



jamk

Finding Business Models in IT Start-Ups

Mohammad Saaim

Master's thesis

November 2023

Professional Project Management

Mohammad Saaim

Finding Business Models in IT Start-Ups

Jyväskylä: Jamk University of Applied Sciences, November 2023, 56 pages.

Degree Programme in Professional Project Management. Master thesis

Permission for open access publication: Yes

Language of publication: English

Abstract

The objective of the research was to learn about the applicable business models for a newly formed IT services company in Finland (Indicsoft Solutions Oy). The goal of this thesis was to discover what factors must be addressed for the company to succeed as a new business in the IT industry.

Author investigates several types of business models and technologies that are appropriate for new businesses and will ultimately offer the best business models for Indicsoft Solutions Oy. This study's research methodology is both deductive and inductive. Because complex and multidimensional phenomena require a multilateral approach, both qualitative and quantitative methodologies were used. Data for this thesis were acquired through interviews with industry experts, a questionnaire, a literature study, and the internet.

Based on a literature review of the different types of business models and the gathered data, business models consisting of manpower outsourcing services were selected to implement the main business idea. The thesis includes a summary of the current state of business models followed by IT services companies in Finland, as well as a comparative report on the business models which Indicsoft solutions Oy could utilize. This report contains the details of different business models to understand why these suit Indicsoft Solutions Oy business.

Keywords/tags

Business models, Start-Up-Companies, Finnish Information and communication technology sector

Contents

1	Introduction	3
1.1	Thesis background.....	4
1.2	Thesis structure.....	5
1.3	Objective of the thesis and Research questions.....	6
1.4	Case Company	7
2	Finnish ICT industry.....	8
2.1	Theory about the Finnish ICT industry.....	8
2.2	ICT technologies used in Finland.....	8
2.3	Growing sectors and areas.....	13
2.4	sectors and areas that are lacking technologies	15
3	Business models.....	16
3.1	Existing Business Models.....	16
3.2	Business models used in Finnish ICT industry.....	32
3.3	Business models used worldwide in the ICT industry.....	33
4	Research method.....	34
4.1	Research Approach and Methodology	34
4.2	Research methods and data collection.....	35
4.2.1	Qualitative: Industry Expert Interviews	35
4.2.2	Quantitative: Questionnaire.....	37
5	Implementation and Results	37
5.1	Data analysis (Collected by Interviews)	37
5.2	Data analysis (Collected by Questionnaire).....	39
5.3	Present Situation Analysis	40
5.4	Target Situation	41
5.5	Key Finding	42
5.6	Reliability	43
5.7	Ethics	44
5.8	Result	44
6	conclusion and Discussion	45
6.1	Theoretical Implications	45
6.2	Business model proposal	46
6.3	Executive Summary and Methods	47
6.4	Limitations of the Study.....	47
6.5	Personal Learning and Improvement	48
7	References	49

Appendices

Appendix 1. Interview Questions	52
Appendix 2. Survey Questions	53

Figures

Figure 1. ICT sector's gross value added and share of GDP in Finland	15
Figure 2. Process of outsourcing	20
Figure 3. Partnership Business models structure	26
Figure 4. The Seven Functional Blocks of Social Media	29

Tables

Table 1. Interview details	38
Table2. Target market	41

Acronyms

IT	Information technology
AI	Artificial Intelligence
FCAI	Finnish Center for Artificial Intelligence
ICT	Information and Communication Technology
BMC	Business Model Canvas
CV	Curriculum Vitae
VR	Virtual Reality
BT	Business Technology
IOT	Internet of Things
GDP	Gross Domestic Product
R&D	Research and development
GDPR	General Data Protection Regulation

1. Introduction

According to (Gaming & Metaverse, 2022)“The Nordic nations are Europe's fastest growing startup regions. Finland is a very inventive nation. We have a number of successful gaming and software firms, including Supercell, Rovio, and KONE. Finland's most important commercial sectors include ICT, software, gaming, health technology, the environment, and energy.”

The Finnish public sector provides funding to new companies in different ways, which is a great aid for a company that is just starting its journey. To comprehend the functioning of business models like Indisoft solution Oy, my objective is to learn where ideas for new businesses originate and what takes place during their development. I decided to do an internship in a digital business destination because of my strong interest in developing my own business. In addition to my studies, I have participated in numerous meetups and events for entrepreneurs and digital developers. I witnessed numerous exceptional presentations on innovative business concepts, and encountered enthusiastic entrepreneurs who were striving to take their start-up to the next level. I was in an environment that was filled with ambitious visionaries, and I think it's possible to connect this innovative flow of ideas with established companies in Germany and Finland.

“In 2019, Business Finland offered 168 million euros in innovation financing to Finnish startups. In Finland, entrepreneurs can apply for a startup grant to help them get started. The goal of startup grants is to assist and support new businesses while also promoting employment.”(EDUCATION.co)

The success of your IT startup depends on selecting the appropriate business model. It should be in line with the skills of your team, market need, possibility for scalability, and income generation approach. You can manage the difficulties of the IT startup industry and open the door for development and innovation by carefully structuring your business model. A business model is simply a road-map for how your IT startup will produce, distribute, and profit from value in the online environment. It includes a number of things, such as your target market, revenue sources, and cost structures for your product or service. It is essential to comprehend and adopt a well-thought-out business model that is in line with your vision, market needs, and growth aspirations if you want to start a successful journey in the IT startup ecosystem.

The author will examine the business models and primary concerns of a newly established IT service company (Indisoft Solutions OY) in Finland. The aim of this work is to find out what business models and key issues need to be considered in order to be successful as a new company in the IT industry. The purpose of this thesis is to investigate different business models that are suitable for IT start-up companies and to provide recommendations for Indisoft Solutions Oy. The research methodology for this study will consist of both deductive and inductive approaches. Both qualitative and quantitative methods will be used.

Setting up an IT business in Finland involves several stages, ranging from legal requirements to business planning. Outline of the general process:

- Market Research and Business Idea
- Business Plan
- Legal Requirements
- Funding
- Location and Office Setup
- Hiring and Workforce
- Taxation and Accounting
- Marketing and Branding
- Business Models

1.1. Thesis Background

The IT startup ecosystem in Finland has attracted a lot of attention in recent years due to its innovation-driven environment, supportive infrastructure and skilled workforce. This paper aims to explore the background and key factors contributing to the success of IT startups in Finland, using a case study approach to deepen the journey of a representative IT startup.

As a foreigner studying in Finland, I have the privilege of seeing things from several perspectives. I believe I can bring to Finland something new and in demand from my homeland of India. I have always been interested in Finland's IT market. The Finnish IT industry needs thousands of IT experts from abroad, as the aging population and low birth rate mean that the working age population will decrease dramatically in the coming years and there are not enough IT specialists. I can run a software company here in Finland because my family has a long history in the IT sector in India.

According to "Duct Tape Marketing" There are several challenges that entrepreneurs might face, and one of them is branding. It is a fact that many of them failed to promote their brand, meanwhile

successful enterprises know how to leverage the digital world to enhance their"image, brand, trust, and interaction with customers and the company's partners.

After all these experiences, the author will introduce a new start-up company called Indisoft solutions Oy. It has a sister company in India, Singapore and China. The headquarters of Indisoft solutions Oy is located in Delhi (NCR), India. Since there is a shortage of IT in Finland, the company hires IT experts from abroad. Indisoft Solutions Oy goal is to fill this gap by providing IT experts from abroad.

When it comes to choosing an exciting topic with which the author is familiar, the IT industry comes first. The IT sector has always piqued the author's attention and passion. The author's upbringing among IT engineers has given him an entrepreneurial mindset and a passion for the sector. While pursuing his master's degree, the author's inventive imagination could not stop considering fresh company ventures.

1.2. Thesis structure

There are six chapters in this thesis. The very initial chapter is the introduction, in which the author describes the research's background, the Objectives of the thesis, research questions and case company where author will explain the background of the Indisoft solution Oy. The second chapter is Research method in this chapter author will describe method, approach and data collection for this research. The third chapter is the Theory about the Finnish ICT industry where he studied about the ICT technologies used in Finland and also studied about area and sector that are lacking and growing in technologies. The fourth chapter is devoted to business models in the Finnish ICT industry, where he examined various types of business models that can be applied to IT start-ups and ultimately recommends the appropriate business models for Indisoft Solutions Oy. The fifth chapter is implementation and Results where the author explains the current situation of the Finnish IT industry, the data of the interview and the questionnaires and the target situation of the Indisoft solutions Oy and in the last author will get the result, where Indisoft solutions Oy choose the Manpower outsourcing services business model. The conclusion and discussion are the final parts of the thesis, where the author reflects on what he has discovered, studied, and implemented.

1.3. Objective of the thesis and Research questions

The main objective of this study is to find out What are the operating business models and key issues that must be taken into account to succeed as a new business in the IT industry. This type of thesis aims to explore and contribute to the understanding of how IT startup business models work, their challenges, and their potential for success also create a significant impact on an industry or market by offering a more efficient, cost-effective, or user-friendly alternative. The interviews of industry experts are the source of the data gathered for this thesis, the questionnaire and the literature review. Quality and reliability check of the thesis would be done by following the standard procedure.

This thesis should provide a clear understanding of what IT startup business models are, including their components, strategies, and unique characteristics. This involves defining the scope and context of IT startups. The thesis should identify and discuss the key success factors that influence the sustainability and growth of IT startups. This might involve factors such as innovation, scalability, funding, and customer acquisition. Investigating how IT startups innovate their business models to adapt to changing market conditions. This could involve exploring concepts like the Lean Startup methodology and the Business Model Canvas. Author will Discuss how IT startup business models can be designed for long-term sustainability and growth. What strategies can startups employ to scale their operations while maintaining profitability.

It is a good opportunity for Indicsoft Solutions Oy to grow in the Finnish IT industry as they are in need of IT experts from outside of Finland. Indicsoft Solutions Oy objective is to fulfill that gap by providing the needed talent not only from India but from all over the world. Indicsoft Solutions Oy have a strong base and reputation in India where we have more IT experts. Already many projects are running successfully in India by the help of our IT experts. In Finland, Company would execute most of the projects with the help of Indian IT experts. In some cases the company can solve problems in Finland without taking help from Indian IT experts. The IT business is quite wide in terms of scope. There are many business opportunities in the Finnish IT Industry.

Based on the described research Objective, background and the focus area, this research work aims to answer the following questions:

Question 1: where is a niche market for an ICT company like Indicsoft Solutions Oy? Which ICT technologies are used in Finland, which sectors and areas are growing, which technologies are lacking?

Question 2: What kind of business model is best, taking into account the business environment of the Finnish ICT industry?

1.4. Case company

Indicsoft Solutions Oy is a IT startup in Finland, and they're looking for a unique business model to stand out in the competitive IT industry. To avoid making costly mistakes, they want to gather feedback from potential customers before finalizing their business plan.

Indicsoft Solutions Oy has a sister company in Singapore and China, with its headquarters in New Delhi, India, called Indicsoft Technologies. The owners of these companies are childhood friends who reunited in 2021 and decided to expand their business to Finland.

Indicsoft Technologies has a strong reputation in India, where they have over 100 IT experts. They specialize in cutting-edge technologies like Block-chain, Machine Learning, Artificial Intelligence, ERP, Big Data, and Live Video Streaming. They offer IT solutions with a skilled team of professionals, catering to their clients' needs.

In 2023, Indicsoft Technologies had more than 120 employees working globally. They provide two main types of services: CV business and project-based services. CV business involves providing individual engineers or teams to work for clients, while the project-based service means they handle the entire project, including documentation.

