Dynamic capabilities through student freelancers: How companies leverage young talent to enhance workforce agility and competitive advantage

Lappeenranta–Lahti University of Technology LUT

Master's in International Business and Entrepreneurship

2025

Sami Sutinen

Examiner(s): Associate Professor, Mikko Pynnönen

Alexander Myers, Junior Researcher

ABSTRACT

Lappeenranta–Lahti University of Technology LUT

LUT Business School

Business Administration

Sami Sutinen

Dynamic capabilities through student freelancers: How companies leverage young talent to enhance workforce agility and competitive advantage

Master's thesis

2025

110 pages, 1 figure, 4 tables and 1 appendix

Examiner(s): Associate Professor & docent Mikko Pynnönen and Junior Researcher Alexander Myers

Keywords: Freelancer, dynamic capabilities, competitive advantage, workforce agility, talent shortage, student, student freelancer.

The purpose of this study was to examine how companies can benefit from engaging students not as employees or interns, but as freelancers. The research was conducted for a young Finnish start-up seeking to renew working life by flexibly connecting students and recent graduates with companies in need of support. The growing shortage of skilled labor, budget pressures, and the demand for agility in working life have made it challenging for companies to involve students due to costly recruitment and onboarding processes as well as internship programs. The aim of this study was to define the term student freelancer as a new concept. In addition, the study sought to explore what kinds of benefits student freelancers can bring to companies and in which roles and situations they may create value the most. The theoretical framework was based on the concept of dynamic capabilities, which was used to explain the impact of students on companies' operations when they are working as freelancers. The research was carried out as a qualitative interview study with companies that had already utilized students as freelancers. The results showed that student freelancers primarily provide companies a flexible and cost-effective way to complement their resources. Students bring the latest academic knowledge, technological expertise, and fresh perspectives into companies. However, their impact on dynamic capabilities remains limited. The need for onboarding, limited work experience, and organizational barriers can restrict the use of student freelancers. Nevertheless, students' learning ability and positive attitude can compensate for these shortcomings, and the student freelancer model can serve as a low-risk recruitment channel for companies.

TIIVISTELMÄ

Lappeenrannan–Lahden teknillinen yliopisto LUT

LUT-kauppakorkeakoulu

Kauppatieteet

Sami Sutinen

Dynaamiset kyvykkyydet opiskelijafreelancereillä: Kuinka yritykset voisivat hyödyntää nuoria osaajia työvoiman ketteryyden ja kilpailuedun vahvistamiseksi

Kauppatieteiden pro gradu -tutkielma

2025

110 sivua, 1 kuva, 4 taulukkoa ja 1 liite

Tarkastaja(t): Apulaisprofessori & dosentti Mikko Pynnönen ja nuorempi tutkija Alexander Myers

Avainsanat: Freelancer, dynaamiset kyvykkyydet, kilpailuetu, työvoiman ketteryys, osaajapula, opiskelija, opiskelijafreelancer

Tämän tutkimuksen tarkoituksena oli tutkia, miten yritykset pystyisivät hyötymään opiskelijoista työntekijöiden ja harjoittelijoiden sijaan freelancereinä. Tutkimus tehtiin nuorelle suomalaiselle startupille, joka pyrkii uudistamaan työelämää yhdistämällä opiskelijat sekä vastavalmistuneet joustavasti yritysten avuksi. Työmarkkinoiden kasvava osaajapula, budjettipaineet sekä tarve ketteryydelle työelämässä on johtanut siihen, että opiskelijoiden hyödyntäminen on muodostunut haasteeksi yrityksille kalliiden rekrytointi- ja perehdytysprosessien sekä harjoitteluohjelmien myötä. Tavoitteena tässä tutkimuksessa oli määritellä opiskelijafreelancer termi uutena käsitteenä. Lisäksi tavoitteena oli myös selvittää mitä hyötyä opiskelijafreelancereistä voisi olla yrityksille sekä millaisissa rooleissa ja tilanteissa heistä voitaisiin saada eniten arvoa. Teoriapohjana tutkimuksessa käytettiin dynaamisten kyvykkyyksien teoriaa, jolla pyrittiin selittämään opiskelijoiden vaikutusta yrityksen toimintaan freelancereinä. Tutkimus toteutettiin laadullisena haastattelututkimuksena yritysten kanssa, jotka ovat jo hyödyntäneet opiskelijoita freelancer -mallilla. Tutkimuksen tulokset osoittivat, että opiskelijafreelancerit pystyvät tarjoamaan yrityksille ennen kaikkea joustavan sekä kustannustehokkaan tavan täydentää yrityksen resursseja. Opiskelijat tuovat yrityksiin uusinta akateemista tietoa, teknologiaosaamista sekä tuoreita näkökulmia. Vaikutus yrityksen dynaamisiin kyvykkyyksiin jää kuitenkin hyvin vähäiseksi. Perehdyttämisen tarve, rajallinen kokemus ja organisatoriset esteet voivat rajoittaa opiskelijafreelancereiden käyttöä. Opiskelijoiden oppimiskyky ja asenne kuitenkin paikkaavat puutteita, ja opiskelijafreelancer -malli voi toimia yrityksille matalariskisenä rekrytointikanavana.

ACKNOWLEDGEMENTS

I would like to thank my supervisors, Mikko and Alex, for their excellent and professional support and guidance during the writing of this Master's thesis.

I would also like to thank the company and its personnel that provided me with the opportunity to conduct interviews and examine a topic that I personally found both interesting and important.

In addition, I wish to thank all the interviewees who agreed to participate in this research on students, young people, and their utilization in organizations.

Table of contents

Appendices

Appendix 1. Interview Framework

Figures

Tables

1 Introduction

The modern business environment is changing rapidly as a result of technological development, globalization, and the transformation of work. Consequently, companies increasingly need flexibility and the ability to respond quickly to change. The growing shortage of skilled labor and efficiency pressures have driven companies into a situation where their needs no longer align with the available workforce, creating inefficiencies in the market. The traditional employment model is too rigid to solve these challenges cost-effectively, which has led to the rise of alternative forms of work. Project-based work and freelancing represent more flexible modes of employment that may help companies adapt and maintain their competitiveness (Horbach & Rammer 2022, 734; Brunello & Wruuck 2021, 1145; Ajgaonkar, Neelam & Wiemann 2022, 951; Burke & Cowling 2020, 395).

At the same time, the younger generation of students and recent graduates approaches working life differently from previous generations. Young people are increasingly interested in entrepreneurship compared to before (Huovinen, 2025). Students and recent graduates tend to have an entrepreneurial mindset and can provide companies with flexible expertise to meet temporary needs (Jackson, Shan & Meek 2022, 101). However, companies mainly engage students through trainee positions and internship programs, which can be heavy, inflexible, and administratively demanding for organizations (Narayanan, Olk & Fukami 2010, 61). As a result, the potential of students and recent graduates as a flexible and cost-effective resource is not fully realized.

Previous research has examined the role of freelancers as external experts complementing organizational knowledge and innovation capabilities (Kozica, Bonss & Kaiser 2014, 423; Horbach & Cowling 2022, 396). However, the use of students as freelancers has remained limited at the company level, and the topic has therefore received little academic attention. Due to the lack of literature and research, the concept of a student freelancer is largely absent from academic discourse, as is an understanding of what it entails and how students could

serve as a flexible workforce. The purpose of this study is to address this gap by exploring the phenomenon.

The theoretical foundation of the study is based on the theory of dynamic capabilities, which defines a company's competitiveness and success as depending on its ability to sense opportunities, seize them, and transform itself in a constantly changing business environment (Teece, Pisano & Shuen 1997, 509–515; Eisenhardt & Martin 2000, 1106; Wang & Ahmed 2007, 35). Workforce flexibility can be seen as one form of dynamic capability, as it enables companies to respond quickly to change and to allocate and utilize skills efficiently (Muduli 2016, 1567; Harsch & Festing 2020, 43). Through this theoretical framework, student freelancers can be understood as a modern resource that helps companies enhance their agility and strengthen their ability to renew themselves.

The aim of this study is to examine how the student freelancer model can increase organizational flexibility, support dynamic capabilities, and bring new value to companies—for example, through new ways of working or the adoption of new technologies. In addition, the study aims to define the concept of a student freelancer in an academic context, which allows for the examination of the value they can potentially create. To achieve this, the study combines perspectives from strategic management, workforce agility, the freelancer model, and the utilization of students in contemporary organizations.

This research focuses exclusively on the perspective of companies and is therefore limited to the value that student freelancers can provide to organizations. In this study, student freelancers refer to higher education students and recent graduates who work under a freelance model. Traditional employment relationships and internships are discussed only for comparison. The study was conducted as a qualitative research project, using semi-structured interviews with companies that have already engaged student freelancers and can therefore validate the value they provide.

Based on the findings, companies can gain flexible and fast access to resources through student freelancers, enabling them to respond effectively to short-term needs. The value brought by students and recent graduates is particularly evident in the form of up-to-date academic knowledge, technological expertise, and fresh perspectives. Student freelancers can also complement the expertise of more experienced employees and freelancers. Overall, when properly utilized, student freelancers can offer companies potential for enhancing agility and renewal capabilities which is an increasingly relevant and attractive prospect for businesses, especially as young people's interest in entrepreneurship continues to grow.

1.1 Background of the study and the research gap

Students have been, and will always be, the future, which companies and organizations must utilize to ensure their own continuity. Today, the innovation activities of the most innovative companies can be disrupted by a lack of skilled labour supply, which may pose a significant obstacle to the company's technological and other forms of development (Horbach & Rammer 2022, 734). Companies must be able to continuously adapt to how they identify the impact and work preferences of different generations in order to ensure that their efficiency and innovation capabilities do not weaken in the future (Shaw & Fairhurst 2008, 366). This problem is further worsened by the gap that has emerged, and continues to grow, between those retiring and the younger employees entering the workforce (Horbach & Rammer 2022, 734). The prevailing talent shortage in today's labor market weakens a company's ability to renew itself, innovate, and create competitive advantages.

Companies are under strong pressure to manage their budgets efficiently (Kiseleva & Chechurin 2022, 234). Budget challenges together with talent shortage create a dysfunctional whole for the company's operational and innovation activities. One-way companies have addressed the talent shortage in addition to the pressure of efficient budget managing is through flexible working models. One of these models is the use of freelancers, whose involvement in business operations has been steadily increasing. This also offers companies with even strict resource constraints the opportunity to outsource innovation-related

activities to external experts (Gupta 2023, 40). When a company can sustainably utilize freelancers in its operations, it can respond to market insights to achieve competitive advantage (Gupta 2023, 39). More flexible forms of employment, such as the freelancer model, provide the company with workforce flexibility, filling the knowledge gap as needed, while also allowing for easy exit once the need ends (Kozica et al. 2014, 422–423). Agility has therefore become a strategic necessity in today's world, where continuous renewal and development are critical (Ajgaonkar, Neelam & Wiemann 2022, 951).

However, more flexible working models and especially freelancing has not reached students. Companies have prejudices that make them hesitant to hire recent graduates in general (Kiseleva & Chechurin 2022, 233). On the other hand, attracting recent graduates to working life through companies' consulting projects is ultimately the best solution for every party involved (Kiseleva & Chechurin 2022, 235). Nowadays, companies make use of internships, through which they get temporary workforce at a low cost and can build visibility among future employees (Narayanan, Olk & Fukami 2010, 61). Nonetheless, from the company's perspective, building and maintaining internship programs is also very expensive, which makes it important to study what kinds of benefits could be gained by using students even more flexibly as freelancers (Maertz, Stoeberl & Marks 2014, 131).

