibility</b>	<b>Complexity</b>	<b>Trialability</b>	<b>Observability</b>
<b>Attribute definition</b>	The degree to which an innovation is perceived as better than the idea it supersedes.	The degree to which an innovation is perceived as being consistent with the existing values, experience, and needs of potential adopters.	The degree to which an innovation is perceived as difficult to understand and use.	The degree to which an innovation may be experimented with on a limited basis.	The degree to which the results of an innovation are visible to others.
<b>Effects on diffusion</b>	Greater perceived relative advantages result in quicker adoption rates.	Compatibility with the values and norms accelerates the rate on adoption.	Less complex innovations are adopted more rapidly.	Innovations that can be tried are generally adopted more quickly.	Observability of the results of an innovation increases the likelihood of adoption.
<b>Identified key words</b>	<ul style="list-style-type: none"> <li>• Ease for the customer</li> <li>• Efficiency gains</li> <li>• Relational and emotional advantages</li> </ul>	<ul style="list-style-type: none"> <li>• Customer needs</li> <li>• Changing customer behaviour</li> </ul>	<ul style="list-style-type: none"> <li>• White-label</li> <li>• Software suppliers</li> </ul>	<ul style="list-style-type: none"> <li>• Beta applications</li> <li>• Pilot video calls</li> <li>• Pilot studies</li> </ul>	<ul style="list-style-type: none"> <li>• KRY</li> <li>• Fast adoption among consumers</li> </ul>
<b>Degree of the attribute on B2C video call services</b>	High	Moderately high	Moderate	High	High

#### 4.2.2. Communication channels

Communication channels make up how a message about an innovation gets from one unit of adoption to another (Rogers, 2003, p. 18). As all interviewees referred to KRY as a

source of inspiration of B2C video call services, an essential communication channel in the diffusion process has been KRY's marketing efforts. The Business Manager of Vet Company explains that KRY has become a well-known brand in Sweden as a consequence of extensive marketing.

“They are not a huge player, but out in the vernacular, they've become big. They are owned by the venture capital firm Creandum and are therefore able to make huge investments in marketing” (Business Manager Vet Company, interview, 2019-04-11).

The statement is further supported by a publication from Sifo, Sweden's largest market research company. According to Sifo, KRY invested SEK 50 million in advertising in Swedish media during 2018. KRY's main competitor invested SEK 30 million (Sifo, 2018).

#### 4.2.3. The social system

The social system in which diffusion is studied is the Swedish market. The different industries in Sweden constitute the subsystems on which the Swedish market is built. Common throughout all cases, is the high level of innovativeness among the organisations compared to the specific industries in which they operate. Six out of eight companies were first to implement B2C video call services within their industry. The other two companies, Doktor.se and Vet Company, belong to the early adopter category. Although a majority of the case companies are innovative within the boundaries of their industry, they highlighted the fact that their industry itself was conservative and characterised by low levels of innovativeness.

“We are the first to offer a digital advisory service in our industry, but compared to KRY we are light-years behind” (Co-founder Virkesbörsen, interview, 2019-04-03).

“We are not early to adopt video calls in Sweden, as it has existed for a few years. However, we are early in our industry” (CEO Qleo, interview, 2019-04-09).

In summary, the empirics indicate that the case companies belong to later adopter categories on the Swedish market as a whole compared to within the industry subsystems.

When discussing characteristics of the Swedish market that has fuelled the diffusion of B2C video call services, all case companies except IKEA and Virkesbörsen emphasised the tendency of the Swedish population to be open towards digital solutions and quick to adopt innovations.

“In Sweden, we are very developed when it comes to using digital services. I can say that with confidence because we operate in several markets” (Head of Business Development Orio, interview, 2019-04-10).

This is supported by data provided by the Organisation for Economic Cooperation of Development (OECD, 2018) that indicates that Sweden is at the forefront of digitalisation.

The topic that generated the greatest variety in the empirics was which stakeholders that has had the most significant influence in the adoption of B2C video call services. IKEA, Doktor.se, Wayke, and Orio emphasised customers as the main influential stakeholder. Qleo, on the other hand, highlighted investors and entrepreneurial networks. iKlinik, Virkesbörsen, and Vet Company underlined the influence of other innovating organisations such as KRY. Vet Company and IKEA also referred to the internal influence of innovation champions advocating the adoption of B2C video call services. In the case company sample, Vet Company and IKEA are the only organisations that are truly large in terms of employees. Thus, the importance of internal acceptance of an innovation becomes more evident in larger organisations. Furthermore, Doktor.se mentioned the influence of the Swedish government as a consequence of the company operating in the heavily regulated healthcare industry.