Indicsoft Solutions Oy sees an opportunity to contribute to Finland's IT industry, which lacks IT experts. They aim to bridge this gap by bringing talent not just from India but from around the world. They have successfully managed projects in India with their IT experts and plan to do the same in Finland. While they'll rely on Indian IT experts for most projects, they can also address some challenges in Finland independently.

In summary, Indicsoft Solutions Oy wants to make a mark in Finland's IT industry by leveraging their expertise and global network, and they see a wide range of possibilities in this dynamic field.

2. Finnish ICT industry

2.1 Theory about the Finnish ICT industry

According to ICT Sector Characteristics in Finland “The Finnish ICT company Nokia is a world leader in mobile communications. Nokia connects people to each other and the information that matters to them with easy-to-use and innovative products like mobile phones, devices, and solutions for imaging, games, media, and business”. Education, historical elements, government assistance, a strong startup ecosystem, global orientation, collaborative culture, infrastructure, digitization projects, work-life balance, and cultural strengths are all characteristics that contribute to the success of the Finnish ICT industry.

Absolutely, IT services are in high demand in today's tech industry. This creates a great opportunity for small businesses with fresh ideas to offer various IT services. Whether a company is big or small, there's a need for IT services to help with growth. Even though there's a lot of competition, the demand for IT services keeps increasing.

Because there's a strong demand for these services, more and more companies are shifting from using IT services to providing them. It's a profitable move due to the long-lasting need for these services. However, the downside is that it's relatively easy for new competitors to enter the field; they just need to acquire the right software skills. The main activities in this business involve training, consulting, setting up and supporting software, creating custom solutions, and keeping things running smoothly.

In this chapter, the author examines the theoretical background of the Finnish IT industry. In this study, the author examines which ICT sectors and areas are growing and which ICT sectors and areas are experiencing a lack of technology. This study also examines the technologies used in the Finnish ICT industry.

2.2. ICT technologies used in Finland

According to (*ICT in Finland - FiCom, 2023*) Finland is among the world's leaders in information and communications technology. Many of the things that are considered uniquely Finnish have contributed to Finland's digital success story: the spirit of enterprise, which could even be called stubbornness at times; the telecommunications market, which was opened up to free competition very early on; and the solid, democratic welfare society.

Finland is known for having a highly developed information and communication technology (ICT) industry. Finland is the home of several top technology firms. Finland has a high value on ICT research and development, and it offers some of the best technological infrastructure globally.

Strong ICT infrastructure, research expertise, and forward-thinking businesses all contribute to Finland's status as a technology leader around the world. Finland's public and private sectors both continue to invest in modern technologies in order to strengthen their positions in the ICT sector. Here are some of the important ICT technologies used in Finland.

- **Cybersecurity**
- **Cloud Computing**
- **Data Analytics**
- **Mobile Technology**
- **Artificial Intelligence**
- **e Government Services**
- **Environmental and Sustainable Technologies**
- **Fintech**
- **Education Technology**
- **Gaming and Entertainment**

Cybersecurity

Businesses all across the world are quickly elevating cybersecurity to the top of their priority lists. Cybersecurity is a vital field that concentrates on safeguarding computer systems, networks, data, and information from various forms of cyber attacks. The development of cybersecurity solutions is being strongly encouraged by Finnish businesses and academic institutions. Cybersecurity is a field that is constantly evolving and adapting due to the constant adaptation and sophistication of cyber threats. According to Glisson and Choo (2017) As technology becomes more and more a part of our everyday lives, cybercrime is on the rise. To combat this, we need to improve and expand our efforts in cybersecurity. This means we should work on finding better ways to identify, investigate, and fix cybersecurity problems, especially when it comes to devices connected to the internet, like smart appliances. The way things are changing shows that we need to come up with new and smart

solutions, not just in how we manage things, but also in the technology and strategies we use to deal with these evolving challenges.

Cloud Computing

In Finland, cloud computing is a commonly used information and communication technology (ICT). Cloud computing is used already in many companies and communities. About one third of the Finnish companies are using cloud computing services (Vartia 2011). Cloud computing solutions are used by Finnish enterprises and organizations for a variety of objectives, including data storage, processing, collaboration, and scalability. Cloud computing enables the use of IT resources via a network based on the demands of the consumer. Finland has a strong startup ecosystem, and many of the country's entrepreneurs rely on cloud infrastructure and services to rapidly create and scale their products and services. This flexibility enables entrepreneurs to concentrate on invention rather than physical infrastructure management. In Finland, cloud computing is still evolving, with businesses and organizations adapting to new technologies and services to boost efficiency, agility, and innovation.

Data Analytic

Finland has a strong academic research background in data analytic. Data analytic technology have been actively used by Finnish firms and institutions to gather knowledge, make informed decisions, and drive innovation in a variety of industries. Organizations are using data and advanced analytic to be more competitive, increase profit and reduce risk. New less traditional organizations are using data as a strategic asset and getting advances from that. These organizations leverage data to deliver better products and services. According to Forbes Insights (2017) it is the key for an organization to understand the value of data in order to make it a core of their business strategy. (Forbes Insights, 2017). Data analytic is being actively used by Finnish industries like as telecommunications, healthcare, banking, manufacturing, and retail to improve operations, customer experiences, and make data-driven choices. Finland is known for its innovative healthcare system, which makes substantial use of data analytic to improve patient care and health outcomes. Finland promotes collaboration among enterprises, academia, and government to boost data analytic innovation. The Finnish government has funded research projects, innovation centers, and skill development programs as part of its efforts to promote data analytic and digitalization. The country's commitment to data-driven decision-making and its advanced infrastructure make it an attractive location for businesses and professionals in the data analytic field.

Mobile Technology

Nokia, one of the world's largest mobile phone manufacturers, was founded in Finland. While Nokia's popularity has faded in recent years, Finland remains the center of mobile technology innovation. Mobile technology is continually evolving, with new developments such as fold able

phones, 5G connectivity, and enhanced battery technologies. It has a significant impact on how people, businesses, and societies engage with information and technology. Mobile technology has revolutionized how we interact, access information, and conduct business.

Artificial Intelligence

AI is now becoming a part of ERP and is used for optimizing the decision-making process by implementing machine learning, while syncing all data to a globally accessible network. (Majstorovic, Stojadinovic, Lalic, Marjanovic 2020, 291). Finland is investing in artificial intelligence research and development, with an eye on applications in healthcare, finance, and transportation. AI technology can help companies in many business activities such as processing large data sets or assisting in managers' and executives' decision-making process. Finland has a thriving AI research community, with universities and research institutes actively advancing AI. Finland has a strong ecosystem of AI startups and tech firms focusing on a variety of AI applications such as natural language processing, computer vision, and machine learning. The Finnish Center for Artificial Intelligence (FCAI) is a major public-private collaboration focused at improving AI research and innovation. AI-related courses and programs are available in Finnish universities to educate the future generation of AI specialists. These programs contribute to the development of a qualified workforce to fulfill the increasing need for AI competence. Finland is likely to remain at the forefront of AI research and application development as AI technologies continue to evolve.

e Government Services

Finland has an advanced e Government system that allows citizens to access government services such as tax filings, healthcare appointments, and public records digitally. The "Suomi.fi" site serves as a central center for online access to government services. The platform, Suomi.fi, provides a one-stop portal for citizens and organizations to access both public and related private sector services (Suomi.fi). Finland is recognized for its modern and comprehensive e Government services, which strive to provide residents and businesses with efficient and accessible public services. Many e Government services are available via mobile applications, allowing people to access government information and services on their smartphones and tablets. Finland lays a great focus on data security and privacy in its e Government services. To maintain the confidentiality and integrity of personal information, strict data protection standards are in place.

Environmental and Sustainable Technologies

Finnish companies are creating ICT solutions to address environmental issues, such as sustainable energy technology and smart grid systems. Finland is well-known for its environmental commitment, with a high priority on researching and implementing technologies that support environmental protection and sustainability. Finland uses innovative environmental monitoring tools to assess air and water quality, wildlife conservation, and the impact of climate change.

Fintech

The Finnish financial sector has welcomed fintech advances, which has resulted in the expansion of digital payment systems, online loan platforms, and mobile banking applications. Fintech has transformed how individuals make payments. It includes a wide range of technologies, including mobile wallets, peer-to-peer payment apps, and digital currencies such as Bitcoin and Ethereum. Users can quickly send and receive money via digital payment services such as PayPal, Venmo, and Square Cash. Fintech uses algorithms and artificial intelligence (AI) to automate investment advice services. Fintech employs AI and machine learning technologies for credit risk assessment, fraud detection, chat bots for customer care, and personalized financial recommendations. Because fintech transactions contain sensitive financial information, strong cybersecurity safeguards are required to prevent data breaches and cyberattacks. Fintech firms make significant investments in security technologies and policies. Individuals can use fintech apps and platforms to better manage their finances, such as budgeting, cost tracking, and financial goal planning. Fintech is fast evolving as a result of technical breakthroughs and shifting consumer demands.

Education Technology

Educational technology is defined as “a combination of the processes and tools involved in addressing educational needs and problems, with an emphasis on applying the most current tools: computer and other electronic technologies” (Roblyer & Doering 2010, 4). Finland has the world's best education system. Finland places a high value on education, which extends to the creation of Ed Tech solutions. The educational system in the country is well recognized, and technology plays an important role in it. Finland has created and implemented a number of online learning systems that give students and teachers access to a wide range of educational resources. Finland places a high value on preparing teachers to use technology effectively in the classroom. Companies such as Duolingo, which provides language learning apps, are headquartered in Finland. These apps are gaining worldwide popularity and are used by students all around the world. Finland has a rising

number of EdTech businesses that are developing innovative solutions for both domestic and international markets. Many of such companies have been supported by government programs and investors. Finland's dedication to educational achievement includes an embracing of educational technologies. The country's approach to EdTech prioritizes research, teacher training, digital literacy, and innovative solutions that improve students' learning experiences at all levels of school.

Gaming and Entertainment

Through the creative application of ICT technology, Finland has made important contributions to the gaming and entertainment industries. In recent years, the most popular mobile game developers have also started to invest heavily in marketing. Supercell, the Finnish developer, and King, the maker of Candy Crush Saga, both spent over \$400 million in marketing in 2014. Although both increased revenues, marketing costs are starting to outstrip profits. (Lovell, 2015). For the creation and marketing of video games, these businesses heavily rely on ICT technology. Online multiplayer gaming is made possible by ICT technology. Before releasing games to the market, ICT tools and automation are used for game testing and quality assurance to find and solve problems and errors.

2.3. Growing sector and areas

Finland is really good with technology. They're like the leaders in making the internet super fast with something called 5G. This helps a lot in places like factories, farms, and hospitals where they use smart things that talk to each other over the internet. Finland has put 5G networks all over the country. These networks make the internet much faster, with less waiting time, and they can connect lots of gadgets at once. This is super important for making new things and using them. In Finland, smart people and tech companies are always thinking of new ways to use 5G. They're not just using it for phones; they're finding new things it can do. Finland is really good at using 5G. They know a lot about how to build the stuff for it, and they keep coming up with new ideas. This makes Finland a leader in the world when it comes to 5G. This doesn't just mean faster internet; it means new and cool things in lots of different jobs and businesses.

Because we use technology so much, we need to make sure it's safe from bad people. So, companies in Finland work hard to protect our stuff online. In Finland's ICT industry, they take cybersecurity very seriously. Cybersecurity is like having strong locks on your digital doors to protect your information and systems from bad people who want to steal or damage them. Finnish companies, big and small, work hard to make sure their digital systems are safe. They use special software and strategies to keep out cyberattacks, like viruses and hackers. These efforts are crucial because a cyberattack could lead to stolen data, financial losses, or even disruptions in services. So, by focusing on cybersecurity, Finland's ICT industry helps keep its digital world safe and secure.