Based on the background, this study identifies several clear research gaps throughout the literature review. The benefits of external labour have been discussed to some extent, but the advantages of freelancers, particularly in relation to the creation of competitive advantage, have been studied only superficially. While freelancers bring new knowledge and have the potential to fill skill gaps and support innovation processes, it is noteworthy that the freelancer phenomenon has been studied only briefly (Kozica et al. 2014, 421–423). In addition, the benefits of utilizing students in companies have been discussed relatively little. This is clearly a challenge since it is mandatory to utilize students and recent graduates, but the benefits gained from them are not necessarily maximized. For example, internship programs have been found to benefit companies, but research on them remains relatively fragmented, and maintaining such programs is costly for firms (Narayanan et al. 2010, 61–62). At the same time, students possess the right competencies and readiness for working

life, yet companies are not making broad use of them (Jackson, Shan & Meek 2022, 101–102). In other words, there has not been sufficient research into what kind of value students and recent graduates could bring and how they should be utilized in practice. Thirdly and finally, student freelancers have not previously been defined in academic research. While students and freelancers are both discussed in the context of business operations, the combination of these two terms has not been explored before. This presents a theoretical challenge, as more young people want to work as entrepreneurs and freelancers. Recent research conducted in Finland shows that 27% of young people believe they will start their own company (Huovinen 2025). However, they cannot bring the same benefits as experienced freelancers, and therefore they cannot be considered through the same theoretical lens.

In this study, the Dynamic Capabilities Theory is used as a one way to explain how the student freelancer model is formed, what value they can bring to companies, and how. Dynamic capabilities aim to explain the potential agility that students may bring and, through that, the development toward achieving a competitive advantage. Dynamic Capabilities Theory focuses on three main abilities: sensing, seizing and transforming. Sensing as an ability means how company can find opportunities and threats in business environment. Seizing, in turn, refers to the ability to efficiently organize and allocate resources. Transforming means continuous renewal to maintain competitiveness in a changing environment. The Dynamic Capabilities Theory draws on key points from the resource-based view together with strategic management practises especially highlighting the role of knowledge and resource reallocation. (Teece et al. 1997, 509-515; Teece 2009, 87-88; Teece 2014, 328) Although this study primarily aims to explain the phenomenon through the Dynamic Capabilities Theory, it does not exclude the possibility of other interpretations.

Workforce flexibility can be seen as a one dynamic capability of an organization. With this specific dynamic capability, a company can respond more quickly to changes, reallocate skills efficiently, and, through learning and teamwork, achieve a level of continuous development. In this way, the company’s adaptability improves in today’s uncertain and complex business environment, thereby also supporting the company’s strategic agility.

(Ajgaonkar, Ganesh Neelam & Wiemann 2022, 951-954; Muduli 2016, 1567) From the perspective of the theoretical framework, it is important to narrow down dynamic capabilities into smaller subcomponents to study the phenomenon comprehensively enough.

In this research, workforce flexibility is examined in the context of external labour, and more specifically, the utilization of freelancers. By using freelancers, a company can respond flexibly and quickly to resource needs. In addition, as external experts, freelancers complement the company's internal expertise and can bring up-to-date knowledge about technologies and trends. (Kozica et al. 2014; Horbach & Cowling 2022) When a company effectively utilizes freelancers, its ability to transform and innovate develops, which could hypothetically strengthen the capabilities described in the Dynamic Capabilities Theory for achieving and maintaining competitiveness.

From a theoretical perspective, the utilization of students as freelancers has been scarcely studied. However, the position of students in working life, as well as the use of freelancers as an external resource in business operations, has been examined in some extent. (Narayanan et al. 2010, 61–62; Kozica, Bonss & Kaiser 2014, 421–423) The structure of this theoretical framework is formed by combining the concepts of students and freelancers theoretically. The aim of the research is to introduce a new type of flexible resource, the student freelancer, intended to bring the company the latest academic expertise, an entrepreneurial mindset, and flexible, temporary labour (Jackson et al. 2022, 101). From the framework's perspective, the Dynamic Capabilities Theory is used to explain the impact of student freelancers on company operations specifically from the viewpoint of flexibility and value creation (Teece 2009, 87–88).

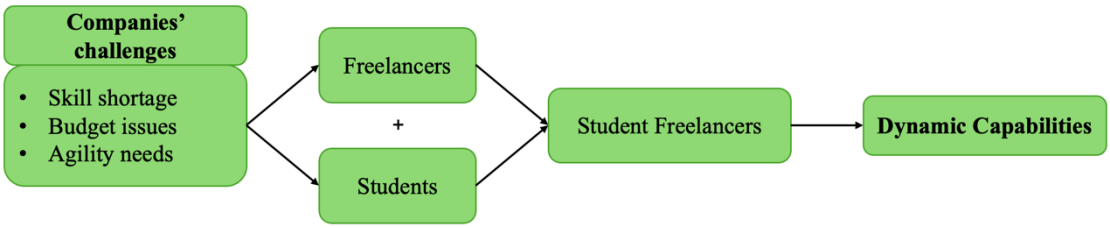

Figure 1: Theoretical Framework

Table 1 presents the challenges faced by companies, which form the basis for the theoretical framework of this study. Companies make use of both students and freelancers, which, when combined, form the concept of the student freelancer. Through this model, the aim is to reach the dynamic capabilities that are examined in this study. On this basis, the study seeks to identify the types of benefits that student freelancers can provide for companies.

1.2 Research questions and objectives

The purpose of this study is to examine the use of temporary and flexible labour to develop dynamic capabilities. In today's rapidly changing and uncertain business environment, workforce flexibility has emerged as one of the key strategic resources (Horbach & Rammer 2022, 734; Brunello & Wruuck 2021, 1145). According to the core premise of dynamic capabilities theory, a company's competitiveness is based on its ability to sense and seize opportunities and to transform its operations accordingly in changing market conditions (Teece, Pisano & Shuen 1997, 515; Teece 2009, 87–88). Flexible and temporary labour can potentially support these capabilities by providing external assistance for allocating expertise, acquiring new knowledge, and utilizing external competencies (Ajgaonkar, Neelam & Wiemann 2022, 951; Kozica, Bonss & Kaiser 2014, 423). The main research question of this study is as follows:

RQ: How can the use of temporary and flexible labour contribute to the development of dynamic capabilities in companies?

In this study, the phenomenon of workforce flexibility is examined through the lens of student freelancers. Student freelancers combine academic knowledge, technological expertise, and an entrepreneurial mindset in a cost-effective and low-risk manner (Jackson, Shan & Meek 2022, 101; Pang et al. 2019, 57). The purpose of the study is to explore how the utilization of student freelancers can support a company's dynamic capabilities and thereby enhance organizational agility and competitiveness. At the same time, the study aims to conceptually define the student freelancer and understand in which roles and situations they can create the most value from the company's perspective. For this reason, three sub-research questions have been selected for the study, through which the aim is ultimately to answer the main research question. The sub-research questions have been formulated as follows:

sRQ1: In what kind of roles students provide the best value for companies as freelancers?

sRQ2: In which situations or challenges is the use of student freelancers most beneficial for companies?

sRQ3: How is the concept of a student freelancer defined and understood by companies?

The purpose of sub-research question sRQ1 is to identify the roles in which students could best be recruited as freelancers, and from which companies would gain the most value. Once this is understood in sufficient depth, a company can build suitable business models and more flexible recruitment models to utilize students and recent graduates more effectively. (Narayanan et al. 2010, 61–62; Pang et al. 2019, 63; Kozica et al. 2014, 423) The second sub-research question sRQ2 aims to determine in what kind of situations students should be recruited as freelancers rather than in other forms of recruitment. Based on the theoretical part of the study, students could, through a more flexible model, help companies facing a skills shortage, for example, but this has not yet been proven. With an objective research

question, it is possible to explore and verify the veracity of the assumption based on the available data. (Horbach & Rammer 2022, 734; Brunello & Wruuck 2021, 1145–1147; Kozica et al. 2014, 423; Narayanan et al. 2010, 61–62) The purpose of the final sub-research question sRQ3 is to find out how company representatives define student freelancing. This makes it possible to compare their perspective with the theory-based definition, allowing other elements to be analysed more comprehensively and reliably. (Jackson et al. 2022, 101; Pang et al. 2019, 57; Aboobaker & Renjini 2020, 73)

1.3 Delimitations

The research aims to be as narrowly defined as possible to examine the studied phenomenon in sufficient depth. The topic is very recent, with only limited existing theory (Kozica et al. 2014, 421–423; Narayanan et al. 2010, 61–62). Although the research is therefore quite general, delimitation is a critical part of the research process. This study primarily focuses on the company perspective regarding what kind of value students can bring to a company as freelancers. In other words, this research does not address the experiences or wishes of students or freelancers, for example regarding potential roles. On the other hand, the theoretical part of the research does touch upon the capabilities of students and freelancers, mainly because it is necessary to define the concept of a student freelancer (Jackson et al. 2022, 101; Pang et al. 2019, 57).

In addition, the study considers as freelancers only higher education students and individuals who have recently graduated from higher education. Secondary education students as well as more experienced freelancers are excluded from this research. Furthermore, when it comes to students and recent graduates, the focus is specifically on their utilization within the freelancer model. Traditional recruitment models and long-term employment relationships are excluded from the study, except for a brief discussion of the more traditional internship model, to create a clearer picture of the student freelancer model (Narayanan et al. 2010, 61–62). Since the existing literature is minimal, the more traditional internship model provides some insight into how students create value for companies (Rae

2007, 615). The research also emphasizes qualitative value creation and does not take a stance on financial metrics. Legal and contractual aspects typical of the freelancer model have also been excluded from the study, so that comprehensive and authentic information can be obtained about the benefits students and recent graduates bring to companies (Kozica et al. 2014, 423).

Data collection has been limited to the client companies of a startup company, from which a comprehensive set of data has been sought. Companies that are not familiar with the student freelancer model have been excluded from the research, as those familiar with the model have already seen potential benefits that students can offer. Therefore, they can provide information based on their own experiences. In addition, the research includes interviews with companies operating in Finland, and thus companies operating exclusively abroad have been excluded from the study. (Eriksson & Kovalainen 2008, 6; Puusa, Juuti & Aaltio 2020).

1.4 Significance of the study

This research can create value from several different perspectives. From a scientific perspective, the research explores flexible forms of work as part of agility, and through that, the creation of competitive advantage and the effect it has on a company's dynamic capabilities (Teece et al. 1997, 516; Kozica et al. 2014, 423; Horbach & Rammer 2022, 734). The role of freelance work as part of strategic flexibility and competitiveness has been studied very limitedly, which makes this research unique (Kozica et al. 2014, 421–423). For companies, this research can provide operating models and suggestions on how students can be effectively and optimally utilized as freelancers. In addition, this can offer companies one solution to the skills shortage and add flexibility in a globalized and increasingly fast-developing market. (Horbach & Rammer 2022, 734; Brunello & Wruuck 2021, 1145–1147; Gupta 2023, 40) Thirdly, the research is meaningful from the perspective of students and recent graduates, as interest in entrepreneurship among younger people is growing. With the help of this research, a closer understanding is reached in which roles would be most useful and realistic from a company's point of view within the freelancer model. This way, students

can, when necessary, also guide their own actions to gain sufficient tools to meet these needs. Furthermore, if the research creates a basis for new operating models in the future, it also helps students gain access to working life more quickly, create value, and build networks (Jackson et al. 2022, 101). However, this research is primarily very superficial, as the purpose of this study is to open a glimpse into the world of student freelancers, which may in the future lead to further studies on the subject (Kozica et al. 2014, 421; Narayanan et al. 2010, 61–62).

2 Literature review

The purpose of this chapter is to provide a literature review of the theoretical background of this study. This section presents the theoretical and literature background of the study, forming a broad foundation for understanding the utilization of student freelancers. It begins with the theory of dynamic capabilities, which provides the basis for understanding how companies in the modern business environment build and renew their resources to respond to rapidly changing market conditions (Teece et al. 1997, 516; Eisenhardt & Martin 2000, 1107). The purpose is to offer a theoretical perspective on how companies can benefit from and make use of external expertise to strengthen their competitiveness (Horbach & Rammer 2022, 734). This framework enables the examination of workforce agility as a manifestation of dynamic capabilities. The aim is to demonstrate how flexible human resources can also help companies meet the demands of an increasingly fast-changing business environment (Kozica et al. 2014, 423). This theory also provides a good transition to freelancer theory, which is introduced in the next section. There, the focus is on how companies can achieve the previously mentioned outcomes through the utilization of external experts (Kozica et al. 2014, 423). In the latter part of the literature review, theory related to companies' internship programs is examined, showing how organizations can temporarily benefit from students' contributions (Narayanan et al. 2010, 61–62). By combining these insights with freelancer theory, it becomes possible to define the concept of the student freelancer, which integrates elements of both freelancing and internship models into a unified framework (Pang et al. 2019, 57; Jackson et al. 2022, 101). Together, these perspectives form the central theoretical foundation of this study, which is later applied in the analysis phase.