### 4.3. Other observations

Presented below are the empirical findings that cannot be described by the components of Rogers's Diffusion of Innovation model.

A consistent theme throughout the interviews was the interviewees' referral to KRY as a disruptive force and a source of inspiration. The case companies also emphasised that KRY's pioneer position forced KRY to take many costs, for example, extensive marketing, in order to change customers' attitudes regarding the way services are distributed. This has helped other companies to launch video call services by lowering the cost of imitation.

“One of the effects of digitalisation is the disrupter that pushes the process initially, tears down barriers, and changes a behavioural pattern” (CEO Doktor.se, interview, 2019-04-11).

Furthermore, several case companies acknowledge that KRY's initial position has generated a positive spill-over effect on their business, mainly in terms of lowering consumer's barriers to try new video call services. The CEO of Doktor.se emphasised the importance of the concept copying with pride (ibid) and the CEO of Qleo confirmed this by highlighting that one should not try to reinvent the wheel (CEO Qleo, interview, 2019-04-09).

Common throughout all cases, the companies did not solely distribute their services through video calls. Instead, video calls were an add-on service to increase the completeness of their service offering. Five out of eight companies: Doktor.SE, IKEA, Vet Company AB, Orio, and iKlinik, offer both digital and physical distribution channels.

Moreover, their digital services are offered through a variety of digital channels and not purely through video calls. The Business Manager of Vet Company emphasized the strategic importance of being able to incorporate the entire animal health ecosystem in their service offering. The remaining three companies, Virkesbörsen, Qleo, and Wayke have no physical channels and are therefore pure digital companies.

The Project Leader at IKEA explained that to create the best customer experience possible, companies must meet the customer in multiple channels. Moreover, the pure digital players also applied video calls as a part of a complete service offering.

“Unlike KRY, where everything goes via the video calls, the video call service is an add-on for us, an alternative to the chat function” (CEO Qleo, interview, 2019-04-09).

Thus, it is evident that distributing B2C services through video calls is not the core of the business models in the case companies. Instead, the adoption was driven by the desire to improve their customer experience.

Furthermore, the empirical findings support that all services provided by the case companies were characterised by a significant knowledge gap between the service provider and the customer. The knowledge gap could explain why the visual component of video calls generate emotional and relational benefits. Moreover, the representatives of Qleo and Vet Company highlighted the ability to work remotely via video calls as a unique selling point when recruiting personnel. In addition, IKEA and Vet Company emphasise the importance of engaging the organisation’s employees and overcoming internal indifference or resistance throughout the innovation process.

## 5. Discussion

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*In the following section, the empirical findings are clarified, interpreted, and discussed by analysing applications of the theoretical framework. The discussion aims to answer the research questions and present the implications of the study. Furthermore, the limitations of the empirical findings are highlighted. Lastly, areas in which future research could be conducted are discussed.*

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### 5.1. The diffusion of B2C video call services

The sample of case companies with different applications of B2C video call services from a variety of industries indicates that the innovation is diffusing across industry boundaries. IKEA's white label supplier's cooperation with other companies looking to implement B2C video call services further confirms the diffusion. Also, all interviewees predicted that additional companies, both within their respective industry and in Sweden in general, will adopt B2C video call services. The predictions speak for the continuance of the diffusion. When the study was conducted, the diffusion process was in its earlier stage as 75 % of the case companies were categorised as innovators within their industry and 25 % categorised as early adopters. This is further supported by the fact that Doktor.se was the only case company that had reached the final stage of the innovation process.

Moreover, the diffusion process within the boundaries of the case companies' specific industries was less developed compared to the diffusion in the Swedish market as whole. Rogers (2003) argues that the structure of the social system in which diffusion occurs affects diffusion. The case companies' own industries were characterized by low levels of innovativeness which fuelled the need for innovation search across industry boundaries. Consequently, the structure of the Swedish market, which is constituted of its different industries, has amplified the diffusion of B2C video call services across industries. Moreover, the Swedish market's tendency to be at the forefront of digitalisation as well as the population's increased use of video communication contributed to the diffusion.