In the Finnish ICT (Information and Communication Technology) industry, artificial intelligence (AI) and machine learning (ML) play an important role. Finland is also really clever with computers. These technologies are used in many ways. For example, in healthcare, they help doctors make better decisions by analyzing lots of medical data quickly. In banks, they can spot unusual activities to prevent fraud. And in transportation, they can help self-driving cars navigate safely. Finnish companies are really good at creating these AI and ML systems, and they're always finding new ways to use them. So, they're helping make life better and more efficient for everyone by using these smart computer programs

Finland is also big on taking care of the environment. They have smart ways to use energy, like making sure we don't waste it. They use technology to create energy from sources that won't run out, like the sun and wind. This is called renewable energy. It's good for the planet because it doesn't produce harmful pollution. They also use something called green technology. This means they design their tech to be energy-efficient and not harm the environment. For example, they make gadgets that use less power and data centers that don't waste energy. By doing this, Finland's ICT industry is helping to protect the Earth while still using technology to make our lives better. It's like using smart tech to keep the planet healthy.

They make it easy for us to do things online with the government, like paying taxes or getting important papers. Instead of going to a government office, you can do a lot of things online, like paying taxes or getting official documents. It's like using the internet to interact with the government. This makes life more convenient because you don't have to wait in long lines or travel to government offices. It's like having the government at your fingertips, and it saves time and makes things more efficient. Finland is really good at this, and they keep improving their online government services to make life easier for their citizens. It's like using technology to make the government work better for everyone.

In the medical field, they use technology a lot, especially when something like a virus, like COVID-19, is around. They use technology to help keep people healthy. They have smart tools and gadgets that can monitor your health, like your heart rate or blood pressure. These tools can also help doctors and nurses take care of you better. Especially during times like the COVID-19 pandemic, they use technology for things like telemedicine. This means you can talk to a doctor online and get medical advice without going to the hospital. Finnish companies are really good at creating these health-focused technologies, and they use them to make sure people stay healthy and get the right care when they need it. It's like having a helpful digital doctor by your side.

Overall, Finland is really good at tech stuff, and that makes them important in the world of technology.

According to Statistics Finland's preliminary Annual national accounts, the gross value added by the ICT sector in 2021 was EUR 14,695 million, or 6.74% of Finland's GDP.

According to the preliminary data, the manufacturing of computers and electronic and optical products accounted for 2.30% of GDP in 2021, while telecommunications accounted for 1.06% and data processing services 3.38%.

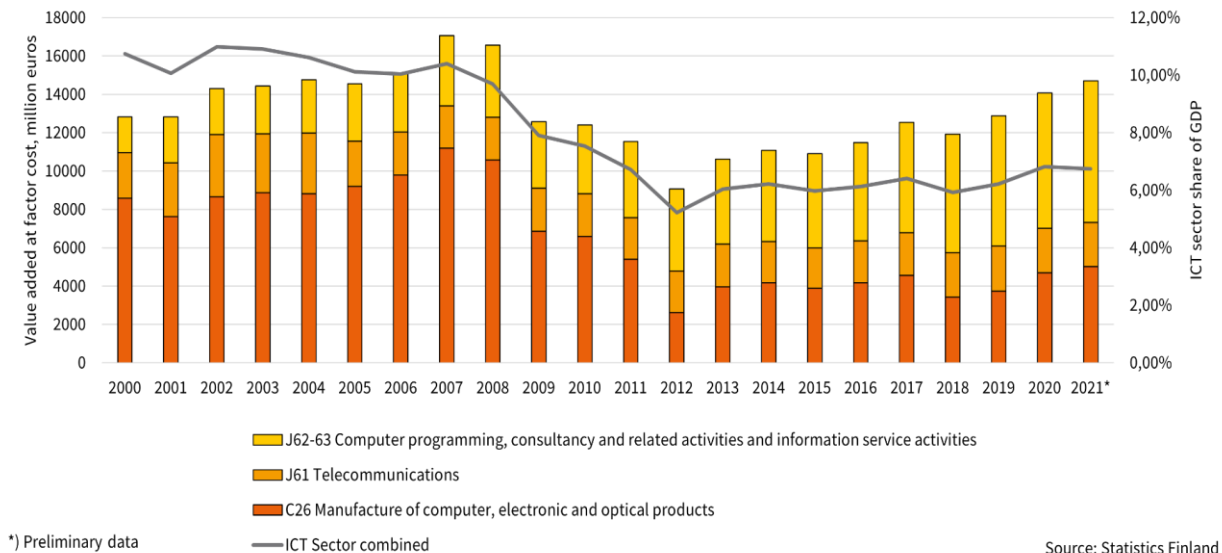


Figure 1. ICT sector's gross value added and share of GDP in Finland

2.4. Sectors and Areas that are lacking technologies

In the Finnish ICT industry, there are both good things and some tricky parts. They're really good at technology stuff, but they don't always have enough people who know how to do it. They want everyone to be able to use technology, but it's hard to make sure that happens, especially in places far away or where people might have a tough time. This is a challenge not just in Finland but in many places around the world.

Tech jobs need people who know a lot about computers, software, and other high-tech stuff. And because technology keeps changing, they need to keep learning all the time. So, finding enough of these skilled people to meet the demand for tech jobs can be a bit tricky.

But Finland is working on it. They're trying to train more people in tech skills and make sure their tech workforce is strong and also they are outsourcing people from other countries like India, Pakistan and Vietnam. This way, they can keep up with the fast-paced tech world and continue to be a leader in technology.

They're also trying out some new kinds of technology, like AI, but it's not always clear how to use it fairly and safely. And, they're in a big competition with other countries and big companies in tech, so they always have to come up with new ideas and stay really good at what they do.

The Finnish ICT industry, known for its tech skills, also faces challenges with data privacy. Since Finland is part of the European Union, it has to follow strict rules called GDPR to protect people's data. Companies and even the government have to make sure they handle personal data properly and safely. As new technologies like AI and the Internet of Things keep growing, it gets harder to keep your data safe while using these cool tech things. Also, because data can move across countries, Finland has to be careful about how data goes in and out. To keep its good reputation for data privacy, the Finnish ICT industry has to be really good at managing all these challenges and always put people's data safety first

So, even if they're fantastic with technology, Finland still has some challenges to overcome if they want to stay awesome in the IT industry.

3. Business models

A business model is a conceptual framework that describes how a business creates, delivers, and captures value. It outlines the key elements and strategies a company uses to achieve its goals and generate revenue. Business models can vary widely depending on the industry, market, and company's objectives.

In the last 30 years, there has been a big increase in research about how businesses operate. The world has evolved dramatically, and so have businesses. People have developed new methods of making money and developing creative products. People are even traveling long distances to find good business ideas and places to start their businesses. But having a great idea is not enough to guarantee success anymore. That's why people are now thinking more about business models to help them navigate the changing market. However, not everyone understands what a business model is, especially in new startup companies.

3.1. Existing Business Models

In this chapter, we will explain and explore different types of business models based on what we've learned. We will introduce various business models and provide clear explanations about how they work in a new startup. There are many business models out there, but we'll focus on the most well-known ones.

- **Manpower Outsourcing Business Model**
- **Project Outsourcing Business Model**

- **Product Development Business Model**
- **Value Added Business Model**
- **Partnership Business Model**
- **Social Media Marketing Business Model**
- **Platform Providers: Software as a Service**

Manpower Outsourcing Business Model

Manpower outsourcing, also called staff augmentation or human resource outsourcing, is a modern and popular way for businesses to manage their workforce. It means that companies hire outside experts to handle specific parts of their employee-related tasks, like hiring, paying, training, and performance reviews. In this essay, we'll explore how this works, what's good about it, what challenges it faces, and what might happen in the future.

At its heart, this method involves two main groups: the companies that need help with workforce stuff (they can be big or small, in any industry) and the service providers who specialize in HR services. These providers can be their own companies or part of bigger ones. They offer lots of HR services, like finding new employees, helping them get started, handling paychecks, and making sure everyone follows the rules. In the middle are the temporary or contract workers. They work for the service provider but do jobs at the client company. They have the skills needed for short projects or to fill gaps in the client's regular team. To make all this work well, we need good technology. Computers and software help with things like tracking job applicants, managing pay, and looking at data to make decisions.

More than 90% of businesses say that outsourcing has been a component of their overall business strategy, whether it is due to greater productivity, reduced costs, or just the ability to access specialist capabilities outside of the organization (Michael F. Corbett & Associates, 2001-2004).

In the future, this way of doing things will keep growing and changing. Technology, like AI and data analysis, will make HR tasks even easier. As companies go global, they'll need HR help all over the world, which means more demand for service providers with an international reach. We'll also see more focus on helping temporary workers learn new skills. And companies and customers will care more about doing things ethically and sustainably. Lastly, the HR outsourcing industry will need to be flexible and adjust to new rules and laws.

In summary, outsourcing HR tasks has become a smart way for companies to manage their workforce. They can save money, grow when they need to, and tap into specialized skills. But it's not without challenges, like making sure the quality of work is good and keeping data safe. The future looks bright, with more technology, global reach, and a focus on developing skills and doing business the right way.

Advantages of Manpower Outsourcing Business Model

Costs saving: Expertise access: Clients receive access to professional human resource experience, providing compliance with labor laws and industry requirements.

ongoing Operation: Completing projects on time is always a competitive advantage for businesses. IT organizations can maintain a continuous operation by using offshore vendors with considerable time gaps. They obtain significantly from the time difference and can monitor the project around the clock (Djavanshir, 2005). A company that worked on a project until 5 p.m. in their home nation can outsource the same job to an offshore vendor who will still be open on the same day. As a result, when the worker returns the following day, the job will have progressed.

Project completion in less time: Finishing a project faster is possible by not only saving money but also by getting it done more quickly. Competitive prices mean you get more value for your money. For instance, you can hire two Indian software engineers for the cost of one American software engineer.

Disadvantages of Manpower Outsourcing Business Model

Lack of control: When businesses outsource IT services to a third party, the supplier or service provider handles a large amount of confidential data. In such circumstances, the corporation loses control and privacy over such sensitive information.

Data Safety: Managing sensitive employee data requires strong security measures to prevent compromises and unauthorized access.

Hidden Costs: During the agreement drafting or early negotiating process, a supplier may place more value on how the customer (the organization that decides to outsource) can save money. However, if more services are required beyond the scope of the basic service agreement, it may result in additional charges. Additionally, during the vendor selection process and between projects, the customer may be required to travel to offshore provider sites, which will add to the costs (Tafti, 2005).

Project Outsourcing Business Model

Project offshore is a business practice during which an organization hires another organization to perform a work or project, manage operations, or deliver services on its behalf. Outsourcing has received a lot of attention, particularly in recent years. Several businesses now see the need to prioritize outsourcing and concentrate on core competencies (Giri & Sarker, 2017). Companies are also able to contract other sorts of labor, such as production procedures, human resource services, and finance activities. An information technology outsourcing engagement with a technology provider may include a wide range of tasks, from the whole IT department to separate, easily defined components. It is a business strategy in which a corporation contracts out certain activities or projects to outside vendors or service providers rather than managing them in-house. This strategy provides multiple benefits, including cost reductions, having access to niche expertise, flexibility, and emphasizing on core strengths. The Project Outsourcing Business Model is a versatile and strategic approach that empowers organizations to optimize their resource. The Project Outsourcing Business Model has emerged as a dynamic and transformative approach to business operations in the modern globalized economy. These can range from IT development and customer support to marketing and accounting. In this model, contracts are established between the company and the chosen vendors. These agreements typically outline project scope, timelines, quality standards, pricing structures, and legal terms. The vendor takes responsibility for executing the outsourced project. They use their resources, skills, and technology to complete the task according to the agreed-upon specifications. The company often implements quality assurance measures to ensure that the project meets its standards and requirements. Regular communication and feedback are essential during this phase. Payment to the vendor may be structured in various ways, including fixed fees, hourly rates, milestone-based payments, or a combination of these, as specified in the contract. Both the company and the vendor manage risks associated with the project. This includes addressing potential delays, budget overruns, and quality issues. The business itself could complete the jobs that were outsourced. Yet, outsourcing can benefit a business in several ways. (Heric & Singh, 2010). Successful project outsourcing requires efficient interaction and cooperation between the organization and the vendor. Regular updates, meetings, and feedback loops help maintain alignment.