2.1 Dynamic Capabilities Theory (DCT) as theoretical background

This section examines the core concept and history of the Dynamic Capabilities Theory, as well as how flexible workforce allocation can be seen as an essential dynamic capability for driving a company forward in the future. One of the most important yet challenging tasks of modern management is to create a strategy for the future (Abrantes & Madsen 2023, 6). This highlights both the need and the major challenge for companies to continuously renew

themselves and remain agile. The theory of dynamic capabilities seeks to explain and facilitate the understanding of this challenge. Dynamic capabilities can be divided into three areas for analytical examination. The first is to identify and shape opportunities and threats, the second is to seize those opportunities, and the third is to enhance, protect, and, when necessary, reconfigure the company's tangible and/or intangible assets to maintain competitiveness (Teece 2009, 4). The business environment requires companies to continuously adapt to evolving customer and technological opportunities to enable the maintenance of competitiveness. To address these opportunities, a company needs difficult-to-replicate enterprise capabilities, which are part of the dynamic capabilities. This can also be defined as strategic flexibility, in which the company utilizes its coordination capability and flexible resources to create strategic options. Additionally, the dynamic capabilities include the ability to reshape and develop an existing ecosystem, create new products and processes, and design and implement sustainable business models. (Abrantes & Madsen 2023, 7; Teece 2009, 4) It is also important for companies to focus on strategic agility, which means that instead of reorganizing existing products or operations, the company concentrates on developing new business models. On the other hand, it is also defined as the management's ability to make strategic decisions that allow the company to detect and respond quickly to changing circumstances. (Abrantes & Madsen 2023, 6) The use and continuous development of dynamic capabilities are at the core of a company's success or failure, alongside changes in the external business environment according to the Dynamic Capabilities Theory (Teece 2009, 5). The dynamic capabilities framework aims to explain the sources of competitive advantage and provide company leaders with the necessary insights and guidance to avoid a zero-profit outcome in markets characterized by perfect competition (Teece 2009, 5). In other words, the framework seeks to answer why some companies sustain their competitive advantage over the long term while others fall behind or lose their position entirely. Ultimately, this section delves into how a flexible workforce can be seen as a builder of such competitive advantage and how it contributes to or enables a company's sustained competitive edge. However, the history of the Dynamic Capabilities Theory and the deeper definition of the framework is addressed first.

2.1.1 The history of the Dynamic Capabilities Theory

The global market in which companies operate today is an extremely competitive environment (Sherehiy & Karwowski 2014, 466). Throughout history, various theories have attempted to explain why some companies succeed in the business environment and gain a competitive advantage, while others fall significantly behind. Companies' ability to create and sustain competitive advantage is one of the key focal points of strategic management (Ambrosini & Bowman 2009, 29). In the 1980s, Porter's competitive forces approach became the dominant paradigm in the field (Teece et al. 1997, 510). This theory aims to highlight the actions a company can take to establish a defensible position against competitive forces (Teece et al. 1997, 510). Five industry-level forces determine the profit potential of an industry or a specific industry segment. These five forces are entry barriers, threat of substitution, bargaining power of buyers, bargaining power of suppliers, and rivalry among industry incumbents (Teece et al. 1997, 511). A company can defend itself against the mentioned competitive forces or influence them to its advantage by utilizing this approach (Porter 1980, 4).

Another historical approach is the strategic conflict approach, which focuses on product market imperfections, deterrence of market entry, and strategic interactions. Because of these elements, it is closely related to the competitive forces theory (Teece et al. 1997, 511). The strategic conflict approach implicitly examines competitive outcomes using the tools of game theory. It assesses how effectively a company can keep its competitors off balance through investments, pricing strategies, signalling, and information control. In other words, this theory aims to reveal how a company can influence the market environment and the behaviour and actions of competing firms. (Teece et al. 1997, 511) As can be observed, both the competitive forces theory and the strategic conflict game-theoretic approach emphasize that privileged product market positions generate a company's rent streams (Teece et al. 1997, 510). However, for example, the game-theoretic approach largely ignores the entrepreneurial side of strategy, which in this context refers to how significant new rent streams are created and protected (Teece et al. 1997, 512).

In contrast to the first two approaches, and more specifically the category they form, alternative framework category suggests that competitive advantage is built by leveraging entrepreneurial rents. These entrepreneurial rents are based on a company's fundamental efficiency advantages (Teece et al. 1997, 510). At the core of these approaches is the discussion of firms' strengths and weaknesses, from which they also originate. Evidence has indicated that a company can achieve sustainable competitive advantage mainly through efficiency and effectiveness, which has contributed to the increasing popularity of these perspectives. Their relevance has also been reinforced by advancements in organizational economics and the application of research on technological and organizational change to strategic issues. One prominent approach within this category is the Resource-Based View, which emphasizes firm-specific capabilities and resources, as well as the existence of isolating mechanisms as fundamental determinants of firm performance. (Teece et al. 1997, 510) The resource-based approach argues that firms with superior systems and structures achieve profitability because they have significantly lower costs or offer higher quality and better performance, not because they engage in strategic investments that deter market entry and allow them to raise prices above costs in the long run (Teece et al. 1997, 513).

However, while the Resource-Based View explains why some firms perform better based on their existing resource base, it has been criticized for its limited ability to explain how firms renew those resources over time (Eisenhardt & Martin 2000, 1106). This observation gave rise to a new kind of approach from the perspective of the strategic paradox, according to which companies may lose their competitive advantage by continuing to operate in the same way that previously brought them success. (Abrantes & Madsen 2023, 6) The Dynamic Capabilities perspective emerged to address this gap. It does not focus on economic profits derived from product market positioning but rather on the rents accruing to the owners of scarce firm-specific resources (Teece et al. 1997, 513). While the Resource-Based View recognizes isolating mechanisms, it does not attempt to explain their role in sustaining entrepreneurial rents and competitive advantage together (Teece et al. 1997, 510). The Dynamic Capabilities Theory therefore extends the Resource-Based View by explaining how firms can reconfigure and renew their resource base to remain competitive in changing environments (Abrantes & Madsen 2023, 34). These developments illustrate why the theory of Dynamic Capabilities provides a more comprehensive understanding of how companies

can maintain and renew their competitive advantage over time (Abrantes & Madsen 2023, 6). Therefore, the main theoretical framework for this thesis is built around Dynamic Capabilities Theory.

2.1.2 Definition and key principles of Dynamic Capabilities Theory

The resource-based view could be also suitable for this research, as leveraging external resources is also a competitive advantage enabled through resources. However, besides lacking explanations of the previously mentioned mechanisms, this view does not sufficiently address innovation (Ajgaonkar et al. 2022, 952). Additionally, it overlooks management restructuring and managerial decisions related to the reconfiguration leading to competitive advantage (Ajgaonkar et al. 2022, 952). In this study, one theory that attempts to explain the exploitation of students as freelancers is the Dynamic Capabilities Theory, which has drawn inspiration from previously introduced approaches. The framework highlights two key concepts, "dynamic" and "capabilities", which were not the focus of previously described approaches (Teece et al. 1997, 515). "Dynamic" refers to the ability to respond to a changing business environment by renewing the company's expertise. It can be considered that market entry timing is critical, technological change is rapid, and the nature of future markets or competition is unpredictable, making certain innovative actions essential for a company. "Capabilities" aim to meet the demands of a changing environment, emphasizing the key role of strategic management in adapting, integrating, and reconfiguring the organization's internal and external skills, resources, and functional competences. (Teece et al. 1997, 515) This framework was developed to help both researchers and practitioners to better understand the foundations of competitive advantage at the firm level, along with the creation and preservation of firm value (Teece 2014, 328; Ambrosini & Bowman 2009, 30). Research has also supported the idea that, alongside large companies, small and medium-sized enterprises should strengthen their organizational capabilities and improve their performance in changing environments by utilizing dynamic capabilities (Arend 2014, 51). One of the architects of this approach, David Teece, later described the goals of the Dynamic Capabilities Theory as ambitious. Since then, although the literature has not always

been consistent, the framework has significantly influenced both strategic management theory as well as practice. (Teece 2014, 328)

Entrepreneurial firms are characterized and unified by their ability to create, define, discover, and exploit opportunities (Zahra, Sapiensa & Davidsson 2006, 917). As mentioned, when discussing dynamic capabilities, it refers to a firm's ability to sense and seize opportunities as well as transform (Teece 2009, 87-88; Zahra et al. 2006, 918; Wang & Ahmed 2007, 35). Dynamic capabilities can also be seen as consisting of various concrete and identifiable processes. Such processes may include, for example, building partnerships and making strategic decisions (Eisenhardt & Martin 2000, 1105). In more depth, sensing capability involves searching, recognizing, and responding to new opportunities aligned with customer demands. Seizing, however, refers to the internal adoption, reallocation, and mobilization of resources within the firm. Lastly, the third element, transforming, means the ability for continuous renewal. (Teece, 2014) Dynamic capabilities can also be described as actions aimed at continually achieving competitive advantage by developing competencies to meet new demands and adapting innovatively and timely to new situations and business environments (Ajgaonkar et al. 2022, 954; Ambrosini & Bowman 2009, 32). Eisenhardt and Martin (2000, 1107) describe dynamic capabilities as organizational and strategic routines that reshape, combine, and reallocate a company’s resource base. Through these routines, companies can create value-generating strategies and adapt to changing business environments. Research situated within the fields of entrepreneurship and dynamic capabilities also recognizes differing explanations for how companies adapt to change and generate returns (Arend 2014, 33). This further reinforces how complex and firm-specific dynamic capabilities can be. From a company's perspective, maintaining substantial returns in the long run is impossible without dynamic capabilities, despite possessing resources or competencies. Thus, a company would only enable competitive returns in the short term (Teece 2009, 88). By utilizing and reallocating existing resources more effectively, a company can nevertheless achieve additional returns from the perspective of dynamic capabilities (Arend 2014, 33).

Understanding the emergence and sustainability of competitive advantage requires a broader paradigmatic shift, particularly demonstrated by international competitive situations in high-tech industries (Teece et al. 1997, 515). According to recent studies, the average time for maintaining competitiveness has decreased. In today's world, it has therefore become increasingly difficult for companies to achieve long-term competitive advantage. (Barreto 2010, 257) Previously, attempts to identify company-specific capabilities as sources of competitive advantage have been rudimentary. At the same time, efforts have also aimed to explain how combinations of knowledge and resources can be developed, utilized, and protected (Teece et al. 1997, 515). Before the Dynamic Capabilities Theory emerged, no detailed framework had successfully addressed the issue. However, it has generally been acknowledged that companies succeeding in global markets can rapidly respond and flexibly innovate their products. For a company to achieve rapid and successful adaptation to a changing market situation, every aspect, from objectives to people, must be able to adapt. Additionally, management capability in these companies has been recognized as facilitating efficient coordination and realignment of both internal and external competencies. (Teece et al. 1997, 515; Sherehiy & Karwowski 2014, 466) Teece et al. (1997, 515) also noted that, for example, in a Schumpeterian competitive environment, characterized by dynamic innovation processes and creative destruction, identifying internal and external capabilities that support the development of valuable and difficult-to-imitate products and services is a strategic challenge for innovative companies.