Rogers (2003) argues that the attributes of an innovation affect its diffusion. The advantages in terms of ease for the customer, efficiency, and the relational and emotional characteristics of B2C video call services were central to the case companies' adoption. Moreover, the innovation was relatively compatible with the companies' needs in terms of meeting customer demands. A high degree of trialability, as well as the decreased complexity with white-label solutions, lowered the risk of adoption. In addition, the success of the MedTech company KRY, who commercialised the implementation of B2C video call services in Sweden, generated a high degree of observability. KRY's extensive

marketing efforts contributed to the diffusion process and evolved into an essential communication channel. In conclusion, the five attributes of the innovation defined by Rogers (2003) have affected the case companies' decision to adopt B2C video call services and thereby fuelled the diffusion process.

## 5.2. Implications

Rogers's model mainly focuses on how innovations diffuse among individuals in a social system. However, as this study aims to take an organisational perspective, the adoption process becomes more complex, and Rogers's model does not provide sufficient explanatory value. Consequently, additional literature is reviewed.

A deviation between the empirical findings and Rogers's model is the opinion leadership that drives diffusion. Rogers (2003) defines opinion leaders as members of a social system that are early adopters and fuelled the diffusion to the early majority. Because all case companies referred to the MedTech company KRY as a source of inspiration, KRY could be defined as an opinion leader that fuels the diffusion of B2C video call services among different industries. KRY became an opinion leader because of the company's visibility in mass media and status as a disrupter. However, KRY differs from Rogers's definition of an opinion leader due to KRY's position as a disruptive pioneer and innovator rather than an early adopter. As the opinion leadership of KRY does not align with Rogers's model, additional literature must be applied to provide explanatory value. Enkel and Gassman (2010) argue that new technologies that have already been tested by an innovator significantly lower the risk for other companies adopting similar technologies. Consequently, the opinion leader in the diffusion of B2C video call services is a pioneer instead of an early adopter. Thus, the fact that KRY's pioneer position forced them to take the initial risk explains why diffusion was possible.

Furthermore, Min, Kalwani and Robinson's study (2006) conclude that pioneers in a product market can build initial demand that early imitators can benefit from. This was the case for Doktor.se who imitated parts of KRY's business model. All interviewees highlighted that their customers were more prone to use their video call services if they had previously used video call services provided by other companies. Thus, the demand KRY created for video call services in the healthcare industry spread into other industries. Consequently, the empirical findings indicate that imitation can also be beneficial across industry boundaries.

von Hippel (1988) studied the sources of innovations within organisations. He argues that sources of innovation can be product manufacturers, their suppliers or their users. In other words, sources of innovation are found throughout the value chain. The empirical findings identified driving forces of the adoption of video call services in the entire value chain. The driving force within the case companies was the champions who advocated the implementation of B2C video call services. Suppliers contributed to the adoption by

providing white-label video call solutions. Lastly, the needs and changing attitudes of the companies' customers fuelled the adoption. However, the fundamental source of the innovation B2C video call service was found outside von Hippel's proposed area, the value chain. Instead, all interviewees referred to KRY as an inspirational source of the innovation, an actor who had no functional relationship with the case companies. Thus, the empirics indicate that the area from which sources of innovations can be found can be expanded beyond the boundaries of the value chain. The extension aligns with Brunswicker and Hutschek's (2010) recommendation to conduct cross-industry innovation search as sources of innovations can be found in remote industries.

Furthermore, all case companies applied video call services as a complement to other digital and/or physical distribution channels, in order to provide a complete service offering. The main driver to pursue a complete service offering was the customers' expectation of and demand for seamless customer experiences. Consequently, the empirics identified a trend among the case companies to move towards an Omnichannel strategy. Brynjolfsson, Hu, and Rahman (2013) explain that digitalisation has increased the possible channels in which customers and companies can interact. Thus, companies must manage customer interactions on multiple channels, both digital and physical. By integrating the channels and pursuing an Omnichannel strategy, a seamless customer experience can be provided. Thus, to adopt innovations is of strategic importance.