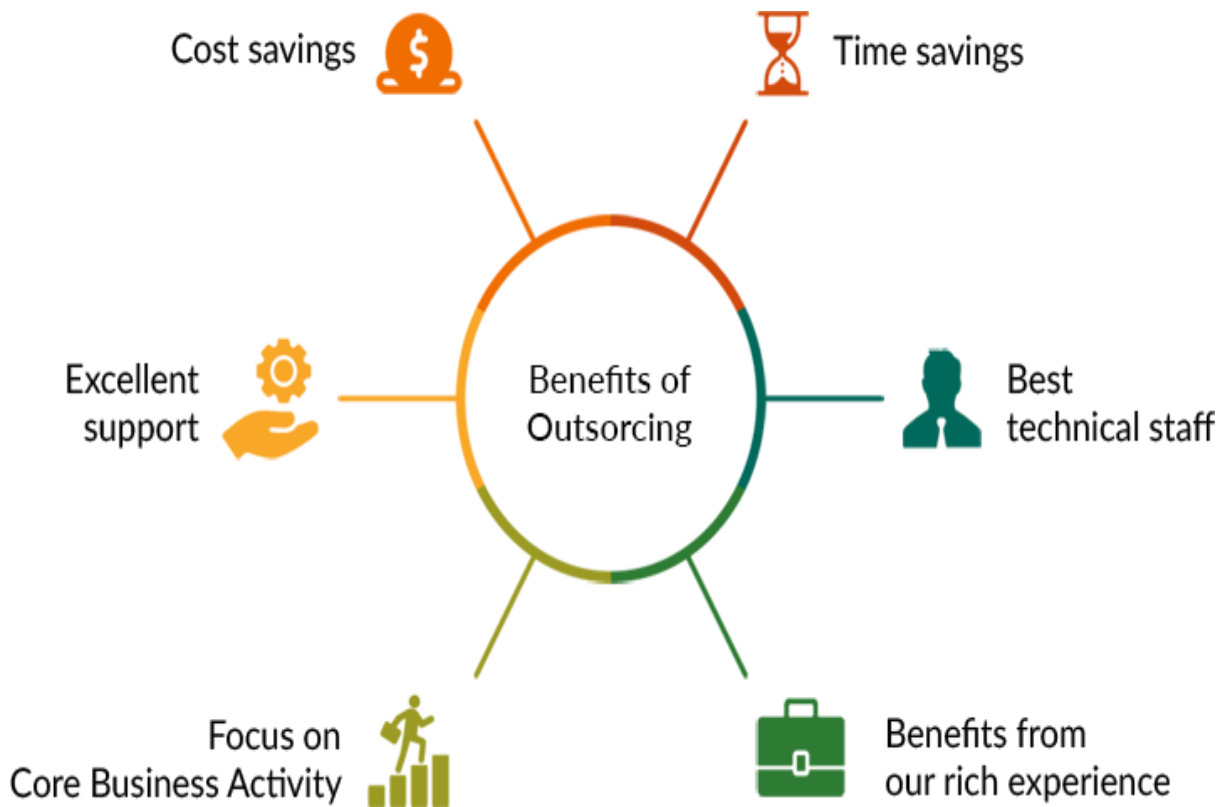


Figure 2. Process of outsourcing

Advantage of Project Outsourcing Business Model

Cost saving: Companies can avoid the expense of hiring full-time employees, providing benefits, and maintaining infrastructure, as they only pay for the services rendered by the external vendor.

Scalability: Companies can easily scale their operations up or down based on project demands. This flexibility is especially valuable for businesses with fluctuating workloads.

Advanced skill level: The project is able to benefit from advanced knowledge and technology. It is no longer necessary for a company to stay up with technology advancements.

worldwide Reach: Because providers may have a greater reach or a better grasp of local markets, outsourcing helps you to access a worldwide market or service consumers in multiple geographic zones.

Market Expansion: Project Outsourcing can enable businesses to enter new markets quickly by leveraging the local expertise and knowledge of outsourcing partners.

Disadvantages of Project Outsourcing Business Model

Quality management: It can be difficult to ensure that the vendor satisfies the company's quality standards. Close monitoring and quality assurance procedures are required.

Communication Barriers: Differences in time zones, languages, and cultures can hinder effective communication and collaboration between the company and the vendor. This can lead to misunderstandings and project delays.

Hidden Cost: While outsourcing can offer cost savings, hidden costs may arise in the form of additional fees, change requests, or unforeseen project complexities

Safety issues: Trade and business secrets may be disclosed depending on the nature of the contract. This can be an issue if the contractor also works for a competitor.

Limited Command: Companies have less direct control over the day-to-day operations and decision-making of external vendors. This lack of control can be a concern in critical projects.

Product Development Business Model

The Product Development Business Model is a comprehensive framework that guides companies through the entire process of creating and launching new products or services. By focusing on customer needs, market research, and quality assurance In a competitive market, organizations can improve their chances of success. However, they must also be prepared to invest resources, To gain the full benefits of this approach, you have to adjust to changing conditions and successfully manage the product throughout its existence. This model is essential for companies that want to develop, stay competitive, and satisfy changing client needs.

This business model has a long-standing approach used by many global companies in the software industry. These companies create or maintain specific software projects and distribute them under Free Software licenses. Their primary source of revenue comes from services such as training and consulting, capitalizing on the idea that the individuals who developed the software are the most knowledgeable experts and can offer valuable services with minimal marketing efforts, thanks to the open redistribution of the code. However, a drawback of this model is its low barrier to entry for potential competitors, as the main investment required is acquiring expertise in the software itself.

The primary tasks in this approach include training, advising, setup, configuration support, bespoke development, and continuing maintenance. The fundamental concept is that companies sell support and services based on free software to their customers. Support includes product training, certification, and technical assistance, while services encompass various product service subscriptions and consulting.

For end-users, the key advantage is that they only pay for the support and services they receive, without the added cost of commercial software licenses. Nevertheless, there are three associated risks for startup companies employing this business model.

Firstly, the low switching cost benefits enterprise users by reducing vendor lock-in, but it also means that companies struggle to build loyal customer bases. To remain competitive, software vendors must consistently deliver higher quality products and services than their rivals. Otherwise, there is little to prevent customers from switching platforms, posing a significant risk to the sustainability of businesses over time.

Secondly, enterprise IT decision-makers tend to prefer established vendors over small startups due to concerns about the latter's capacity to provide consistent, stable, and reliable support and services. This issue becomes critical if smaller vendors or startups lack control over the source code. However, for less complex or non-mission-critical software, enterprise IT managers might opt for self-support rather than paid service subscriptions.

Lastly, unless a company possesses in-depth knowledge of the source code and the entire system, this business model can be easily replicated by competitors. This poses a challenge for venture capitalists seeking sustainable competitive advantages in their investments within this type of startup.

Advantages of Product Development Business Model

Important in business planning: In business planning, creating and improving products is crucial because it helps companies stay important in a changing market. By regularly coming up with new ideas and offering new products or services, businesses can keep up with what's popular and the latest technologies. This ensures that they stay interesting and appealing to the people they want to reach (Product Development: Innovation Unleashed: Nurturing Product Development in Business Planning - FasterCapital)

Creation: This method promotes continual innovation by encouraging a systematic approach to product creation. It enables businesses to stay ahead of competition while also adapting to changing market circumstances.

Risk management: The step-by-step strategy, which includes validation and testing phases, assists in identifying and correcting difficulties early in the development process, lowering the risk of costly errors.

Revenue: Successful product development can lead to new revenue streams, increased market share, and improved profitability.

Adaptability: This model can be applied to various industries and product types, making it adaptable to different business contexts.

Disadvantages of Product Development Business Model

Timing: Timing is crucial in product development. A delayed launch or entering the market too early can impact a product's success.

Market Acceptability: Even innovative and well-designed products may meet consumer opposition or slow uptake.

Competitive Tension: Competitors may create similar goods, resulting in strong competition, price wars, or market saturation.

Value added business model

A Value Added Business Model is a strategy that involves enhancing a product or service in a way that offers customers more than what they could get from a similar product or service elsewhere. Value added is important for every start-up company. In business, value added addresses the question of what essential benefit a company can provide to its consumers. Why do customers prefer to buy from a new start-up company over other businesses like it? In the above sense, the product or service that the company provides to clients should solve problems and meet the demands of the customers. Every company's value proposition is known as its backbone. The value proposition is the foundation of every firm and also the foundation of the business method. Understanding your target clients and their needs is critical in this scenario. You need to identify pain points or unmet needs that your product or service can address.

A successful value-added business model begins with a deep understanding of your target customers and their specific needs, including identifying any pain points or unmet requirements that your product or service can effectively address. This understanding forms the foundation upon which you build your base offering, ensuring that it fulfills the core requirements of your customers. However, the true essence of this model lies in the art of value addition. It involves continuously identifying opportunities to enhance your offering, whether through improved product features, additional services, or tailored solutions that cater to individual customer needs. Quality is

paramount in this endeavor, as customers paying a premium for added value rightfully expect superior standards.

To set yourself apart from competitors, effective differentiation is key. Clearly communicate the unique features and benefits of your value-added offering, ensuring customers grasp why it surpasses alternatives in the market. This differentiation supports your pricing strategy, allowing you to command higher prices for the additional value you provide, as long as those prices are perceived as fair and justifiable.

Education plays a pivotal role in this process. Enlighten your customers about the extra value they receive, employing marketing, demonstrations, and robust customer support to highlight the advantages of your offering. Strong customer relationships are vital, fostering trust and loyalty. Actively listen to customer feedback, address their concerns, and continually refine your offering based on their input.

Innovation is the lifeblood of a value-added model, enabling you to stay ahead by adapting to evolving customer needs and market trends. Seek out opportunities to introduce new features or services that further elevate the value you deliver. Effective market positioning is equally important; position your brand as a premium or top-tier option within your industry, reinforcing the justification for higher prices.

Consider the broader impact of your business model by incorporating sustainability practices. This not only aligns with the values of environmentally conscious customers but also adds another layer of value to your offering. Ultimately, a well-executed value-added business model can provide a significant competitive advantage, making it challenging for competitors to replicate the same level of added value. By focusing on these key components, you can create a compelling value proposition that resonates with customers and drives success in your chosen market.

Advantages of Value Added Business Model

Higher margins of profit: By adding value to your clients, you may frequently charge higher pricing, resulting in higher profit margins when compared to ordinary items or services.

Customer Satisfaction: Customers who perceive added value in your products or services are more likely to become loyal and repeat buyers. This can lead to long-term customer relationships and sustained revenue.

flexibility: Value-added businesses can more easily adapt to changing customer needs and market trends because they focus on delivering what customers want

Disadvantages of Value Added Business Model

The disadvantage of value added pricing is that organizations must conduct substantial market research in order to implement value-based pricing correctly. That process is extensive, time-consuming, and resource-intensive. This is typically not possible for new firms.