At any given point in time, the most crucial path for companies is a particular pathway of competence development, which they should fundamentally aim to follow. This pathway not only defines the possibilities of internal capabilities for the future but also outlines the current opportunities available to the company (Teece et al. 1997, 515). It should be noted that dynamic capabilities are not merely processes but are also embedded within those processes (Wang & Ahmed 2007, 35). This forms the basis of the dynamic capabilities model. The model emphasizes leveraging both internal and external company-specific capabilities to manage changing market conditions effectively. Furthermore, the dynamic capabilities model highlights the importance of developing managerial capabilities and combining hard-to-imitate organizational, operational, and technological skills. (Teece et al. 1997, 515). Capabilities are often firm-specific and develop through complex interactions

between the company's resources (Wang & Ahmed 2007, 35). Thus, it integrates and leverages research from various fields such as research and development management, product and process development, organizational learning, and human resource management. Insights from these areas help understand emerging sources of competitive advantage, making dynamic capabilities an approach that fosters development and integration into the future. (Teece et al. 1997, 515)

2.1.3 Workforce flexibility as a dynamic capability

The information technology sector, for example, has demonstrated that in a globalized world, where trends and preferences change rapidly, workforce agility has become strategically essential for companies (Ajgaonkar et al. 2022, 951). To respond to global competition and the challenges created by disruption, companies must be able to renew themselves faster than before. (Abrantes & Madsen 2023, 6). Workforce agility enables companies to identify changes in the external business environment, quickly leverage changing trends, and swiftly adapt accordingly (Felipe, Roldán & Leal-Rodriguez 2016, 4624). Agile workforce is also an integral component when a company aims to become an agile organization (Breu, Hemingway, Strathern & Bridger 2002, 23). Developing such a workforce within a company requires the development of employee resources to become more adaptable. (Sherehiy & Karwowski 2014, 466). With an agile workforce, companies can anticipate unstable, complex, and ambiguous business environments. Therefore, organizations strive to establish practices rooted in organizational learning, training, rewarding, engagement, teamwork, and information systems, enabling them to maintain workforce agility. (Muduli 2016, 1567; Shereiy & Karwowski 2014, 466)

Research focusing on workforce agility has previously been linked to the resource-based view (Ajgaonkar et al. 2022, 951-952). Recently, the dynamic nature of the business environment has gained attention, however, Ajgaonkar et al. (2022, 952) highlight that no direct link to the theory of dynamic capabilities has yet been established. From the perspective of dynamic capabilities, research into workforce agility and human resource

management has a notable gap identified by Harsch & Festing (2020, 43), who also emphasize that the topic has generally been understudied. From a strategic human resource management perspective, previous research has primarily focused on how human resource management could facilitate companies and organizations becoming strategically agile. Research efforts have aimed to identify conceptual connections between human resource management and strategic agility (Ajgaonkar et al. 2022, 952). Key themes have been the behavioural perspective, defining predictability, adaptability, and resilience as elements of workforce agility (Sherehiy et al. 2007, 453; Alavi et al. 2014, 6277). Workforce agility in business environments is also defined as the capacity to anticipate changes and respond rapidly, enabling companies to capitalize on opportunities created by these changes (Ajgaonkar et al. 2022, 953).

Previously, strategic human resource management research has predominantly addressed overall strategic agility, with limited focus on workforce agility and its driving factors (Ajgaonkar et al. 2022, 955). While human resource management is only one among several business components of strategic agility, it can indeed be considered as one of the core components (Ajgaonkar et al. 2022, 954). Therefore, it is noteworthy that research has not delved deeper into the details. Instead, practical research has investigated the role of human resource management in companies' journeys toward strategically agile organizations overall (Ajgaonkar et al. 2022, 954).

Ajgaonkar et al. (2022, 959) identified in their study that clients base their decisions regarding technology trends on information provided by third parties. From this, it can be assumed that companies seek validation for their investment decisions from external information sources, which could, for example, lead a company to replace employees with artificial intelligence during economically challenging times. Workforce agility must therefore be capable of adapting if short-term plans change due to market conditions. For example, IT companies accordingly categorize their employment strategies into economic and non-economic values, enabling them to identify when it is more beneficial to hire individuals who already possess the necessary skills to deliver a specific service, and when it is more sensible to train existing employees for new services. (Ajgaonkar et al. 2022, 959)

Due to the demands for rapid responsiveness, uncertainty in the workplace tends to increase as employees are required to demonstrate greater adaptability (Sherehiy & Karwowski 2014, 467). According to the study, several participants also indicated that solutions are industry-specific (Ajgaonkar et al. 2022, 960). From the IT industry's perspective, which was primarily the focus of the study, skills and competencies are essential for resolving current challenges, whereas agility reflects preparedness for present and future changes (Ajgaonkar et al. 2022, 960-961). In other words, from a human resource management viewpoint, an agile company can partially address current challenges while simultaneously developing a strategy for managing change and fostering development. For a company to achieve its long-term growth objectives, it requires a strategic decision on workforce transformation and development (Ajgaonkar et al. 2022, 961). To successfully achieve business objectives, such as meeting customer demands and identifying new opportunities, this strategic decision requires continuous renewal of competencies and skills (Ajgaonkar et al. 2022, 961). Additionally, a company can seek enhanced agility by utilizing externally available resources or by hiring employees specifically for projects challenging traditional full-time employment. (Ajgaonkar et al. 2022, 964; Kässi & Lehdonvirta 2018, 242). Generally, in such employment arrangements, the sufficiency of experience and skills, in other words, the amount of time spent in the industry, is considered (Ajgaonkar et al. 2022, 964). While broader experience increases an individual's cost, the candidate may still not be selected due to the absence of a current business need (Ajgaonkar et al. 2022, 964). Thus, leveraging external resources also enhances a company's agility and provides opportunities to utilize the workforce flexibly, according to specific needs.

2.2 Freelancing: key for competitive advantage

This section addresses skill shortages and other factors that hinder or negatively impact agility, innovation, entrepreneurship, and competitive advantage. It also discusses the rise and trend of the freelancer model and how freelancers can play a crucial role in addressing companies' challenges. Firms are increasingly utilizing highly educated individuals who work as independent contractors, known as freelancers, especially in IT, technology, and other related fields (Kozica et al. 2014, 421). It has also increased the amount of remote

work, as more flexible contracts have made it possible (Kässi & Lehdonvirta 2018, 242). When freelancers are engaged in core value-creation activities, they can even enhance knowledge transfer and organizational learning across entity boundaries (Kozica et al. 2014, 421).

2.2.1 Skill shortage and recruiting challenges in business

COVID-19 had a negative impact on the labour market, even causing a recession. The market is currently undergoing structural changes due to globalization, shifts in labour market institutions, demographic trends, and emerging digital technologies. At the company level, this affects investments, primarily due to the limited availability of skilled labour. As previously mentioned, innovating and adapting technologies is critical for businesses, but skill shortages hinder these processes and reduce overall productivity. (Brunello & Wruuck 2021, 1145) However, this challenge is not limited to companies alone. From an individual perspective, it is equally problematic. Without the right skills, employment prospects decline, making it harder to secure a high-quality job. At the same time, unfilled job positions remain vacant for extended periods, or companies are forced to hire inadequately trained individuals to fill roles. (Brunello & Wruuck 2021, 1145)

Skills, according to the OECD's definition, refer to cognitive, non-cognitive, and job-specific abilities that are characteristic of a particular profession, occupation, or industry (OECD 2019, 4). Skill mismatch describes the gap between the supply and demand for skills at the macro level (Brunello & Wruuck 2021, 1145). It means that the requirements between employer and employee markets do not match (Brunello & Wruuck 2021, 1145). On the other hand, if employers are unable to recruit workers with the required skills from the available labour market at the offered wage level, this is called a skill shortage (Brunello & Wruuck 2021, 1146). If the skill levels of the existing workforce simply are not sufficient to meet companies' requirements and needs, it is referred to as a skill gap (Brunello & Wruuck 2021, 1147).

Since 2016, limited skill availability has become an increasingly significant concern for companies, emerging as one of the main reasons for delaying investments or refraining from making investments altogether (Brunello & Wruuck 2021, 1147). Technological development also suffers when the shortage of skilled labour hampers innovation in companies that are more innovative than average (Horbach & Rammer 2022, 734). Some reasons suggested at the firm level include wage levels, workforce characteristics, and the efficiency of recruitment processes. In other words, the market would most likely offer suitable candidates if these conditions were met. (Brunello & Wruuck 2021, 1148) In recruitment processes, the offer made by the company does not align with the needs of the potential employee.

2.2.2 The rise of freelance economy and its impact on organizational flexibility

One way to address the skill shortage is to make use of a flexible workforce. The corporate sector of the world's most dynamic economies is described as entrepreneurial and innovation driven. For companies, this has meant abandoning bureaucratic constraints, especially related to the workforce, to enhance agility and flexibility. By reducing bureaucracy, companies can develop increasingly flexible and agile business models that respond effectively to the demands of an ever more dynamic and rapidly changing business environment. Companies are increasingly collaborating with freelancers, whose role as providers of expertise and new knowledge has grown critical. (Horbach & Cowling 2022, 393) Companies are also increasingly using online platforms to find freelancers (Kässi & Lehdonvirta 2018, 241). Collaborations benefit both the hiring companies and the freelancers employed (Horbach & Cowling 2022, 393). This paragraph discusses the history of the freelancer model and explores how and why freelance entrepreneurship has emerged as a trend, continuously growing, albeit with fluctuations, among professionals.

During pre-industrial society, the relationship between employer and employee could be freely terminated. Contracts did not include matters related to job security (Horbach & Cowling 2022, 395). Thus, the contemporary normal employee model is a relatively new

concept, as the development towards this employee model was very slow. It was not until the early 20th century that workers began to appear in a more modern employment relationship that offered employee protections. Gradually, workers who could be considered freelancers at that time became rarer, and companies started to regard them as less critical to operations and more uncertain for the company's future. From the last quarter of the 20th century onwards, economies and businesses became more dynamic, and the number of innovations increased, disrupting existing practices, among other things. (Horbach & Cowling 2022, 395)

The past two decades have witnessed growth in the freelancer workforce (Horbach & Cowling 2022, 394). Innovation-oriented and entrepreneurial economies have risen significantly, outpacing more conservative economies. The diverse development of markets has led to rapid changes and a turbulent business environment. (Sherehiy & Karwowski 2014, 467). This has led to companies needing to become more flexible and innovative than before (Horbach & Cowling 2022, 393). As the external business environment has become more dynamic, companies have been forced to become increasingly agile and innovative. For example, if a company has effectively responded to the demands of a changing environment, it has consequently performed better (Horbach & Cowling 2022, 395). Good examples of this include new management techniques, such as open innovation, which have compelled companies to create new organizational structures and ways of working (Horbach & Cowling 2022, 393). Companies sought to respond efficiently to new resource requirements by utilizing external contributors, creating a culture of open innovation (Chesbrough 2003, 34). As a result of these new models and needs, a fixed-term contract-worker model has emerged alongside the traditional employer-employee relationship. In an uncertain and dynamic environment, a flexible and need-based worker model enables, for example, the implementation of specific projects and the expansion of capabilities within the organization (Horbach & Cowling 2022, 393).

Both large and small companies wanted to use open innovation to transform their organizational structures into project-based entities that operate flexibly and agilely, thereby increasing the number of external solo entrepreneurs (Horbach & Cowling 2022, 395). For

instance, for small companies with limited financial resources, using freelance workforce has been critical in enabling innovation and competition against large organizations with greater resources (Horbach & Cowling 2022, 394). Due to all these historical developments and changes in the market environment, the number of people identified as freelancers or independent contractors increased (Horbach & Cowling 2022, 395).

Nowadays, instead of replacing regular employees, freelancers complement the work performed by employees of the hiring companies. Freelancers enable innovation, entrepreneurship, and growth, thus creating added value for companies that need to be capable in a rapidly changing entrepreneurial environment (Horbach & Cowling 2022, 396; Kässi & Lehdonvirta 2018, 241). They are primarily hired for their unique expertise or their willingness to take risks, thereby sharing the risk jointly with the company (Horbach & Cowling 2022, 396). In this model, a symbiotic relationship develops between freelancers and employees, with freelancers not posing a competitive threat to regular employees (Horbach & Cowling 2022, 396). The growing popularity of using freelancers is also reflected in the annual 26% increase in the use of freelancer platforms (Wood, Graham, Lehdonvirta & Hjorth 2019, 57). Therefore, in practical terms, the emergence of a dynamic environment has not only significantly increased the importance of freelance work but also fundamentally transformed its nature (Horbach & Cowling 2022, 396).