### 5.3. Conclusion

In the B2C video call context, Rogers's Diffusion of Innovation model can be applied to identify if diffusion occurs. Moreover, the model has some explanatory value to why diffusion occurs in terms of the innovation's attributes and the characteristics of the social system. However, Rogers's model focuses mainly on adoption among individuals. As this study aims to take an organisational perspective on why diffusion occurs, additional theory and the empirical findings are used to provide necessary explanations. The additional theory can be categorized accordingly: (1) the benefit of being an imitating organisation, (2) the benefit of cross-industry innovation search within organisations and (3) the strategic importance of being an innovative organisation. The benefits of imitation mainly reflect risk reduction and efficiency gain when adopting innovations. Open innovation activities can help companies identify new innovations and mitigate the risk of industry blindness by tapping into cross-industry sources of innovation. Applying an Omnichannel strategy enables companies to interact with customers in a digital age where seamless customer experiences are essential.

### 5.4. Limitations and critique

Similar to all academic research, this study has limitations in the methodology, empirical findings, and its implications. The research was conducted during the initial stages of the

diffusion of B2C video calls. Thus, the diffusion had only reached innovators and early adopters. The innovative nature of the case companies limits the generalisability of the research, and the implications may therefore not be transferable to all organisations. According to Rogers (2003), diffusion initially occurs among homophile adopting units. Therefore, the fact that open innovation activities occur in all case companies may be a consequence of their homophily in terms of innovativeness, which may not be the case for later adopting companies. By expanding the time span of the research, the entire diffusion process could have been observed which would have incorporated the perspectives of the remaining adopter categories. Consequently, a higher level of generalisation could have been reached. However, the expansion was not possible due to the time constraint of the study.

Moreover, the data collection was limited to the Swedish market. Because Sweden is at the forefront in terms of technological development (OECD, 2018), diffusion processes in other markets are likely to look different. Thus to increase generalisability, perspectives from multiple geographic markets could have been applied. Furthermore, due to the subjective nature of a qualitative study based on interviews, the study's implications may incorporate the interviewee's personal biases. The fact that the interviewees were innovation champions within their respective company may have resulted in a positively biased view of the adoption. Also, one can never entirely exclude the possibility that the data analysis process was influenced by the researchers' personal biases even though the analysis followed established methodological theories.

One could argue that a larger sample of case companies would increase the generalisability of the study. However, increasing the sample size was difficult due to the rather small number of companies that have implemented B2C video call services. Also, the fact that Qleo had not yet launched its video call service could be limiting in terms of the contribution the interview with Qleo's CEO generated. For example, the interviewee had no insight into whether the implementation of video call services was successful or not.

## 5.5. Future research

As the study was limited to the Swedish market, future research could be conducted in other geographical markets. Moreover, the focus on the innovation B2C video call services could in future research be substituted with other innovations. Furthermore, future research could focus on generating a broader perspective of the innovation process by interviewing representatives from multiple functions and levels within the organisations.

In future research the study's methodology could be altered in multiple ways. A possible alteration could be to include quantitative measures of diffusion, for example, the rate of adoption. Moreover, as the study's inductive approach has generated theory with

explanatory value of the diffusion of B2C video call services between organisations, it would be of interest to test the generated theory through a deductive approach in a variety of contexts. This could, in turn, determine the robustness of the findings and implications of the study.

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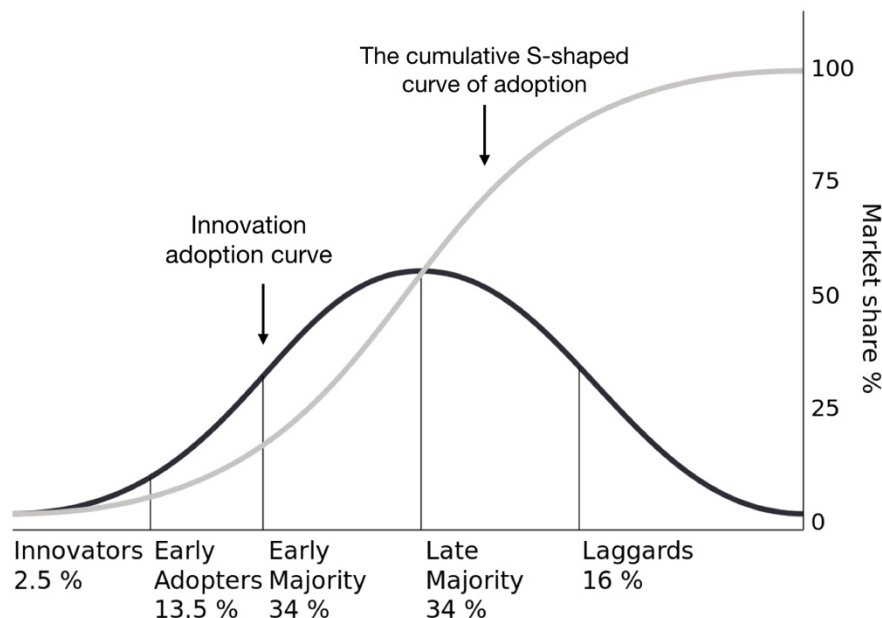
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## 7. Appendix