Partnership Business Model

The partnership business model is like a teamwork setup where a group of people or companies work together to run a business. These team members, known as partners, devote money, talents, and know-how into starting and running the firm together. Each form of partnership has its own set of restrictions, such as general partnerships, limited partnerships, and limited liability partnerships. In this model, partners share ownership and make decisions together, usually following a written agreement. In some partnerships, like general ones, partners are personally responsible for any debts the business has. But in others, like limited partnerships, some partners have less risk.

When it comes to taxes, the business itself doesn't pay them. Instead, the partners record the company's revenues and losses on their own tax returns. Through working together, companies may achieve efficiency, improved productivity, or profitability, accelerated development or lower costs (Lank 2006, 7).

Partnerships offer flexibility and can work for many different kinds of businesses. But it's important to remember that the rules for partnerships can be different depending on where you are, so it's a good idea to get advice from legal and financial experts to make sure you're following the right rules and have a clear partnership agreement.



Figure 3. Partnership Business models structure

Advantages of Partnership Business Model

Flexible Integration: Companies developing a business model where one company's garbage is repurposed and transformed into profit by the other, resulting in a positive scenario where less waste is created and more cash is earned(Laughlan & Bansal 2011).

Common Resources: Partnerships allow for the pooling of resources, including capital, skills and expertise, which can provide the company with a more solid foundation on which to launch and operate effectively.

Work division: Based on their skills and talents, each person in an organization divides the work of the entire business. Separation of tasks is achievable in a partnership. This division of work leads to more efficient management, which results in more earnings.

Tax Benefits: In many cases, partnerships provide pass-through taxation, which means that the entity itself does not pay taxes; instead, profits and losses are reported on the partners' individual tax returns, which can result in a lower tax liability.

Disadvantages of Partnership Business Model

Uncertainty: Instability has an impact on a partnership firm. A corporation may be forced to close due to insolvency, retirement, or the demise of a partner. In addition to the above conditions, a partner can inform the other partners of the business's separation. As a result of all of these uncertainties, planning for the future and developing new corporate strategy has become challenging.

Open Decision-Making: While joint decision-making can be beneficial, it can also slow down the decision-making process if partners have differing opinions and cannot reach consensus.

Capital blockage: if you invest in a business with partners, you can't take your money out by yourself. You need all your partners to agree. You also can't sell your ownership to someone else without asking your partners first, which makes it hard to turn your investment into cash. This rule can make people hesitant to join such partnerships.

Ownership Transfer: Transferring or selling a partnership interest can be difficult and may necessitate the assent of other partners or adherence to specific partnership agreement terms.

Social media marketing business model

The entire business concept is to establish a start-up IT company in Finland; I believe it is essential to learn about the modern age of marketing. In this part of the article, I examine and describe the social media marketing idea in order to completely understand how it works and how it can be used in my business strategy. Social media marketing is rapidly expanding. People spend more and more time on social media. Nowadays, social media is an excellent platform for marketing and selling products.

Social media marketing has grown a lot and has many different ways to help businesses. There are companies that make content and track how well it does. Some businesses work with popular social media people to promote their stuff. Some websites charge money for extra features. People can also make money by sharing what they know about social media. Some businesses sell things directly on social media, and others use data to make smart choices. Some companies make interesting stories and connect with people. Also, businesses pay to put ads on social media, and experts can teach others how to do social media better. There are tools to help organize social media posts and software that does lots of things. Sometimes, businesses use a mix of these ways to be successful. To do well in social media marketing, you need to be flexible, know your audience, and stay updated on the latest trends. Businesses often try different ways and mix them to fit their goals and industry.

Nowadays there are many social media platforms on the internet, each with its own purpose and content. However, they all share a common idea: letting people create and share content, connect with others by posting, commenting, or sending messages. People often use multiple social media accounts to fulfill different needs.

Social media marketing brings two key benefits. First, it allows companies to create marketing strategies based on information that customers share easily. Second, it helps consumers make better choices when evaluating products or services. Social media marketing is always changing and evolving. Initially, businesses used social media to share their content or ads and bring more visitors to their websites (Evans & Bratton, 2008, pp. 13-14).

Nowadays, there are many ways to use social media platforms for business purposes. Some ways are:

- Social media monitoring and engagement: companies will track what people post about their brands in social media platform conversations and respond to important comments.
- Media analysis: Businesses can learn about their performance by analyzing reach, engagement, and sales on social media.
- Social media marketing: Using data analysis, a firm can reach a highly focused audience with social media ads.

To make sense of the manner in which functionalities shape the social media environment,(Kietzmann et al.2011) identified seven functionalities which all examine an element of the social media user experience and its implications for businesses aiming to build a community on these platforms.

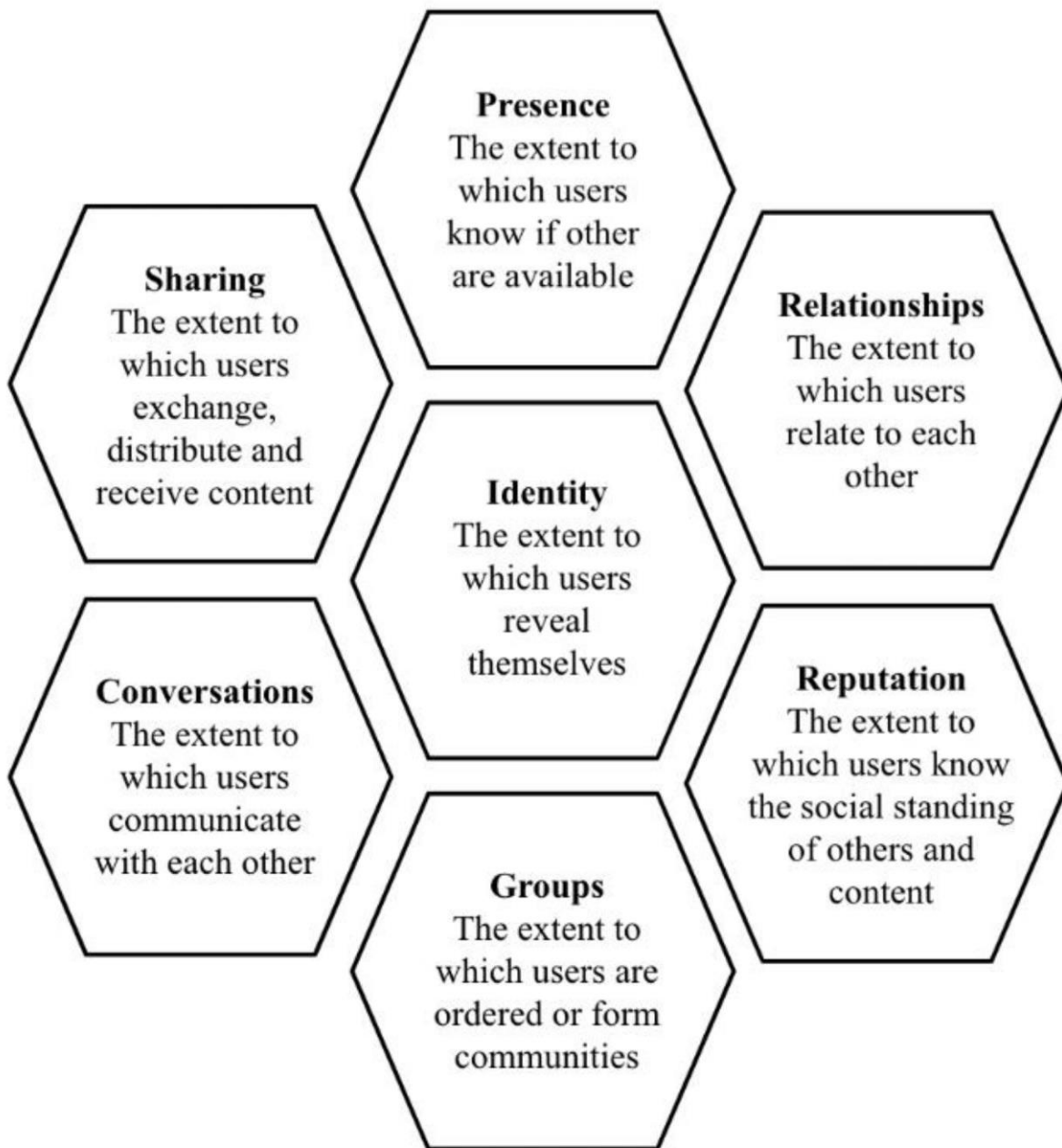


Figure 4. The Seven Functional Blocks of Social Media, as visualized by Kietzmann et al. (2011)

Advantages of Social Media Marketing Business Model

Strong relationship with customer: A start-up business can benefit from social media marketing if it has a strong social media presence among its clients. A social media platform is one of the best ways for a new company to establish the best consumer base. Marketers can utilize social media analytics tools to identify and target prospective customers. They can also utilize social media to connect with their customers and generate brand loyalty.

Targeted Marketing: B2B technology businesses may pinpoint important areas to concentrate on in their online advertising efforts by analyzing social media data. This involves, for instance, raising

the degree of engagement and raising the caliber of the product. (Vrontis, Makride, and Christofi, 2019).

Content Sharing: Users are able to easily share content, which increases the chance of genuine reach and popularity.

Global Reach: Social media overcomes geographical divides, allowing firms to access global audiences.

Disadvantages of Social Media Marketing Business Model

Negative Feedback: Many people are continuously looking for ways to harm a competitor's reputation. If a firm is new and unknown, or is just beginning to gain public attention, its chances of receiving negative remarks are considerable, all of which can harm the company's reputation.

Time-consuming: Keeping a good social media presence demands consistent work, which might be time-consuming for companies.

Content Quality: Maintaining high-quality and engaging content on a consistent basis might be difficult for certain businesses.

Platform Providers: Software as a Service

Software as a Service (SaaS) is like a new and improved way to use software. Instead of buying and installing programs on your computer, you can now access them directly on the internet. It is like using apps in your web browser. You do not have to worry about installing or updating anything yourself. Instead, you pay a subscription fee, like a monthly fee, to use the software. This fee usually covers all the updates and help you might need.

The cool thing is, all the software is stored and managed by a central team, so you don't have to deal with complicated installations or fixing things when they go wrong. It is like having your own personal IT team in the background.

SaaS is flexible, too. If you need more or less of a certain tool, you can easily adjust it. The system is set up to keep your data safe and separate from other users, and you can work on projects with others in real-time, even if you're not in the same place.

Think of it like using apps on your phone, but for work stuff. Examples include tools like Salesforce for keeping track of customers and Google Workspace for things like email and documents. People really like SaaS because it's cost-effective, easy to use, and it makes working together with others a breeze.

In today's business world, more software companies are using a specific way of doing business. Take Salesforce.com, for instance. They're successful because customers pay to use services from a software package they've developed, and this package includes open source software. It's not common to see Software as a Service (SaaS) solutions that are completely based on open source software. Usually, companies offering these services mix both closed source and open source software together.

SaaS is different from other business models because instead of selling expensive software licenses, it provides affordable software services. This model works well for companies that don't want to deal with buying, setting up, and maintaining software licenses. The key technologies behind this business model are web technologies, and people usually use a web browser to access these services. Right now, most of these services are designed for businesses that need solutions for their overall operations.

This way of doing business has a lot of good points. It's a smart choice for people who buy the solution because it saves them money and time. Unlike some other ways of selling software, customers don't have to worry about spending extra on keeping their computer stuff running smoothly after they buy it. For companies that make software, especially if it's something special, this way lets them get into the global market through the internet more easily and quickly. It also helps companies avoid the problem of people using their software without paying for it.

But, some companies are worried about how safe and dependable it is to use this service for their important information. Even though there are technologies like SSL and VPN that make things secure, some companies still have concerns. The big challenge is convincing companies to trust this way of doing things. For companies that choose this way, they need to have a really good product and a service that people can depend on. That part can be tough, especially for new companies just starting out.