2.2.3 Freelancing as a tool for maintaining competitive agility

This history and the growth of the freelancer trend have led to an increased academic interest in freelancer theory. In this paragraph, freelancers and their benefits for companies are discussed in greater detail from the perspective of this research. Due to companies' successful practices, the utilization of freelancers as part of a broader trend towards flexible employment forms has increased to varying degrees in all industrialized countries (Kozica et al. 2014, 422). Freelancers have served as providers of entrepreneurship as well as enabled entrepreneurial activities within organizations (Horbach & Cowling 2022, 394). They are frequently referred to as solo entrepreneurs, temporary contract workers, or independent

professionals (Horbach & Cowling 2022, 394). However, this research will primarily focus on the broader term “freelancer,” as it encompasses more than any of the three terms individually.

Officially, freelancers are regarded as self-employed individuals who do not establish permanent employment relationships with the companies or organizations that contract them. Freelancers are paid per assignment for tasks that require specific qualifications or skills. The proportion of highly educated individuals among freelancers is relatively higher than in any other atypical employment arrangement. Typical industries for freelancing include IT, management consulting, media, and engineering. (Kozica et al. 2014, 422) In these sectors, freelancers contribute valuable and up-to-date knowledge of current trends, including technological developments, which is extremely critical in today’s globalized and dynamic business environment (Kozica et al. 2014, 423). Human capital plays a key role in the work of freelancers, which they utilize to succeed in their work, but it is not the only part on the path to success for each party (Popiel 2017, 222). As previously mentioned, companies often cannot internally produce all the knowledge they require, leading them increasingly to rely on external expertise in critical innovation processes (Kozica et al. 2014, 422).

The modern era is characterized by intensified competition, rapid technological advancement, and uncertainty, such as uncertainty regarding available talent, and as a result, it is essential for companies to continuously innovate (Kozica et al. 2014, 422). The previously mentioned dynamic capabilities became determinants of business performance through the ability to create unique resources, which is at least as important as having existing unique resources (Teece et al. 1997, 510). By utilizing freelancers, companies can flexibly close internal knowledge gaps with external expertise, thereby improving their dynamic capabilities (Kozica et al. 2014, 423). Gupta (2023, 40) has also highlighted the benefits gained from collaboration with freelancers, stating that it increases, among other things, flexibility in hiring talent, brings new competencies into the company, enhances innovation capacity, and helps bring products and services to market more quickly. Recruiting and hiring permanent employees takes significantly more resources and time,

making freelancer contracts beneficial due to the flexibility to terminate or discontinue them when external help is no longer needed (Kozica et al. 2014, 423). Additionally, companies can leverage the latest technological advancements and associated knowledge by using freelancers in innovation projects, particularly when the company's internal expertise base is insufficient (Kozica et al. 2014, 423). When company employees and freelancers collaborate, for example, on a joint project, new knowledge emerges. Thus, freelancers can also be considered a source of innovative potential and creativity (Kozica et al. 2014, 423). Ultimately, it is the company's responsibility to harness this potential. Generally, freelancers contribute to creating a more creative working environment by increasing the diversity of expertise within the company (Kozica et al. 2014, 423). Freelancers' capacity to introduce entrepreneurial spirit, innovation, and timely, need-based assistance helps companies enhance their dynamic capabilities, thereby enabling the creation of competitive advantages.

2.3 Integrating student freelancers into business operations

Freelancers are relied on even during difficult times. For example, in the globalization of business operations in the United States during the pandemic, a Spanish startup utilized college interns as freelancers. (Gupta 2023, 40; Kapasi 2022, 80–81) This shows that the need for freelancers, regardless of experience and age, is growing over time, even in uncertain times. Universities and companies are connected and share knowledge with each other in many ways. (Narayanan et al. 2010, 61). Through the joint innovation process between recent graduates and companies, learning can occur both inside and outside the organization as part of the interactive process of innovation work. (Alpaydın 2024, 3; Kapasi 2022, 80–81). In addition to dynamic capabilities and the use of freelancers, the third main topic of this research involves students and recent graduates, who are examined from the perspective of companies as student freelancers. Because there is very limited existing research on this topic, the concept will initially be approached through internships, as these enable students or recent graduates to bring value flexibly to companies already at the early stages of their careers (Maertz et al. 2014, 130-131; Kapasi 2022, 84). Subsequently, parallels between the internship model and the freelancer model will be identified to define

the concept of a student freelancer. Finally, potential benefits and ways for companies to more effectively and flexibly leverage students as freelancers will be explored.

2.3.1 The value of internship for a company

There are several ways in which companies and universities interact. Companies obtain the latest knowledge from universities through various courses, training programs, consulting, and other joint research projects through which their cognitive capabilities can be enhanced (Narayanan et al. 2010, 61; Alpaydın 2024, 2). Through universities, companies gain human capital in the form of students and recent graduates, which enhances their research and development capabilities through projects and consulting services. (Alpaydın 2024, 2). Students, on the other hand, get opportunities to apply their newly acquired knowledge in real-life work settings through internship programs. Students also gain valuable work experience from internships, potentially guiding them towards permanent employment after their studies. Due to these factors, internship programs constitute an essential component of many business schools' activities even though the requirements differ. (Narayanan et al. 2010, 61; Weible & McClure 2011, 231) However, from this study's perspective, more significant is what companies can gain from maintaining internship programs, particularly regarding dynamic capabilities, competitive advantage, entrepreneurship, and innovation (Maertz et al. 2014, 131; Mgaya & Mbekomize 2014, 129).

Internship programs benefit companies by providing temporary assistance when needed and enabling the firm to utilize the student's academic knowledge (Narayanan et al. 2010, 61–62; Weible & McClure 2011, 229; Mgaya & Mbekomize 2014, 137, 141). Companies can also develop their capabilities to innovate new processes and products through that collaboration. (Alpaydın 2024, 2; Weible & McClure 2011, 230). Additionally, internships allow companies to test and screen students based on performance, identifying those best suited for future roles (Narayanan et al. 2010, 61–62; Weible & McClure 2011, 229). For students, learning through work is important for the development of workplace skills (Rae 2007, 615). Research on internships, especially from the companies' perspective, is

relatively scarce, leading to limited understanding of their effectiveness, despite their long-standing popularity in business practice (Weible & McClure 2011, 229). Narayanan et al. (2010, 62) note that literature on business school internships is sparse and primarily descriptive, lacking a coherent theoretical framework. Furthermore, they emphasize that internship research typically focuses on only a small part of the entire process, even though internships involve complex relationships among multiple actors. Considering all this, it is quite surprising that clear evidence regarding internships' impacts, especially on companies, is still lacking. (Narayanan et al. 2010, 62)

From a company's perspective, how internships are integrated into company processes is. Firms need to consider their size and available resources to manage internships effectively (Maertz et al. 2014, 131). Additionally, companies must determine how students are selected and integrated into their operations (Narayanan et al. 2010, 65). This process and the associated programs can be surprisingly particularly in terms of supervision and reinforcement required, considering that students may not remain with the company after their internships (Maertz et al. 2014, 131). Typically, a designated individual within the company is responsible for managing interns and overseeing the internship program. This creates a formal structure for the process, solving challenges related to a potential lack of clear procedures. On the other hand, if firms do not designate responsible personnel, the effective utilization of interns' abilities may suffer significantly. (Narayanan et al. 2010, 66; Maertz et al. 2014, 131) Nevertheless, companies generally derive multifaceted benefits from internships (Maertz et al. 2014, 130). These may include the completion of specific projects, improved efficiency through less costly labour, opportunities for evaluating and recruiting interns, and the transfer of new ideas from students to the organization (Narayanan et al. 2010, 66; Maertz et al 2014, 130; Mgaya & Mbekomize 2014, 137, 141). Thus, it can be concluded that the benefits students bring through internships differ significantly from what traditional full-time employees typically contribute to companies.

2.3.2 Competencies that companies search for in students

Especially with the growing need for knowledge workers, the demand has increased specifically for competent fresh graduates (Pang et al. 2019, 55). Fresh graduates have already been a source of work for companies, but they have also become key human resources for organizations (Pang et al. 2019, 55; Tomlinson 2017, 341). Fresh graduates are expected to have, among other things discussed later, the fundamental technical skills related to their profession (Pang et al. 2019, 57). The challenge, however, is that universities have no requirements to educate students in a way that meets the needs of the business world (Rae 2007, 607; Tomlinson 2017, 339). However, in countries such as Finland, the technical level of university graduates is already very high to begin with. In addition to this, studies have been able to show that soft skills have received more attention both at universities and organizations (Pang et al. 2019, 57). Companies also have a strong need to employ recent graduates, but there are clear gaps between companies' requirements and the skills of graduates. (Rae 2007, 610 Tomlinson 2017, 341).

From the companies' perspective, studies have aimed at finding competencies required regarding work readiness, profitability, and performance. The ability and willingness to learn, initiative, efficient planning and organizing of activities, as well as efficient time management and action were found to be the most important competencies prior to educational experiences situated in working life. From the companies' side, taking responsibility, efficient planning and organizing of activities, and efficient time management and performance were the most important competencies among students. Additionally, for example, in predicting business profitability, team leadership, achievement orientation, developing others, and influence over others were critical. (Pang et al. 2019, 57, Rae 2007 610) Based on these research findings, it can be concluded how valuable more abstract skills are in working life, especially among students and recent graduates, who do not yet have much experience (Kapasi 2022, 89). Students and fresh graduates coming from universities, through job opportunities provided by companies, can utilize their skills to advance companies' competitiveness (Pang et al. 2019, 63; Mgaya & Mbekomize 2014, 141). However, companies find it challenging to identify graduates of this kind. (Rae 2007, 610).

2.3.3 The student freelance model: flexibility beyond internships

Maintaining entrepreneurship at the core of the business world is critical for future sustainability and innovation. All over the world, nurturing entrepreneurial skills and intentions, particularly among young people, is central to socioeconomic development (Aboobaker & Renjini 2020, 73). Entrepreneurial competencies such as critical thinking, problem-solving skills, collaboration, and value creation are skills possessed by students and recent graduates whom a constantly evolving and complex work environment demands to hire (Jackson et al. 2022, 101). Stimulating students' interest in entrepreneurship and enhancing their skills related to starting ventures already at the university level is therefore significant, as young people constitute the most potential group from which new entrepreneurs emerge (Aboobaker & Renjini 2020, 74). Consequently, curriculum renewal also needs to be continually assessed, since there is a considerable gap between workplace expectations and the entrepreneurial skills of graduating students (Jackson et al. 2022, 101). Additionally, globalization and disruptive technology have created entirely new dimensions in the work environment, including gig-based employment relationships and remote and flexible working arrangements (Jackson et al. 2022, 102).

It should be noted that students or recent graduates have not been very widely utilized specifically as freelancers. Partly because of this, the existing research-based knowledge on this topic is very limited, and the traditional definition of a freelancer mainly focuses on work experience, which students rarely have. However, as previously discussed, students already have entrepreneurial skills gained through their education, which creates an initial basis for potential employment both as freelancers and as modern traditional employees. For this research, it is therefore critical to define what "student freelancing" means, to evaluate its significance and value for companies. Dynamic capabilities guide the company to recognize opportunities and threats, seize them, develop its operations, and reorganize internal practices (Teece 2009, 4). Without dynamic capabilities, maintaining significant returns over the long term from a company's perspective is almost impossible, even if they own the resources and competencies, resulting in the company's potential to achieve returns only in the short term (Teece 2009, 88). Eisenhardt and Martin (2000, 1117) note, however, that dynamic capabilities are not a source of long-term competitive advantage, but rather it

is the speed and skill with which they are applied that matters. Companies are currently widely and increasingly utilizing highly educated individuals as freelancers, as they enable innovation, entrepreneurship, and growth, which are critical factors in a rapidly changing business environment (Kozica et al. 2014, 421; Horbach & Cowling 2022, 396). Accordingly, it can also be seen that the rapid and effective utilization of capabilities lies at the core of dynamic capabilities (Wang & Ahmed 2007, 36).