### 7.1. Curves of adoption



Source: Briscoe, Trehwitt and Hutto (2011).

### 7.2. KRY's business model

In Sweden, healthcare centers have two revenue streams: (1) a yearly fixed fee from the county for each citizen registered at the center, regardless whether the citizen visits the healthcare center or not, and (2) a patient fee for each consultation (Sveriges Kommuner och Landsting, 2019). The patient fee is subsidised to different degrees in different counties. KRY is based in the county of Södermanland where the patient fee is fully subsidised. Consequently, KRY can offer fully subsidised consultations to any Swede, anywhere, using their video call services. Digital healthcare providers who are not based in Södermanland country cannot offer fully subsidised patient fees (Cederberg, 2019).

### 7.3. Rogers's ideal types of adopter categories

#### **Innovators**

Innovators are the quickest to adopt an innovation in a social system. They account for 2.5 % of the social system and are characterised by traits such as venturesomeness, great interest for new ideas, and risk proneness. Innovators launch the diffusion process by

importing innovations from outside the boundaries of the social system (Rogers, 2003, p. 282).

### **Early adopters**

The early adopter category adopts an innovation after the innovators have imported it. The category accounts for 13.5 % of the social system and is often highly respected by peers in the social system. Consequently, early adopters have the highest degree of opinion leadership and thereby help trigger the diffusion process towards the critical mass (Rogers, 2003, p. 283).

### **Early majority**

The early majority category accounts for the 34 % of the social system that adopts an innovation just before the average member. The category is a crucial link between the diffusion from units adopting very early and the units adopting relatively late. They are seldom opinion leaders (Rogers, 2003, p. 284).

### **Late majority**

The late majority category accounts for the 34 % of the social system that adopts an innovation just after the average member. The late majority is characterised by skepticism and caution. They do not adopt until it is economically necessary and until there is pressure from peers. Moreover, uncertainties surrounding an innovation must have been eliminated before they choose to adopt (Rogers, 2003, p. 284).

### **Laggards**

The laggard category account for the remaining 16 % of the social system who are last to adopt an innovation. They are characterised as being traditional and are often isolated in the social systems' networks and interact primarily with other laggards. As they have limited resources, laggards must guarantee that the innovation will not fail before adopting it (Rogers, 2003, p. 284).

## **7.4. The five stages of the innovations process in organisations**

### **Agenda-setting**

Agenda-setting takes place when an organization identifies a problem which, in turn, generates a need for innovation. The stage also includes the search for potential innovations to solve the problem. Innovations are most commonly triggered by performance gaps (Rogers, 2003, p. 422).

### **Matching**

Matching occurs when an innovation fits the organisation's agenda. In other words, members in the organisation conceptualise and test how feasible the innovation is in

solving the defined problem. If the innovation is found feasible, decision-makers in the organisation will adopt the innovation (Rogers, 2003, p. 423).

### **Redefining/Restructuring**

During the redefining/restructuring stage, the organisation re-invents an innovation imported from the outside to the extent that it meets the organisation's structure and needs. Moreover, the organisation itself changes to enable the adoption of the innovation. The amount of change required for an organisation to adopt an innovation depends on the extent to which the innovation is disruptive. The more disruptive an innovation is, the larger the required adjustments (Rogers, 2003, p. 424).