3.2. Business models used in Finnish ICT industry

Indicsoft uses different business strategies to do well in a tough market. Indicsoft, a company in Finland's ICT industry, uses a smart plan called the Manpower Outsourcing Business Model. This helps them get the right experts for their projects without spending too much money. They can easily use skilled professionals when they need them from other countries like India, Pakistan and Vietnam. This plan makes sure they have the right number of people for the job and can grow or shrink their team as needed. They're all about doing a great job and making their customers happy, and this Manpower Outsourcing plan is a big part of why they do so well in the fast-paced Finnish tech industry.

They use a smart plan called the Project Outsourcing Business Model. This plan helps them take on tricky tasks and make them turn out really well. They're experts in handling these kinds of tough jobs, making sure they meet high standards and make their clients happy. Because of this Project Outsourcing plan, Indicsoft solutions Oy has become a trusted partner for businesses that need special skills and want their projects to be done right. It shows how dedicated they are to doing a great job and has made them a strong player in Finland's competitive tech industry.

Product Development Business plan helps them create new and cool tech stuff that people really need. They spend time and money on researching, designing, and making these high-tech solutions. By doing this, Indicsoft solutions Oy has become known as a company that's always thinking ahead and making things that help businesses and people. They really care about coming up with new

ideas and making customers happy, which is why they do so well in Finland's competitive tech industry. People trust them to make exciting tech products.

Indicsoft solutions Oy also cares a lot about making their customers happy, which is part of their Value-Added plan that means they don't just do the minimum required; they do more to make their customers really happy. They make sure their clients get extra benefits and top-notch services. By putting their customers first, they make sure everyone is super satisfied. Indicsoft solutions Oy is known for always giving more than expected, which is why people trust them so much in Finland's competitive tech industry. Their dedication to making things better really makes them stand out and do well in the business.

Indicsoft solutions Oy believes in teamwork, and they use a smart plan called the Partnership Business Model. This means they work closely with other companies that share their goals. By teaming up with these like-minded businesses, they bring together their strengths, resources, and knowledge to help clients in a big way. This teamwork lets them offer a wide range of solutions to their clients and use a lot of different skills. It not only makes Indicsoft' solutions Oy services more diverse but also makes them a trusted partner in Finland's competitive tech world. They're dedicated to building strong partnerships, which keeps them flexible and ready for any changes in the industry, making them a valuable help to their clients.

Indicsoft solutions Oy uses a clever plan called the Social Media Marketing Business Model. They use social media like Facebook, Twitter, and others to talk to their customers and get them interested in what they do. They post interesting stuff and connect with people online. They also run special ad campaigns to make more people know about them and like what they offer. By doing this, they become more popular and trusted in Finland's competitive tech industry. Using social media helps them build strong relationships with customers and stay ahead in the fast-changing tech world of Finland

3.3. Business models used worldwide in ICT industry

The worldwide ICT industry uses many different ways of doing business to meet its various needs. One popular approach is the Manpower Outsourcing Business Model, which helps companies find skilled people and use resources wisely. Some companies hire experts from outside to help with specific tasks, which is cheaper and more flexible than hiring full-time employees. Another method is the Project Outsourcing Business Model, which lets companies get help from experts for tricky tasks. Others give certain jobs to skilled people or firms outside the company to save time and money. For making new tech stuff, there's the Product Development Business Model, which is all about innovation. These businesses focus on creating new and cool products to meet what people want. The Business Model Canvas is like a smart plan for companies to figure out their strategies and how they work. To make customers really happy, some companies use the Value Added Business Model. To plan and adjust their strategies some companies make their products or services

better in special ways, so they can charge more for them. They also team up with other companies through the Partnership Business Model to work together and share resources and expand their reach. In today's digital world, the Social Media Marketing Business Model is a must for connecting with people online. Social media is a big part of how businesses advertise and connect with people to sell their stuff.

All these different ways of doing business help companies in the ICT industry adapt and do well in a constantly changing environment. These different ways of doing business are super important because they help companies deal with the changes in the business world, and each way has its own good and not-so-good parts. Companies pick the one that works best for them based on the industry they're in and what's happening in the market.

4. Research method

4.1. Research Approach and Methodology

Applying a suitable research method to a study is crucial for a successful investigation (Cho & Lee, 2014). For the thesis, there are two different research methodologies: deductive and inductive. The selection of acceptable research methodology is an important part of the thesis process. The role of researchers in research is that of an execution instrument. The goal of this study is to find out how a business might construct a useful business model canvas for itself. In this study, the process of developing a business model and value proposition is used to carry out the investigation. The management and staff of the example company make up the research's main audience.

The author has repeatedly observed that the service industry IT is in trend in Finland. Due to the high demand, the author can recognize what is emerging and popular in the IT sector. Based on the author's research and observations, the final business model makes a hypothesis about how the company ought to run. Both primary data and secondary data are used to support this investigation. Data was primarily gathered using surveys and interviews. The Internet, books, other works, or electronic sources like articles, statistics databases, and websites of various organizations were all good places to look for secondary data.

The case firm employees, visitors to the exhibition, interviews with outside sources, and written materials and documents were all used to gather the data for this study. Since case studies often relate to human activities, different interviews are commonly used as a data collection strategy.

4.2. Research methods and data collection

The questions, goals, and type of data to be investigated all factor into the selection of research methodology and data gathering strategies. Researchers must use the most appropriate techniques and uphold ethical norms in order to guarantee the validity and dependability of their findings.

We used both qualitative and quantitative methodologies since we needed multilateral approaches to deal with complicated and multidimensional problems. The approaches employed in this thesis research were chosen to increase the research's relevance and validity.

4.2.1. Qualitative: Industry Expert Interviews

The case company "Indicsoft Solutions OY" is located in Vantaa, Finland. while the interviewees were held in Vantaa, Helsinki and Espoo, Finland

Supportively, the qualitative method is appropriate while targeting to obtain a deeper understanding of a topic through interviews, as well as when experiences, feelings, and thoughts are involved (Blandford, 2013).

Qualitative industry expert interviews are commonly used in various fields, including market research, academic research, business strategy development, and policy analysis and also as a valuable research method for gaining in-depth insights.

Industry expert interviews were selected as one of the primary data gathering methods. The data from these interviews are analyzed using qualitative research methods, such as thematic analysis. Researchers identify recurring themes, patterns, and insights within the interviews to draw meaningful conclusions.

Interviews are conducted one-on-one or in small groups, allowing for in-depth conversations. The data collected includes rich, qualitative information, often in the form of transcribed interviews or detailed notes. The interview times ranged from one to two hours. Questions patterns were the same for each interviewee.

Interviews that are semi-structured are often used in qualitative research as they give insights into the subject. Furthermore, it enables the researcher to include additional questions in the interview in order to expand his/her results, and it is very adaptable, encouraging two-way dialogue.

According to (Saunders, et al., 2015) This conversational tone made the interviewee more relaxing expanding on the topics that are being discussed as the interviewer can engage in the discussion for the desired information. It provides for considerable flexibility in the specific questions asked based on the context and flow of the conversation. Furthermore, data that was not originally on the agenda can be obtained. The semi-structured interview allows for the collection of detailed data.

The main thing is to give the interviewee the opportunity to spontaneously explore topics relevant to that interviewee. While other research methods would have been suitable, the author decided to conduct semi structured interviews for getting honest opinions on the research questions that's why this method was selected.

This was done to maintain the interview's natural flow. To ensure that the interview would proceed logically and that the needed information would be gathered, a prepared interview structure was developed. The interviews conducted were of the industry expert variety. Industry experts are well-known specialists who typically represent an established company. Because a particular expert can offer accurate and pertinent information about the phenomenon being examined, they were chosen for an interview.

The following are some benefits of interviews

- It is possible to acquire knowledge with more depth since it Provides a deeper understanding of industry-specific issues and challenges.
- It becomes easy for the researcher to gain personal information and he can control who answers his question which is not possible through emails.
- It Offers expert perspectives and insights that can inform strategic decisions.
- It becomes feasible for the researcher to acquire additional data, such as the interviewee's traits and other environmental elements, which will subsequently aid him in properly analyzing and interpreting the data.
- Allows for the exploration of emerging trends and potential opportunities

The interviewees were selected on the basis of their varying roles within the company, to give a broader view of how the company is actually doing business. Altogether ten interviews were done in two companies by the author. The information gathered in the interviews and analysis of the data is presented in chapter 5. The objective of the interviews was to obtain as much genuine and relevant information as possible, This would certainly aid in the research of designing and positioning the company's business model in relation to the Finnish IT services market.

4.2.2. Quantitative: Questionnaire

The most effective way to gather data for the thesis is through a questionnaire.

questionnaires are commonly used in research and surveys to gather quantitative data. Quantitative questionnaires are a valuable tool for collecting data when researchers seek to obtain numerical information and conduct statistical analysis to gain insights into specific research questions or hypotheses. It Clearly outlines the research objectives and goals of your study. Determine what specific information you want to gather through the questionnaire. To put it another way, questionnaires are a measurement tool that enables researchers to directly ask respondents questions.

The questionnaire is divided into several sections to collect a range of information from the respondents. Unstructured questions required respondents to provide their own explanations in order to answer. Some respondents skip several questions, but the majority of them go into great detail with each response. These responses provided the author with extensive information of the Finnish IT sector. These questionnaires were designed to gather information about current business models, expanding sectors, and important upcoming technologies in the Finnish IT sector. For this thesis, the author uses semi-structured surveys. We chose more than 10 respondents from the IT industry's various sectors.

5. Implementation and Results

5.1. Data analysis (Collected by Interviews)

Analyzing data from interviews is an important part of qualitative research. It helps me learn a lot about different things, what people think, and their experiences. The process starts with making sure we have accurate records of what was said in the interviews, either by transcribing them or organizing our notes. The people interviewed were part of the management team, which included the Product Head, Engineering Manager, Chief Technology Officer, Sales Head, Automotive Industry Manager, and the CEO of the company. The author specifically chose experts in their areas for the interviews based on their experience and qualifications. During the interviews, the author noticed that everyone was calm and polite. They gave detailed and complete answers to all the questions asked.

S.N	Date	Time	Company Name	Designation
1	22-09-2023	40min	Indicsoft Solutions Oy	CEO
2	22-09-2023	30min	Indicsoft Solutions Oy	Chief Technology Officer,
3	23-09-2023	40min	Indicsoft Solutions Oy	Project Manager
4	04-10-2023	30min	BaseMark Oy	Sales Head
5	04-10-2023	30min	BaseMark Oy	Project Manager
6	16-10-2023	30min	cloudKraft Oy	CEO
7	16-10-2023	30min	cloudKraft Oy	Sales Head
8	16-10-2023	30min	cloudKraft Oy	Product Head

Table 1 Interviews details

As mentioned in table 1(interviews table) I talked to 8 experts about the IT industry in Finland. First, I asked about the companies they work for. Then, we discussed different business models in the Finnish IT industry, what areas need improvement, and why. We also talked about the growing parts of the IT industry in Finland and the new technologies they use. I asked how a company like Indicsoft Solutions Oy could use these technologies. Finally, I asked about how new IT companies can do well, what problems they face in Finland, and what advice they have. We used this structured approach to make sure we have all the background information for our analysis.

The experts told me that in the Finnish IT industry, there are various ways companies do business. They mentioned things like outsourcing IT work, making products, giving advice, building websites,

and working on cybersecurity and cloud solutions. For new IT companies, they suggested using similar business models because they work well.

They also said that the IT services part of the industry is growing fast in Finland. Some experts think this is because international companies come to Finland to do IT work. They also mentioned that more people from other countries are starting their own IT companies in Finland, and they often hire people in their home countries for projects here.