Freelancers can flexibly fill internal knowledge gaps within the company and provide workforce as needed, which companies also desire from students in internship programs, and terminate these relationships when the need ends, precisely increasing flexibility and thereby improving dynamic capabilities (Kozica et al. 2014, 423; Narayanan et al. 2010, 61–62). Based on this theory, in this research, a student freelancer is defined as a university student or recent graduate whom a company hires temporarily as an entrepreneur to leverage their latest academic knowledge, their ability to quickly learn, and entrepreneurial capabilities, such as critical thinking and problem-solving skills (Narayanan et al. 2010, 61–62; Pang et al. 2019, 57; Jackson et al. 2022, 101). Combining the characteristics of a student freelancer with the traditional idea of flexibility enhances the company's capability to recognize, seize, and adapt to changing opportunities and threats in the business environment, thereby improving the company's dynamic capabilities also in the case of students and recent graduates (Teece et al. 1997, 515; Kozica et al. 2014, 423; Horbach & Cowling 2022, 396).

2.3.4 Strategic benefits of student freelancers

This section aims to delve deeper into what the previously defined Student Freelancer model can offer companies, what value it can create, and how it strategically affects a company's operations. Universities and other research institutions have generally been recognized as key actors in economic growth and international competitiveness (Bellucci & Pennacchio 2016, 733; Narayanan et al. 2010, 61). This serves as a good example of how knowledge-producing institutions play an increasingly important role in the creation of innovations

(Bellucci & Pennacchio 2016, 733). In some definitions, ‘entrepreneurial’ means the same as ‘commercial’. Entrepreneurial universities have an important role in the creation and implementation of economic innovations, which takes place through the shift of knowledge production toward problem-based research and the commercialization of research results into products (Bellucci & Pennacchio 2016, 734; Narayanan et al. 2010, 61). These institutions are considered crucial sources of knowledge for business innovation activities (Bellucci & Pennacchio 2016, 749; Mgaya & Mbekomize 2014, 137, 141). This fundamental idea is also realized in the utilization of Student Freelancers on a smaller scale.

Companies improve their dynamic capabilities by flexibly complementing internal knowledge gaps with external expertise and by using external knowledge in their innovation processes when they are unable to generate all knowledge internally (Kozica et al. 2014, 422–423). Student freelancers cannot contribute expertise based on work experience, but they can transform the knowledge acquired in school into company-relevant knowledge. In addition, student freelancers can provide flexible resources for companies facing investment challenges caused by skill shortages, which often lead to project delays (Brunello & Wruuck 2021, 1147). Companies gain tools for navigating the external business environment, where student freelancers can identify the latest changes, bring insights on emerging trends, and, through school-acquired expertise, help steer adaptation in the right direction (Felipe, Roldán & Leal-Rodriguez 2016, 4624; source on students). Students and recent graduates possess the latest knowledge and are not burdened by historical baggage, which helps them innovate and co-create new knowledge with employees who understand the company’s operating practices (Pang et al. 2019, 57; Kozica et al. 2014, 423). It is therefore quite natural that the business environment is also evolving toward utilizing younger and less experienced individuals more flexibly, rather than relying solely on traditional means.

As organizations develop their practices to maintain workforce agility, it is important to also consider external factors, especially when these factors are students, who are likely to be young (Muduli 2016, 1567). However, this does not mean that entrepreneurial students require constant monitoring. Student freelancers, when working alongside employees, can utilize the existing staff as support. As in the traditional freelancer model, the purpose of

student freelancers is not to replace employees but to complement their expertise (Horbach & Cowling 2022, 396). The perspectives of student freelancers balance the views of more experienced professionals by bringing an entrepreneurial mindset, enabling the transformation of knowledge into organizational benefit, and providing companies with evidence of the individual's competence for potential future recruitment (Narayanan et al. 2010, 66). Based on all this, a flexible way of utilizing students as 'student freelancers' enhances a company's dynamic capabilities by bringing entrepreneurial thinking, an innovative attitude, a future-oriented mindset, and the latest knowledge, altogether creating, when used correctly, an excellent tool for companies to gain a competitive edge.

3 Methodology

The purpose of this chapter is to present the methodological choices and the analysis approach of the study, as well as to explain their suitability for this research. A qualitative research approach was selected because complex phenomena in business can be examined more deeply and in their real-world context (Eriksson & Kovalainen 2008, 6). This type of approach is especially appropriate in new and under-researched topics, where the goal is to understand an emerging phenomenon and build the foundation for new concepts (Tisdell, Merriam & Stuckey-Peurot 2025). Semi-structured interviews were chosen as the method of data collection, as they allow for a combination of comparability and flexibility by exploring participants' experiences and interpretations through a consistent set of questions (Eriksson & Kovalainen 2008, 7–8). Interviews are well-suited for generating knowledge interactively through the phenomenon being studied (Puusa, Juuti & Aaltio 2020). The interview participants consisted of Finnish companies that had already utilized student freelancers and therefore possessed relevant experience, ensuring that the data was based on broad and existing organizational knowledge and understanding. The collected data was analysed using qualitative content analysis, which enables the identification of recurring themes and the systematic organization of findings for the final analysis (Tuomi & Sarajärvi 2018, 117). This method makes it possible to condense the data while preserving the depth and significance of the interviewees' perspectives (Mayring 2023). Together, these methodological choices, which are examined in more detail in the following sections, ensure a strong and coherent foundation for the analysis.

3.1 Research approach

Qualitative research from a business perspective allows the researcher to examine the complexity of business phenomena within their own context (Eriksson & Kovalainen 2008, 6). Flick (2007) also described qualitative research as a context-bound activity that positions the researcher within the world being studied. In qualitative research, it is important to gain an understanding not from the researcher's perspective but from the participant's perspective (Tisdell et al. 2025). This study focuses on the perspective of companies utilizing students

and recent graduates as freelancers and on what advantages companies can gain from it. In this case, the research topic has been studied narrowly, which is why new theoretical foundations must be established, thus creating new research knowledge through this study. Qualitative business research specifically generates new knowledge about how things function within a business context, why they function precisely in that way, and how they could be understood to enable, for example, changing or improving potential shortcomings (Eriksson & Kovalainen 2008, 6). With the help of this study, it is possible, for instance, to identify how companies have previously utilized students, why companies have not previously utilized students as freelancers, and using this information, understand how companies could consider changing their approach in the future.

It has been suggested that qualitative research is particularly justified when prior understanding of the phenomenon under investigation is limited, thus making the research exploratory and flexible, given that the structure of the research problems is unclear (Eriksson & Kovalainen 2008, 8). Qualitative research is often chosen as the approach when there is little existing theory or knowledge available (Tisdell et al. 2025). As already observed based on the theory in this study, the structure remains quite unclear, particularly in the case of students, as there is not much existing research-based knowledge about students' benefits for companies. Qualitative research can be divided into several different approaches, many of which focus on interpretation and understanding (Eriksson & Kovalainen 2008, 7–8). Tisdell et al. (2025) also note that the overall purpose of qualitative research is to achieve an understanding of how people experience and describe the phenomena they encounter. Thus, qualitative research is justified for this study.

The goal in qualitative research is usually to examine the subject comprehensively, which is accomplished through data collection and analysis by considering the context of the research (Eriksson & Kovalainen 2008, 8). In addition, in qualitative research the researcher aims not at testing hypotheses but at building concepts, hypotheses, and theories (Tisdell et al. 2025). In this study, the aim is precisely to gain a comprehensive picture of what kind of value students can bring, particularly as freelancers. However, it is important in qualitative research that the analysis based on the selected samples can generate findings that describe

the broader population (Flick 2007). In this study, the potential sample size is very small, which makes generalizability challenging in any case. Therefore, the intention is to collect data from individuals who have already realized how this works. Different interview types are the most used methods for data collection, which also applies to qualitative organization and management research (Puusa, Juuti & Aaltio 2020). On this basis, this study utilizes qualitative business research, where the data is intended to be collected through interviewing, which will be further discussed in the next paragraph.

3.2 Data collection methods

In this qualitative research, interviews with the company's existing customers are used as the data collection method. An interview can be considered as a conversation between the interviewer and the interviewee, which has a predetermined goal set beforehand (Puusa et al. 2020). In qualitative research, data collection is descriptive, which fits well with the nature of this study (Tisdell et al. 2025). The goal of the interviews is to gather data upon which credible conclusions can be drawn in this research (Puusa et al. 2020). Therefore, in this study, the company's existing customers were selected as the target group, as they already know something about the topic, have utilized students, and have seen what kind of value the students can bring to the company. Trust is also important in interview research (Puusa et al. 2020), which makes the existing customer companies a very suitable target group, as trust has already been established previously. This way, the subjective experience, which is important for the research, becomes part of the study (Puusa et al. 2020). Interview research can be viewed as a social construction, created through the interaction between different participants and the phenomenon under investigation (Puusa et al. 2020).

A semi-structured interview method is used in this research. This research style allows for a wide range of possibilities within the field (Galletta 2012, 19). In both semi-structured and structured interviews, the interviewer typically plans the questions in advance based on theory (Puusa et al. 2020). In this case, the questions were formulated based on theory from the perspectives of dynamic capabilities, freelancers, and students, logically progressing

toward the research objective. In fully structured interviews, even the answers are predetermined (Puusa et al. 2020), which is why this research used semi-structured interviews, to obtain comprehensive and authentic responses from the interviewees. This approach allows the interviewees to assign their own meaning to the subject of the study (Galletta 2012, 19). Semi-structured interviews can thus be considered somewhat more flexible in the sense that they might yield information that the interviewer could not anticipate while creating questions and answers (Puusa et al. 2020). This research method provides sufficient potential for examining a topic as complicated as this (Galletta 2012, 19). Using the mentioned research style and data collection method creates a solid basis for analysis, enabling well-founded answers to the research questions and any possible recommendations to be justified convincingly.

3.2.1 Description of the interviewees

This chapter presents the individuals who participated in the study. A total of four interviews were conducted. Each interviewee is presented anonymously, with only their field and role disclosed to the extent that it is relevant. All interviewees had at least some experience in utilizing students through the freelancer model.

Table 1: Interviewees

	Industry	**Role**	**Have used students as externals**	**Length**
Interview 1	Electrical industry	IT	Yes	33min 21sec
Interview 2	Car accessories	HR	Yes	38min 23sec
Interview 3	Consultancy	Management consultant	Yes	60min 30 sec
Interview 4	Business services	Operational	Yes	49min 15sec

The interviews lasted from thirty minutes to one hour. They were conducted mainly using the same framework (Appendix 1) and carried out in Finnish. Only four interviews were obtained for the study, which limits the generalizability of the findings. However, the interviewees represented a wide range of fields and roles, which may improve the reliability of the results.

3.3 Data analysis techniques

There are numerous different approaches for analysing qualitative research data (Mayring 2023). In this research, the focus is on analysing material obtained from interviews using content analysis. In management, strategic leadership, and international business research, content analysis has become a popular method for analysing data, as it enables the examination of material that is otherwise difficult to access. (Gaur & Kumar 2018, 280; Short & Palmer 2007, 727). This method of analysis can be described as a basic analysis method that can generally be utilized in traditions of qualitative research (Tuomi & Sarajärvi 2018; Gaur & Kumar 2018, 280). The method divides and structures communication into different categories using various analytical tools. (Short & Palmer 2007, 728). Through content analysis, the understanding of the data can be deepened by testing and developing theoretical perspectives and category definitions (Mayring 2023). The analysis method is relevant in this research, as the existing theoretical gaps allow the data to be approached from multiple perspectives. Galletta (2012, 18) emphasized that if a researcher observes a lack of prior studies on the topic, it may be important to keep the analysis plan more open and flexible in relation to theory. At the same time, however, it is crucial that the analysis of the data remains systematic (Galletta 2012, 18). In this study, content analysis is used to allow space for the interviewees' insights regardless of existing theory.

With content analysis, it is possible to create content-based categories into which the collected interview material can be condensed (Mayring 2023). Categories are developed for classification, and specific coding rules are created for each category. (Short & Palmer 2007, 730). From the perspective of this research, finding categories and dividing material into

them is critical to identify different viewpoints on the benefits students bring as freelancers to companies. The strength of the method lies in its ability to enable an in-depth examination of cognitive and emotional aspects, while keeping the data itself at the center of the analysis. (Smulowitz, Cossin & Lu 2023, 765) It has also been mentioned that content analysis can be considered a flexible and neutral theoretical framework (Tuomi & Sarajärvi 2018). In this research as well, it can be considered to function this way, as precisely in this manner the value-creation methods and what could potentially bring competitive advantage to companies with this approach can be identified.