### **Clarifying**

Once the organisation has put the adopted innovation into more widespread use, the clarifying stage is entered. Consequently, the idea of the innovation gradually becomes more evident to the organisation's members. Initially, an innovation has little meaning to the organisation's members. However, as members turn to other members in the organisation to seek answers to their questions about the innovation, a gradual common understanding of the meaning of the innovation arises over time (Rogers, 2003, p. 427).

### **Routinizing**

The final stage of the innovation process occurs when the adopted innovation has become integrated into the organisation's regular activities and therefore lost its unique identity as new. Once the innovation is routinized, the innovation process is complete. However, the innovation may still be vulnerable to discontinuance. High levels of participation and re-invention create a sense of ownership among the members in the organization which, decreases the risk of discontinuance (Rogers, 2003, p. 249).

## **7.5. The case companies' business models and application of B2C video call services**

### **Doktor.se**

Doktor.se is a Swedish Healthcare provider that provides healthcare services through digital and physical health centres. The company was founded in July 2016 and has since then become one of Sweden's largest digital healthcare providers with over 250 employees (Doktor.se, n.d.). Doktor.se applies video call software in their mobile application as one of three ways patients can communicate with healthcare providers. Apart from video calls, patients can chat or call their healthcare provider. The patient fee for a digital consultation by Doktor.se is fully subsidised as the company, similar to KRY, has its base in the county of Södermanland (Cederberg, 2019).

## **iKlinik**

iKlinik is a Swedish physical therapy clinic that was founded in 2013. The clinic assists patients with physiotherapeutic injuries through diagnosis, treatments and rehabilitation. iKlinik employs 15 people and distributes services through two physical clinics located in southern Sweden as well as their digital clinic. The digital clinic launched in september 2017 and is accessed via the company's website. The patient can choose between digital consultations via online messages for 200 SEK per consultation or via video call for 400 SEK per consultation.

## **Wayke**

In the fall of 2017, the Swedish trade association for car dealers and automobile repair shops, Motorbranschens Riksförbund, launched Wayke. Wayke is one of Sweden's largest independent digital marketplaces for cars and employs 40 people. The decision to launch Wayke was motivated by the increase in online car sales in Sweden that was lacking in security and quality. In the January 2018, Wayke launched a test pilot of an add-on service called Wayke Buddy. Wayke buddy is an independent and free advisory service helping consumers navigate through the extensive pre-purchase process when buying a care. A process that according to Wayke's CEO normally take three to five months and includes over 900 digital interactions (interview, 2019-04-15). The service was distributed online via video calls. In the spring of 2019, the service was removed for the purpose of altering and improving the service, before re-launching it (ibid).

## **Virkesbörsen**

The Swedish start-up Virkesbörsen was founded in 2015 and is an independent digital marketplace for buying and selling timber. Virkesbörsen has 10 employees. As the company has a marketplace business model where a percentage fee is earned on every sale made on their platform, the company has two types of customers: (1) forest owners selling timber and (2) businesses buying timber. The forest owners using Virkesbörsen's marketplace are both private individuals and large corporations. In may 2018, Virkesbörsen launched a free forest advisory service distributed through video calls. The service is called Skogskompis (in English this translates to Forest Buddy) (Virkesbörsen, 2018).

## **Orio**

In 2013 Saab Automobile Parts, who has equipped Saab cars with original parts since the first Saab car in 1947, was renamed Orio. In conjunction with the rebranding, the company also decided to manufacture spare parts for other popular car brands as well. However, Orio is still the exclusive supplier of original Saab parts. The company has a global market presence and employs just above 200 people (Orio, n.d.). Orio recognised that their customers, the car workshops, were lacking competence in digital marketing and thus having trouble communicating to the end customer, the cars owners. Orio

launched the MySaabCar mobile application in September 2018 as an attempt to bridge the digital communication between workshops and consumers. “The app’s purpose is to gather the consumer’s information about his or her car ownership. Everything from vehicle inspections and bookings to information regarding reparations” (Head of Business Development Orjo, interview, 2019-04-10). The application has an integrated video call service that consumers use to ask simple car-related questions that do not necessarily require a visit to a car workshop. The consultation costs 99 SEK.