Most of the experts (Five out of Eight) said that the Finnish IT industry is getting bigger, with big companies from around the world investing here. But they also said there aren't enough IT experts in Finland, and this is a problem. Finland will need to bring in skilled people from other countries to work in IT. One expert said the problem is because the current IT workers are getting older, and there aren't enough young people in Finland. If Indicsoft Solutions Oy can help by providing IT experts, they could do well in the future.

The experts told me about new technologies in the Finnish IT industry, like artificial intelligence, robots, the Internet of Things, and blockchain. One of the experts, who has a lot of experience in the Finnish IT industry, shared some secrets. He said that Finland's IT industry is doing well because of good education and big companies coming here. But he also said there are problems, like not having enough IT experts, older workers, and not enough babies being born. To fix these problems, he thinks Finland should bring in IT experts from other countries who are experts in certain areas. He also said that the weather in Finland and the lack of sunlight can make it hard for IT professionals from other places to come here, and this is part of the reason why there aren't enough IT experts in Finland.

5.2. Data analysis (Collected by Questionnaire)

Analyzing questionnaire answers is super important to get useful information from surveys. I talked to 10 experts who work in different parts of the IT industry. They know a lot about their fields. I asked them questions using forms that gave them some freedom to choose what they wanted to answer. They could skip questions if they didn't want to share certain information about their companies. But they all gave detailed answers, which are helpful for a new company.

We had different types of questions in our forms. Some were like multiple-choice questions, where they just had to pick an answer. Others needed them to explain a little. Most of the experts (70%) said they would be interested in getting advice (consulting services). They also told us some things about what kind of advice would be good for a company like Indicsoft Solutions Oy. About 60% said they would use services from other IT companies. They told us about some of these services, both common ones and new ones that are becoming important.

When I asked about why the IT industry in Finland might not be doing as well as it could, most of them (7 out of 10) said it is because there are not enough IT experts, and Finland needs to get some from other countries. According to them, some important new technologies are Artificial Intelligence, Robots, Cybersecurity, Cloud Solutions, the Internet of Things, and Block chain.

I also asked what kind of business models would be good for new IT companies. All of them (100%) said that getting people from outside to help (manpower outsourcing) is a good idea. Most (80%) also said doing projects for others (project outsourcing) is a good idea. Half (50%) said making new products is good, and some (30%) said giving advice (consulting) is a good choice for new companies.

5.3. Present Situation Analysis

The IT industry in Finland has been growing steadily recently. This growth is because more people want digital services, and there are new technologies and more IT-related businesses. Finland also has a lot of new tech start-up companies, especially in cities like Helsinki and Tampere. These places attract people who want to start their own tech businesses and investors who want to help them. Finland's education system is known for making skilled IT experts, but there is a worry that there might not be enough of them because the demand for tech experts keeps going up. The government in Finland is helping the IT industry grow by giving tax breaks for research and development and investing in digital technology. Finnish IT companies are also focusing on new technologies like AI, block chain, and IoT, and they are paying a lot of attention to cybersecurity to keep digital systems safe. Some Finnish IT companies are even expanding to other countries because they are known for good technology and quality.

However As per the Ministry of Economic Affairs and Labor's assessment, Finland is on the path to experiencing a significant shortage of labor, particularly skilled professionals, in the near future. They think Finland will not have enough workers, especially those who are really good at their jobs, in the near future. If things don't change, there might be 150,000 jobs that can't be filled because there won't be enough people to do them. This means Finland needs to find talented workers from other countries to make up for the shortage.

For international students who want to work in Finland after they finish their studies, there are great job opportunities in fields like IT, ICT, AI, VR, Big Data, and gaming. Finland will have about 10,000 jobs for skilled computer programmers, and there will be a total of around 200,000 job openings in these areas, including industrial internet, artificial intelligence, big data, and robotics. This means students interested in these high-tech fields have a good chance of finding a job in Finland.

However, it's important to remember that the lack of skilled workers is not just a problem in certain industries. It's a big issue across Finland because many people who have jobs now will retire soon. This shortage affects industries where Finland is doing really well, like the automotive, gaming, and healthcare sectors. In these areas, there's a special need for experts with specific knowledge, and finding these experts is hard because there aren't many of them in Finland.

5.4. Target Situation

Finland wants to keep being known as a place where people come up with new ideas and start businesses. They also want to help new startups grow and get investments from other countries. The author has a clear plan in place, with a well-defined target for the company's growth. Since Indisoft Solutions Oy is a new company in the Finnish IT market, the initial focus will be on the manpower outsourcing business model in the first year. This is a smart move because there is a high demand for IT workers in Finland, and many Finnish companies are already using this model.

In the first year, the company will concentrate on this business model while also gathering information about other services business models. In the second year, the aim is to venture into the partnership business model. As the company grows and matures in the third year, it will add the value added business model. Finally, in the fourth year, the company will include the project outsourcing business model.

While all these models are in demand in Finland, the company is aware that it will take some time to establish a strong reputation since it's new to the market. However, the author is confident in Indisoft Solutions Oy potential, especially with the support of its well-established sister company in India, which has a pool of IT experts ready to work. Based on data collected and research on the Finnish IT services market, these IT services business models align with the author's target for Indisoft Solutions Oy in the next four years. The company recognizes that more IT market research and resources will be required to achieve these goals.

Years	Targeted business models
1	Manpower Outsourcing business model
2	partnership business model
3	value added business model
4	project outsourcing business model

Table2. Target market

5.5.Key Finding

The research mainly used the internet, interviews with experts, and questionnaires to gather important information for the thesis. I chose these methods to get the data I needed for my research goals. Here are the main things I found from the interviews and questionnaires: The Finnish IT industry really needs companies that provide workers for their projects. Indicsoft Solutions Oy has a chance to meet this need by offering new services. Indicsoft Solutions Oy could make a profit doing this.

The interviews and questionnaires also told us that the IT services part of the Finnish IT industry is doing well in the technology field. Most people we talked to said that for new IT companies, it's a good idea to provide workers for projects. Many of the people we interviewed or surveyed are worried about the Finnish IT industry because it doesn't have enough workers. They think this is because the current workers are getting old, and there aren't enough young people being born. They said the industry needs IT experts with special skills to take the place of the older workers. Overall, our data shows that Indicsoft Solutions Oy has a good chance to do well in the Finnish IT industry by providing these experts from outside Finland.

One person we talked to said that the Finnish IT industry has a problem because many of the workers in every part of it are getting old and will retire soon. This means they need to find new IT experts to take their place.

We also found information on the internet and in articles that supports what we learned. The data shows that the IT services market is growing in the Finnish IT industry. But it also shows that there's a problem because the people who can work are getting older, and there aren't enough new workers because of the low birth rate. This could lead to a shortage of workers in different parts of the industry.

Some internet evidence of IT expert shortage

Finland needs an international workforce to respond to the labor market demand and the shortage of skilled employees. In order for international experts to come to work in Finland, our country must be able to attract and retain both employees and employers. (Ministry of Economic Affairs and Employment 2023).

A recent study conducted by Technology Industries of Finland indicates that over the next decade, Finland's technology sector will require approximately 130,000 new experts, at an annual rate of approximately 13,300 professionals. This study, which assessed the skills demand in Finland by analyzing company projections and utilizing artificial intelligence, highlights the pressing issue of a skills shortage in an aging Finland. This shortage poses a significant threat to the economic growth

and overall well-being that the digital and environmentally friendly industrial transformation has made possible (Deputy CEO Minna Helle, 2021).

According to Business Development Manager Santeri Muhonen, in 2022, there's a big concern in Finland's IT industry about not having enough software developers. This issue is getting a lot of attention. The latest forecasts show that more and more software developers are needed, and it's expected that there could be a shortage of up to 14,000 developers in the IT field in Finland.

According to Helsinki times, Finland is facing an escalating shortage of skilled workers, according to a recent study by Manpower group. The study found that 81% of Finnish employers are struggling to find the necessary skills to fill their job vacancies. This is up from 70% the previous year. The shortage is most severe in Eastern Finland, where 85% of employers report difficulty finding the right talent.

According to Cathcart technology Finland, like many Western countries, faces the challenge of an aging population. The birth rate has been declining steadily, leading to an increasingly older workforce. As a result, there are concerns about a shortage of skilled workers to replace retiring employees, inevitably widening the technical skills gap in Finland whilst also leading to a lack of diversity in the labor market.

5.6. Reliability

The reliability of the research was ensured through adherence to research procedures, documentation of stages, use of multiple high quality sources from the literature, existing knowledge, well planned and documented research and data collection processes, and questionnaires and interviews conducted by the author. The author carefully considers the questions for the interview and schedules a favorable time for the meeting in order to prevent distortion in interpreting replies and assure the research's reliability. Furthermore, pre-planning the interview and questions prevented the research or the researcher from affecting the research outcomes.

The approach and research method for this work are valid and reliable because the theories are based on trustworthy sources such as published articles, official literature, websites, and statistical data. In addition, all facts in this paper are cited and provided as links in the references.

In addition, the author has a reasonable amount of knowledge and expertise on this subject through observation, hobby, internships, family background and connections. Therefore, this paper is reliable because the author has used his skills and knowledge to support the theories from the literature and collect data from interviews and questionnaires to conduct a business unit.

5.7.Ethics

For IT startups in the Finnish ICT industry, ethics are fundamental to their success and long-term impact. These startups should prioritize safeguarding people's personal information and ensuring transparency in how they handle data, as this builds trust with users. Additionally, being environmentally conscious by using resources wisely and adopting eco-friendly practices is crucial. Treating employees fairly, promoting diversity, and providing a safe work environment are not just ethical but also essential for a positive workplace culture. Fair competition, responsible use of advanced technologies like AI, and respecting intellectual property and creativity contribute to ethical business practices. Engaging with the local community, maintaining cybersecurity, and considering societal impacts underscore a commitment to ethical responsibility. Adherence to laws and regulations, honest customer interactions, and a readiness to rectify mistakes when they occur all contribute to ethical business conduct. Ultimately, ethical behavior is not just good for business but also for fostering positive relationships with the community and contributing to a better world.

5.8.Result

The analysis shows that starting a business that provides specialized workers to Finnish ICT companies has great potential for success. Here's why Finnish tech companies are always looking for smart people who are experts in things like software, cybersecurity, and data analysis. But sometimes, these companies struggle to find the right people for the job.

The main purpose of this thesis was to develop a profitable business model for the company Indisoft solutions Oy in the Finnish ICT industry. I gathered information from three main sources: talking to experts in the field, using a questionnaire, and reading up on what's already out there. What I found is that Indisoft Solutions Oy needs a business plan that will help it enter the market successfully and make a profit. This is especially important because there aren't enough IT experts in Finland, and we need a smart strategy to overcome this challenge.

After looking at lots of data and different business ideas, I had to pick the best one for Indisoft Solutions Oy. In the IT services world, many companies use a few different business plans, like Manpower Outsourcing, Project Outsourcing, Product Development, Value-Added Services, and Consultancy Services. These are all ways to make money in the IT business.

I talked to a bunch of people and did surveys to find out which business plans are the most popular in the Finnish IT industry. It turns out that Manpower Outsourcing and Project Outsourcing are the big winners. So, for the first year, Indisoft Solutions Oy will focus on Manpower Outsourcing because they're new in this market, and it takes time to learn how things work here.

Manpower Outsourcing means providing companies in Finland with IT experts from other countries, like India. And guess what? Finland really needs these experts because we have an aging population and not enough young workers. This is a huge chance for Indicsoft Solutions Oy to grow in the Finnish IT industry.

There's also a big demand for IT experts in different fields like gaming, software, data, graphics, and artificial intelligence. Indicsoft Solutions Oy can provide experts who specialize in these areas. So, it's a big opportunity for them to do well in Finland and help out the Finnish IT industry with the skilled workers it needs.