Content analysis is thus a research method whose goal is to create a condensed but sufficiently comprehensive description of the phenomenon being studied (Mayring 2023). From the perspective of organizations, content analysis enables the examination of structural dimensions, allowing insights into the core values of individuals, groups, and entire organizations. (Smulowitz et al. 2023, 765). It aims to produce repeatable and well-founded conclusions about new perspectives, descriptions of facts, and practical guidelines based on the collected data. As the analysis progresses, categories are systematically formed according to the defined themes, enabling a structured and comparable interpretation of the material in accordance with the rule-based, replicable, and theoretically grounded principles of content analysis. (Mayring 2023; Short & Palmer 2007, 729) Despite its popularity, the laborious nature of the method means that ensuring the reliability of coding and analysis is an important aspect to consider. (Short & Palmer 2007, 727). However, in management research, content analysis has become a valuable tool that can be applied to a wide range of studies. (Smulowitz et al. 2023, 765). For this research, content analysis is a justified method to produce analysis supporting conclusions and recommendations. Thus, unified thoughts can be ensured within the research so that it can be replicable in the future and thereby make the research credible and increases the credibility of the research (Short & Palmer 2007, 729).

4 Findings and analysis

This section reviews the material based on content analysis, focusing on what has emerged from the transcribed interview data. The section will include direct references to the interviewees as well as a referential writing style that analyses and explains the core content of the topics based on what the interviewees have said. Based on this analysis, it will later be possible in the discussion section to examine broadly the connections and differences between the theory and the collected interview data.

Table 2: Analysis process table

Phase	Description
1. Transcription	Interview recordings were transcribed into text
2. Familiarization	The material was read through multiple times to gain an overall understanding and to enable comprehensive analysis.
3. Identification of meaning units	Statements and key expressions were extracted from the data so that the themes could be found.
4. Translation	The statements and key expressions were translated into English for the purpose of this thesis.
5. Coding	The identified meaning units were coded according to their relevance.
6. Categorization	Coded units were grouped into sub-themes that were categorized into top themes.
7. Interpretation	Themes were analysed in relation to theoretical framework and research questions.

In Table 2 the analysis process table can be seen so the analysis process can be seen transparently. The process included transcription, familiarization, identification of meaning units, translation, coding, categorization, and interpretation. The entire data analysis process consisted of these seven steps. Below is a coding structure table, which provides a clearer picture of how certain observations led to the identified themes.

Table 3: Coding structure table

Meaning Units	Interpretation	Sub-themes	Theme
"The two most important factors are cultural fit… and the ability to learn." - Interview 4	Companies emphasize personal fit and learning ability over prior experience	Recruitment needs	Companies' need for workforce
"Just to find the right kind of people" – Interview 1	Critical aspect of student recruitment is finding individuals who match organizational culture and team dynamics.	The expectations for student recruiting	Companies' need for workforce
"There are many thoughts, and I have even thought of solutions, but there is no time to implement them." – Interview 1	Lack of internal capacity forces companies to seek external support.	The need for external help	External workforce and freelancing
"That we get some help, for example, from a coder, we can outsource coding work and so on, because the amount varies." – Interview 2	Freelancers are used flexibly for tasks with fluctuating demand, such as coding or development work.	Typical roles for freelancers	External workforce and freelancing
"The threshold to bring someone in as a teammate is very high. How much it requires resources, the onboarding." – Interview 1	Onboarding is resource-intensive and creates barriers to using external workforce.	The recruiting challenges of freelancers	External workforce and freelancing
"It is a resource that companies could utilize a lot." – Interview 4	Students are valuable resources with potential to support companies broadly.	Students' roles and opportunities	Student freelancing and its impact

"Instead of being in an employment relationship, they work as a freelancer." – Interview 2	A student freelancer is defined by self-employment alongside studies.	The definition of student freelancer	Student freelancing and its impact
"It probably does not differ that much in practice." – Interview 4	Student freelancers are seen as largely similar to traditional freelancers.	Student freelancers' and traditional freelancers' differences	Student freelancing and its impact
"Brings value just like any other team member" – Interview 2	Students can integrate into teams and contribute comparably to permanent staff when given opportunities.	The benefits of utilizing student freelancers	Student freelancing and its impact
"Quite a few have had to learn how working life operates." – Interview 4	Limited work-life experience among students can cause challenges in meeting professional expectations.	The challenges of using student freelancers	Student freelancing and its impact
"Of course, the work tasks are at first in line with your own skill level." – Interview 4	Students need assignments matching their current abilities, but they also seek growth through challenges.	Most valuable roles for student freelancers	Student freelancing and its impact
"Flexibility would perhaps increase in a way." – Interview 2	Using student freelancers is expected to enhance organizational agility and responsiveness.	The student freelancers' impact on organization	Student freelancing and its impact
"Recruitment costs money." – Interview 2	Student freelancing offers a cost-efficient alternative to traditional recruitment processes.	The best time for using student freelancers	Student freelancing and its impact
"I wish it would be done more." – Interview 4	Companies express interest in expanding the use of student freelancers.	Future views	Student freelancing and its impact

Table 3 shows the components that the findings phase consisted of and how the subthemes and themes were formed. On the left are examples of codes that were identified from the interview transcripts. These were then used to create shared assumptions, which served as the basis for forming the subthemes and themes. Finally, the themes were divided into three main areas, which are presented in more detail in Table 4 below.

Table 4: Summary of the findings

Main theme (section)	Summary of the findings
4.1. Companies' need for workforce	In recruitment, cultural fit, learning ability, and attitude are emphasized rather than immediate technical skills. Competence requirements vary by role, but companies want to invest in the individual's development in the long term. For students, the criteria set by companies are mostly the same, but activeness, willingness to learn, and personality are seen as important indicators of potential and commitment.
4.2. External workforce & freelancing	External help is utilized for reasons such as speed, flexibility, seasonality, and specific expertise. Typical roles include development and IT tasks, operational support, innovation work, and ideation roles. The main challenges involve maintaining core competence within the company, onboarding costs and bureaucracy, as well as finding the right person quickly. The best practices identified were hybrid teams that combine internal and external expertise.
4.3. Student freelancing & its impact	A student freelancer is an entrepreneurial student or recent graduate who works by invoicing the client. The difference compared to traditional freelancers is minimal, but student freelancers can be more cost-effective, bring new perspectives, and serve as low-risk experiments for workforce recruitment. The greatest value a student freelancer can provide lies in customer service, coding, AI and research tasks, and innovation, especially when working in teams. The main challenges include lack of work experience, idealism, and bureaucracy, while the benefits are quick adaptability and fresh thinking. Their impact on the organization is

	indirect but positive, as they can enhance flexibility and foster a future-oriented culture.

Table 4 summarizes the findings of the analysis section under the main thematic areas. The findings presented in this table are later utilized in the discussion section. In the following chapters, the summarized points are examined in greater depth through interview quotations and the analysis derived from them. The purpose of this summary is to provide the reader with a concise and comprehensive overview of the empirical findings before moving on to a more detailed interpretation.

4.1 Companies' needs for workforce

One main theme that emerged from the interviews was what companies value, seek, and expect from their workforce, especially from new individuals in the need of a recruitment. This section aims first to analyse in general what qualities are appreciated in individuals. After that, it highlights aspects that are specifically focused on in students overall.

4.1.1 Recruitment needs

In all interviews, the importance of the right person in recruitment emerged. Based on this view, the interviewees also described which aspects they focus on during recruitment. The clearest main theme that emerged from the interviews was a person's cultural fit for the organization and the team. From the organization's perspective, it is critical whether the person fits into the team or not. Especially in interview number four, it was emphasized how the person's personality and cultural fit are highlighted when looking for the right individual. The importance of this observation was further reinforced by points from another interview, interview number two, where cultural fit also clearly stood out. Particularly in small teams, the impact of one person can be significant, and some interviewees also had negative

experiences related to a person's personality and fit in relation to the rest of the team. Therefore, it is important to prioritize cultural fit and interpersonal compatibility during recruitment processes.

"What I value the most is the person as an individual." - Interview 4

"The two most important factors are cultural fit… and the ability to learn." - Interview 4

"Cultural fit, core competences, and learning ability." - Interview 2

As can be seen from the quotations above, core competences and learning ability also emerged in the interviews. The importance of core competences, which was especially highlighted in interview two, must be considered particularly when specific expertise is needed quickly for a certain need and the time for orientation is intended to be minimized. For example, it is difficult to recruit someone into a leadership role who has no knowledge of leading others. On the contrary, in interview four, it was mentioned that competence does not matter that much. Learning ability was mentioned more frequently in the interviews, which further emphasizes the importance of finding the right person, as the person must feel right fit in the team even if they do not yet bring significant value to the business directly from the start. In interviews two and four, it was especially highlighted that recruitment can easily be an investment for the next decade, which is why investing in finding the right person is important. It was particularly emphasized that the person will grow into the role and learn the necessary things, even if they do not have the required skills at the beginning.

"That person will certainly grow in that position over the years and learn the things they may not necessarily know in the beginning." – Interview 4

In addition to the previously mentioned points, attitude, the ability to face challenges, and commitment also emerged. Attitude referred to the attitude to develop, do one's best, and learn, which also strongly relates to the previously mentioned learning ability. Commitment is difficult to measure in the recruitment phase, but it was a factor that is appreciated in

individuals. It is important that the person wants to commit and belong to the group, which can also be assumed to relate to the attitude expected from the individual. In interview one, it was also mentioned that people in a company like to challenge the worker. All of this is strongly related to how the person's attitude toward the work, the company, and their own performance is perceived.

"I personally like to challenge people a little." – Interview 1

"And then the attitude." – Interview 2

Overall, the person's suitability as an individual and their attitude toward learning and doing emerged in the interviews as the most important factors. Competences were also important, but they are more role-specific and related to what is needed. Based on this, it can be assumed that when recruiting people, the aim is to build the team as a primary objective and with a long-term perspective.

4.1.2 The expectations for student recruiting

The interviews also brought up discussions about the needs when recruiting students. Students do not directly have experience or the competence that comes with the experience, but otherwise the recruitment of students or recent graduates was not seen as differing from general recruitment criteria. Especially in the recruitment of students, it is emphasized that companies need people who have the desire to learn. In addition, when speaking about recruiting a student team, the chemistry between individuals and how they work together also becomes emphasized. However, measuring and validating one's ability to work with the team is relatively difficult. Another emphasized aspect was also finding the right person, meaning a suitable cultural and organizational fit. These topics especially emerged in interviews one, three, and four. In interview two, mainly the same themes as in general recruitment were emphasized, which is why no single aspect specifically related to students came up during the interview.

"It is very much the same, wanting to learn new things." – Interview 4

"That is why you need to find the right team." – Interview 3

"Just to find the right kind of people" – Interview 1

In addition to showing skills and attitude, students are also appreciated for their extracurricular activities and other pursuits alongside school, which can also advance their career. This could include, for example, making music or photography, which as individual hobbies can show the person's attitude and willingness to learn. In addition, a certain kind of willingness to invest in learning about the company and its culture enough to start one's own work is also considered necessary. In other words, the learning ability and attitude to learn should also extend to the company. This increases commitment along with the idea that although students are hoped to be utilized as flexibly as possible, in the long term they may end up being hired permanently if they prove their abilities and commitment. This also shows that companies hope for long-term thinking from students regarding a potential career at that company.

"In the long term, the goal is to bring everyone in on the payroll. That is how you get that commitment." – Interview 4

"…to invest in those homework assignments to understand the organization's culture and business well enough." – Interview 3

Mainly, the needs in student recruitment do not differ significantly from ordinary recruitment needs. Of course, the weight of certain things must be reduced and others increased to get a realistic picture of the student as a person, which was still considered the most important aspect. This means that the importance of factual competence decreases, and other active engagement is emphasized to demonstrate, for example, entrepreneurial spirit.