## **IKEA**

The Swedish multinational group IKEA designs and sells furniture, kitchen appliances and home accessories. IKEA was founded in 1943 and has since then become the world’s largest furniture retailer with over 208 thousand employees (IKEA n.d.). The affiliate IKEA Svensk Försäljning AB, operating in the Swedish market, initiated the experiment IKEA Samsyn in November 2018 (IKEA, 2018). IKEA Samsyn is a branded mobile application used by customers to access video call services within the following areas: (1) customer service, (2) product claims, (3) kitchen-sales, (4) consultations with interior designers, and (5) in-store assistance and sales. As the experiment proved the feasibility of applying video calls to improve the customer experience and streamlining operations by enabling resource allocations, IKEA plans to implement video call services globally. As the innovation is under restructuring, the pricing of the video call service is under development (Project Leader IKEA, interview, 2019-04-12).

## **Vet Company**

Vet Company provides animal healthcare services to smaller animals and horses. The company was founded in 2012, employs 1500 people, and is a part of the largest animal healthcare group in Northern Europe. The company owns multiple local animal clinics as well as specialised animal hospitals in Sweden. Vet Company launched, in the autumn of 2018, an online animal pharmacy where customers can order animal related products. Since February 2019, Vet Company also offers a virtual veterinary clinic where animal owners can receive veterinary consultations for 295 SEK. If the animal’s health issue cannot be solved through a digital consultation, the veterinary books a physical consultation at one of the company's clinics or hospitals. If this is the case, the cost of the digital consultation is refunded. Both the virtual clinic and the online animal pharmacy are branded as individual sub-brands that are endorsed by Vet Company. The Business Manager explained that Vet Company decided to develop the virtual clinic and the online pharmacy in order to meet the customer throughout the entire customer journey. Vet Company aims to be present from the first google search on the animal’s symptoms, to the digital or physical consultation, and thereafter by supplying the prescription medication.

## **Qleo**

The Swedish startup Qleo is a new legal service that aims to provide consumers with an accessible lawyer in his or her pocket. The company was founded in the fall of 2018. The digital law firm Qleo will distribute their legal services on the company's mobile application which is to be launched in August 2019. Examples of legal services Qleo will provide are legal advice regarding insurance claims and the preparation of various contracts. When launched, consumers will be able to communicate with lawyers either via the application's chat function or via video calls. In contrast to traditional law firms, who charge customers by the hour, Qleo has a subscription based business model that dramatically lowers the end-price for the consumer (CEO Qleo, interview, 2019-04-09).

## **7.6. Interview guide**

The following questions were the basis of the empirics collected through interviews with case company representatives.

### **Background**

- Could you provide us with a brief introduction to the company and the industry you are operating in?
- Could you tell us more about your position in the company?

### **The innovation**

- How has the company applied video call services and how does the service work?
- Have you developed the video call software yourselves or have you bought the software from a supplier?
- Why did you choose to implement video call services? What problem did you aim to solve?
- If the video call service had not been implemented, what other alternatives existed?
- Which advantages does video call services have compared to other alternatives?
- When the idea to implement video call services was born, was it a natural step that aligned with the company's business or was it something very new and distant?
- Was it technically complex to implement the video call service?
- Did you have the possibility to test the video call service in a closed environment before launching it to customers?
- Did you decide to implement the video call service after observing the innovation within another company?

- Do you have a way to measure if the implementation of video call services was a good investment?

### **Communication channels**

- Where did you first hear about the application of video call to distribute services to consumers?
- When was the decision to adopt video call services made?
- Where did the idea to implement B2C video call services come from?
- When innovating within the company, do you search for inspiration within your industry or across industry boundaries?
- Was it a specific company or person that inspired you to implement video call services?

### **Time**

- Would you classify your company as innovators, early adopter, early majority, late majority or laggards in terms of the adoption of B2C of video call services? Both within the industry and in Sweden as a whole.
- Do you believe more companies will implement B2C video call services?
- Could you please give us an overview of the innovation process and its important milestones?
- What factors were essential in the innovation process?
- How innovative is the company both in terms of the industry and in Sweden as a whole?
- What drives the company's innovativeness?

### **The social system**

- Are there any trends on the Swedish market that has influenced your adoption of video call services?
- Is rivalry within the industry a driver of innovation?
- Are there any specific characteristics of the Swedish population that makes it easier or more difficult to implement video call services?
- Do you believe that consumers are more prone to use your video call service if their have used similar technology in other situations?
- Which stakeholders have influenced your decision to implement video call services?

## **Ending**

- Is there something you would like to add that has not yet been discussed?