However, it's crucial to follow all the rules and laws when running a business in Finland. So, in a nutshell, with careful planning, thorough research, and following the local rules, a manpower outsourcing business can thrive in the Finnish tech industry.

That's where a manpower outsourcing business comes in – it helps these companies find the skilled workers they need. This will not only help the industry grow but also meet the changing needs of local companies for skilled workers.

6.conclusion and Discussion

In this chapter the author will reflect on his research based on the results of this thesis, theoretical implications, Executive Summary and Methods, Recommendations and Business model proposal.

6.1.Theoretical Implications

The aim of this thesis is to explore the operational business models and critical factors necessary for the success of a new company in the IT industry. Studying business models in IT start-ups offers valuable insights that have wide-reaching implications. It teaches us that these start-up businesses are incredibly adaptable, always finding new ways to tackle challenges. Moreover, it illustrates how groundbreaking ideas and technologies can revolutionize entire industries, opening up fresh opportunities. Additionally, the research dives into how IT start-ups manage with limited resources, collaborate within networks, scale up their operations, prioritize customer satisfaction, expand globally, consider sustainability, and learn from their missteps. All of these factors provide us with a deeper understanding of how technology-driven entrepreneurship shapes not just industries but also entire economies. To do this, the author looks at different ways businesses operate and what they need to do to thrive. Author study various business models, understand how they work, and then pick the best one for a new startup. Additionally, the author talks to people in the Finnish IT industry through interviews and surveys to learn more about it. From all this information, they find the most important findings needed for the thesis.

6.2. Business model proposal

Manpower Outsourcing is a common and straightforward way of doing business in the IT industry. When companies need to hire people, whether it's for permanent or temporary jobs, there are many things to think about. Some companies can handle this on their own, but often they need help from specialized companies like Manpower Outsourcing firms. These firms offer exactly what companies need when they want to find new employees. Finding the right people with the right skills can be hard and expensive for businesses, and it takes a lot of time. If a company wants to find the best people to make their work better, they can go to a Manpower outsourcing company. These companies are responsible for finding the right employees to meet the specific needs of the company that hired them.

IT service companies usually have different ways of doing business, like providing software services, cybersecurity services, sharing R&D costs, adding extra services, or helping with systems and processes. Right now, the most common way they work is by outsourcing manpower. Because of Covid-19, people are working from home, even in other countries. So, in Finland, there's a growing need for IT experts from other places, and the outsourcing model is likely to do well there.

Indicsoft Solutions Oy, with their team of IT experts in India, is in a good position to do well. Finland's IT industry needs more IT professionals, especially in areas like gaming, embedded software, data analysis, computer graphics, and artificial intelligence. Indicsoft Solutions Oy can help by providing IT experts from India. Finland's IT sector needs more skills, and Indicsoft solutions Oy can help with that. Right now, the most popular way of doing business is outsourcing manpower. Many smaller and less known software companies are using this approach. They hope to get a piece of the profits from bigger companies by doing this.

6.3.Executive Summary and Methods

The goal of the thesis is to create a plan for how Indicsoft Solutions Oy can run its business. To do this, the first thing I need is a clear and organized outline that will help readers understand what the author is trying to say. Starting the thesis with some background information is important because it helps explain why this topic was chosen and what inspired the author to write about it.

After that, the thesis states its main goal at the beginning to clarify why the author is doing this research. Without looking at what other experts have already studied and written about, it's tough for readers who aren't experts in the same field to fully understand this thesis.

A theoretical framework is like the foundation for understanding different business models. The author wants to show he can use these theories in real life, so he sets research questions and objectives based on these theories. Then, I did interviews and surveys to collect important information. Ultimately, the study resulted in creating a business model for outsourcing manpower.

In this research, I used a mix of two kinds of methods:qualitative and quantitative. I also used both theoretical ideas and real-world observations. I found that this mix was the right choice for my study because it covered most of the theories I needed to create a business model that gives an overall picture of the industry.

6.4.Limitations of the Study

This study faces limitations because it's hard to get information about how IT service companies run their businesses. These companies keep their business details secret due to tough competition. Also, most of these companies are still figuring out their business models. They have recently started offering services like project outsourcing, product development, cyber security, and cloud solutions, and it's not easy to know what they will do next. They Are mainly working on their main products and services while trying to find the best ways to make money from their services.

In the Finnish IT industry, there's a big demand for IT outsourcing, gaming, artificial intelligence, cyber security, and cloud solutions. Because the competition is fierce, IT service providers don't want to share their future plans with others to stay competitive.

6.5. Personal Learning and Improvement

Writing this thesis was one of the most challenging parts of my master's degree at Jamk University of Applied Sciences . I come from a family of IT engineers, and my time at Jamk university sparked my interest in creating new and innovative business ideas. To introduce something new from my home country, India, to Finland, I developed a business concept for my thesis. I successfully designed a business plan for my startup by applying what I learned during my master's program. I have realized how important it is to have a clear business plan for future success. I have also learned that when starting a business, it is crucial to study and compare the business models of other companies. Writing a thesis is challenging and requires good time management. With the help of my thesis supervisor, I overcame these challenges and adjusted my schedule. It was also tough to put all my research into this paper, especially when I was creating the business plan for Indicsoft Solution Oy.

During my research, I used online articles and the internet to understand the IT industry. Talking to various people, including CEOs and industry experts, gave me valuable insights into the Finnish IT sector. I believe this information will be very useful for my future plans. To sum it up, this study is a significant achievement in my academic journey at Jamk University of Applied Sciences. It's special to me because it's something I created and a way to share my knowledge and skills with the world, becoming part of an online resource.

7. References

Saunders, B., Kitzinger, J., & Kitzinger, C. (2015). *Anonymising interview data: Challenges and compromise in practice*. *Qualitative research*, 15(5), 616-632.

Evans, D., Bratton, S., & McKee, J. (2021). *Social media marketing*. AG Printing & Publishing.

David, D. (2022). Learning from Japan: Which Policy Reforms Will Be Viable Option to Address the Challenges of Ageing Population in Finland?.

Djavanshir, G. R. (2005). Surveying the risks and benefits of IT outsourcing. *IT professional*, 7(6), 32-37

Tafti, M. H. (2005). Risks factors associated with offshore IT outsourcing. *Industrial Management & Data Systems*, 105(5), 549-560.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business horizons*, 54(3), 241-251.

Cho, J. Y., & Lee, E. H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *Qualitative report*, 19(32).

Blandford, A. E. (2013). Semi-structured qualitative studies. Interaction Design Foundation.

Corbett, M. (2004). *The outsourcing revolution: Why it makes sense and how to do it right*. Dearborn Trade Publishing.

Lovell, N. (2015). Free-to-play marketing costs rise and profitability falls at King and Supercell. *Gamesbrief*, March, 24.

Yli-Huumo, J., Päivärinta, T., Rinne, J., & Smolander, K. (2018). Suomi. fi—Towards government 3.0 with a national service platform. In *Electronic Government: 17th IFIP WG 8.5 International Conference, EGOV 2018, Krems, Austria, September 3-5, 2018, Proceedings 17* (pp. 3-14). Springer International Publishing.

Heric, M., & Singh, B. (2010). Seizing the strategic high ground in capability sourcing. *Bain & Company: Boston, MA, USA*.

Ylätuupa, T. (2011). Cloud computing in the ICT of Finnish public administration.

Roblyer, M. D., & Doering, A. H. (2010). Integrating educational technology into teaching.(ed.) Boston. MA: Allyn & Bacon.

Joch, A., & Moreno, K. (2017). Data & Advanced Analytics—High Stakes, high Rewards. *Forbes Insights, Ernst&Young*.

Laughland, P., & Bansal, T. (2011). The top ten reasons why businesses aren't more sustainable. *Ivey Business Journal*, 75(1), 1-14.

Makrides, A., Vrontis, D., & Christofi, M. (2020). The gold rush of digital marketing: assessing prospects of building brand awareness overseas. *Business Perspectives and Research*, 8(1), 4-20.

Majstorovic, V., Stojadinovic, S., Lalic, B., & Marjanovic, U. (2020, August). ERP in industry 4.0 context. In *IFIP International Conference on Advances in Production Management Systems* (pp. 287-294). Cham: Springer International Publishing.

Giri, B. C., & Sarker, B. R. (2017). Improving performance by coordinating a supply chain with third party logistics outsourcing under production disruption. *Computers & Industrial Engineering*, 103, 168-177.

Lank, E. (2005). *Collaborative advantage: how organisations win by working together*. Springer.

Glisson, W., & Choo, R. (2017). Introduction to Cyber-of-Things: Cyber-crimes and Cyber-Security Minitrack.

Jantsch, J. (2023, August 30). *Duct tape marketing*.

<https://ducttapemarketing.com/>

Gaming & Metaverse. (2022b, October 12).

<https://www.businessfinland.com/explore-business-opportunities/gaming--metaverse/>

FiCom Ry. (2023, October 3). *ICT in Finland*

<https://ficom.fi/english/ict-in-finland/>

FiCom Ry. (2023, October 3). *The Finnish ICT sector is important for its size*.

<https://ficom.fi/news/the-finnish-ict-sector-is-important-for-its-size/>

Valtioneuvosto.(2023, September 5). *Welcome to Finland, international experts and entrepreneurs*.

<https://valtioneuvosto.fi/en/-/1410877/welcome-to-finland-international-experts-and-entrepreneurs>

Cathcart Technology. (2023, October 26). *How to overcome Finland's talent shortage*.

<https://cathcarttechnology.com/insights/how-to-overcome-finlands-talent-shortage/>

Crew, E. (2023, October 26). *Software developer shortage in Finland [Updated]*. Espeo Software.
<https://espeo.eu/blog/software-developer-shortage-finland/>

FasterCapital. (2023, October 29). *Product development: Innovation Unleashed: Nurturing Product Development in Business Planning*

<https://fastercapital.com/content/Product-development--Innovation-Unleashed--Nurturing-Product-Development-in-Business-Planning.html#The-Importance-of-Product-Development-in-Business-Planning>

Appendix 1

Interview questions

1. Can you describe your experience with startups IT companies?
2. Could you describe your position at your company?
3. When working on a project, how do you handle disputes or confrontations with coworkers?
4. What motivates you to work in IT, and how do you keep interested in technology and development?
5. How would you classify the IT services sector in Finland
6. How would you figure out ways to make money for our IT startup, taking into account what's happening in the market right now?
7. What are the technological domains and sectors where Finland falls short?
8. How do you prioritize work and manage your time efficiently in a fast changing startup environment in order to fulfill project deadlines?
9. What are the most important new technologies in Finland's IT industry?
10. IT organizations must prioritize security. What are some best practices you use to protect the security of the systems and data with which you work?
11. Is it common for your organization to outsource whole projects to service providers?
12. What do you want to achieve in your career in the long run, and how do you think you can help this IT startup company grow and succeed?

Appendix 2

Survey questions

1. Have you heard of our IT startup in Finland before this survey

a) Yes

b) No

2. Could you please provide the number of staff members currently employed by your company?

3. Are you open to looking into our IT startup for your future IT needs?

4. How many foreign staff do you have in your company?

a) 0-10

b) 10-20

c) 20-30

d) 30-50+

5. Do you hire people directly or through consultants in your company?

6. Does your company use a service provider?

7. If yes, what type of services?

8. What level of satisfaction do you have with the IT solutions you now use?

9. Do you know that the Finnish IT industry is lacking in IT specialists?

a) Yes

b) No

10. For an IT start-up company in Finland, which business model would you suggest?

a) Manpower outsourcing business model

b) Project outsourcing business model

c) Partnership business model

d) Business model canvas