4.2 External workforce and freelancing

This section aims to examine in more detail companies' need for external help and how that need can be met. From the perspective of this study, the student freelancer model was particularly emphasized in the interviews, which is why it was also critical to discuss the freelancer model in general with the interviewees, and what leads to this type of flexible external help. First, the need for external help will be analysed, after which the focus will shift to what benefits and disadvantages can be experienced in utilizing freelancers. Together with the aspects emphasized in recruitment, this helps to address the student freelancer model and the value they can bring to companies.

4.2.1 The need for external help

Based on the interviews, the need for external help was generally perceived as critical for many reasons. Primarily, there is a need to get people when they are needed effectively and quickly. In practice, this means that sometimes a company may suddenly have a need to fill a certain task, but recruitment would be too long and heavy a process, in which case they turn to external help. An example from interview 4 highlighted seasonality, where the company's core team has work throughout the year, but when a specific season begins, additional hands are needed to handle the massive number of tasks. In such cases, the use of flexible external workforce is important and effective. In addition, interview one brought up the fact that the internal team is so small that it cannot independently handle all development-related matters. Often, a small team already faces a huge number of different processes and practices in basic operational activities, which leads to difficulties in carrying out development work. External help can assist in development activities in a broad manner.

"It is pretty critical that we get people when we need them." – Interview 4

"There are many thoughts, and I have even thought of solutions, but there is no time to implement them." – Interview 1

On the contrary, interview two emphasized how important it is that core expertise remains within the company. In practice, such expertise is a competitive advantage. The need for external help mostly arises for needs where easy competence or specific expertise is required. However, it is not excluded that these could also help in development work. Supporting this thought, interview three highlighted that a hybrid team combining internal and external help would produce the best result when core expertise is needed to create competitive advantage, along with outside-the-box thinking.

"But if a company decides to outsource its core competence, then it is on very dangerous ground." – Interview 2

Additionally, as stated in the above quote from interview 2, outsourcing core expertise was perceived as a strategically risky decision. In the long term, it removes stability and the foundation from the company's operations, based on the idea that core expertise does not remain inside the company in the long run. However, integrating knowledge from external help into the internal team is the goal in any situation.

Despite this competence-related question, the interviews mainly emphasized that temporary needs are the reason for turning to external actors. However, this type of operation includes many challenges, which are also discussed later, and for example, in interview one it was raised that the use of external help should be as easy and efficient as possible. To utilize external help efficiently, synergy between the individuals and the business must be found quickly.

"Basically, if we have a temporary need, then we want to turn to some actor like that." – Interview 2

"It really has to snap into place quickly, the thing has to flow." – Interview 1

In general, the use of external help is critical and almost essential for companies. It must be noted that a company most likely wants to keep its core business within its own people, but external help can be used, for example, to develop operations or handle urgent, routine tasks. However, there are many challenges and risks for a company regarding when and how to utilize external contributors. Companies want it to work efficiently and effortlessly, which makes finding the right person even more important.

4.2.2 Typical roles for freelancers

The interviews also included extensive discussions on what kind of external help, especially from freelancers, companies aim to receive, using concrete examples. Three main categories emerged where freelancers are utilized. The first is the developer and IT side, the second is the operational side, and the third involves developing new ways of working, so-called outside-the-box thinking.

"That we get some help, for example, from a coder, we can outsource coding work and so on, because the amount varies." – Interview 2

"The two most common are developers, devs" – Interview 4

The most common category in the interviews was clearly platform developers and coders, as this came up in several interviews. For example, when a platform is being developed, temporary help may be needed. Additionally, the best developers often end up working as freelancers themselves due to their own preferences. In other words, if a company wants the best coders or developers, they must be taken as external help. A concrete task where external help has been used in the developer area is the development of a new reporting feature that did not previously exist. In interview one it was mentioned that in such situations the architecture came from the company, and an external person was used for the implementation. Also in interview two, it was noted that the need for coding work varies,

making it easy to outsource because the company can discontinue the contract if the need ends.

The second category identified includes other operational tasks, such as accountants, customer service representatives, recruitment support, and payroll. In other words, work between the company and customer and, for example, finance function tasks, depending on the situation. In these types of roles, flexibility can be created in how the basic business operations are run. It was also felt that external help could be utilized even more in these types of roles, but there are differing challenges associated with their use, which will be discussed in more detail later. These roles were also considered less critical, making it relatively easy to train the workers. In the long term, this is also an easy and cost-effective way to recruit employees, as it allows testing the person's fit and learned competence with low risk.

The third main theme was the implementers of concrete ideas. In practice, this means that the company has a need that they do not have time, skills, or desire to implement themselves. Utilizing skilled external help for this is an effective way to solve the issue so that the company receives the best possible outcome from a person who aims to find new kinds of solutions for business challenges.

"Probably those who implement concrete ideas, with which you can execute things." – Interview 1

The roles of freelancers in companies vary greatly. However, they can be divided into a few main groups, even though that does not directly benefit business development. Business situations and needs vary, which is why companies must have internal discussions and draw strategic lines about where external help is used and where it is not. This need may also vary depending on the industry, company, and even a small internal team.

4.2.3 The recruiting challenges of freelancers

Despite all the positive and efficiency-enhancing aspects, the use of freelancers and other external workforce also involves many challenges, both internal and external to the company. This section focuses on the challenges that emerged from the interviews, which are caused by company decisions, general recruitment-related issues, or, for example, onboarding-related matters. The interviews revealed that the use of external help has been made more difficult at the company level, which is also connected to legislative and societal decisions. These topics are excluded from the scope of this study, but they will be briefly addressed later in the analysis section to support potential future research.

"I understand the point that it is easier to have X amount of a small, limited number of suppliers from whom you can reliably get people." – Interview 4

Based on the interviews, the ease of utilizing external workforce in companies has decreased for many reasons. When needed, the business unit cannot flexibly use a billing freelancer in an ad-hoc manner. Instead, companies generally aim to hire employees for substantial recruitment needs. There is a conflict here, as at the same time, companies are reluctant to grant permission for recruitments, especially in a weak economic situation. In addition, companies want to maintain a list of trusted suppliers, the number of which is limited to ensure sustainable and secure support. There are also legislative reasons related to this, which are not discussed further here. On the other hand, in interview one, it was raised that external contributors are sought to be used as flexibly and extensively as possible, but there are other challenges related to their utilization.

"It has still been a bit of a challenge, where to find that help." – Interview 1

"Really, really, really good people are hard to get, because the contracts are not so good from their point of view." – Interview 4

As can be seen from the quotes above, the interviews also brought up a challenge related to where to find the right and suitable help that is needed. In other words, when a need arises, it is difficult to efficiently determine where exactly the right person can be found for that need. Based on the interviews, companies also have their own suppliers, as mentioned earlier, and the right person is not always found from them. Therefore, companies would want easy tools and flexibility, which consists of many dimensions, for finding external workforce and freelancers. Now, the best people are usually outside the company's own lists, as the contracts have not been so attractive from their perspective. Therefore, companies might also need flexibility in contract negotiations. However, the biggest challenge here is the difficulty of finding the right kind of person for the need.

"The onboarding takes so long that the busiest time might already pass before the new person knows what to do and can actually help with it." – Interview 4

"The threshold to bring someone in as a teammate is very high. How much it requires resources, the onboarding." – Interview 1

Onboarding was also considered a challenge in all interviews from the company's perspective. Getting someone familiar with the company's ways, no matter the need, is mandatory, which in turn takes resources broadly. On the other hand, there are also tasks where onboarding is not required, but those kinds of tasks are very few. In addition to this, due to company processes, for example, arranging a company computer for the worker for a short-term period feels challenging and complicated. Overall, onboarding should be made very efficient, which could lower the threshold to bring in external people to complete tasks and slightly longer projects.

Mainly, the challenges that emerged were the possibility to even employ external workers as freelancers, finding the right help for the need, and onboarding the person cost-effectively. If these factors were improved, companies would not have a large issue hiring external freelancers to carry out their tasks. However, these different factors may vary in weight from one company and organization to another. In addition, there are also legal and societal

challenges that further increase the threshold for companies to even consider acquiring external help in the form of a freelancer.

4.3 Student freelancing and its impact

This section delves into the most critical part of the analysis from the perspective of the study. The aim is to go through the issues that emerged in the interviews from the company's perspective regarding the role and opportunities of students in the company's operations, through which the analysis then logically transitions to defining the term student freelancer. After this, the benefits and drawbacks will be analysed, as well as the areas where students could be most valuable to companies, especially as freelancers. This analysis serves as a solid foundation for defining student freelancing and its impact on company operations.

4.3.1 Students' roles and opportunities

Students bring many kinds of perspectives to business operations. The role of students and the opportunities they bring are seen as things that companies should utilize as much as possible. For companies, students and recent graduates are also an investment in the future. On the other hand, students cannot be placed in just any role, as a certain type of competence and understanding of business is still lacking at that stage.

"Also in our team, I would say that the majority who have come to us over the years have still in some way had student status." – Interview 4

"It is a resource that companies could utilize a lot." – Interview 4

Especially in small companies and in the development of new business, students have been perceived to be of great benefit. It is also seen as a resource that companies should utilize as much as possible, as interview four indicates. This is reflected in the fact that in small

companies, people with student status may form an even larger part than others. At the same time, this is naturally not possible in larger companies, and the utilization of students is much more aligned with certain processes, where the aim is to develop the student into a competent professional for the company in the long run. In smaller companies, a student becomes part of the team as needed, and with a bit of interest, the person is directed toward their area of interest.

"I could say that they are offered all kinds of roles." – Interview 2

"They are quite aware of new phenomena related to, for example, technology or social media." – Interview 4

The roles of students overall are very diverse. Based on the interviews, the group of students is perceived as large and heterogeneous, which can be interpreted to mean that in practice the utilization of a student is based on interest, skills, and need. Based on this, it is difficult to direct the entire group of students toward a specific theme. However, students are perceived to be the most aware of new trends, for example in relation to technology. If we consider what kind of roles would be the most valuable for utilizing students, the role could in some way be aligned with areas where awareness of trends and current topics would be most beneficial. These observations, together with the lack of experience, nevertheless lead to the conclusion that it does not make sense to use students in a senior position by default. On the other hand, the discussions also brought up that this is not excluded either, but rather situation dependent. It can still be assumed that this type of student who could be utilized in a senior position is occasional.

"The most natural path has always been for students to basically come into the operations side." – Interview 4

In interview four, the student's path and its importance in the company's operations were highlighted. According to the observation, the most natural path for a student is to start on

the operations side, giving the student the opportunity to learn about the company's business. This also gives the company the opportunity to find out what the student is genuinely interested in and to guide their career development in that direction. For example, a customer service role can provide a good foundation for understanding the company's services, which can lead the student to become interested in service development. Eventually, a completely new role may be created for the student based on where their interests have directed them. Based on this idea, it is important to note that utilizing a student in a very specific role may limit the opportunities to become interested in a particular area of the business within the company. This limitation, in turn, may reduce the student's potential to grow into a professional in their area of interest.

In addition to this, the role of students as support in marketing also came up, where students are likely to have knowledge and understanding of the most effective current ways to carry it out, as mentioned earlier regarding trends. In interview three, it was also noted that students work best in a group. In a group, students can share their uncertainties and guide each other in the way they see best. In addition, their ability to develop new things and new ways of working is very innovative in a group. These were, however, smaller observations, and this analysis does not delve deeper into them.

From these observations, it can be concluded that the role and opportunities of students in business are relatively significant. They are a positive resource for the company and can bring modern, new knowledge to strengthen the existing expertise within companies. It was also mentioned in the interview how important it is that mistakes made by more experienced people should not prevent students from making mistakes. One learns best through mistakes, and in the best case, these learning processes create something new for the companies. Mainly, the potential of students is there to be harnessed by companies, which must be done correctly.

4.3.2 The definition of student freelancer

From the perspective of the study, it is important to first define the term student freelancer, and in addition, to aim for a shared understanding of what it means in practice. In the interviews, the interviewees were asked about their experiences of what a student freelancer means. Based on these discussions, it is possible to form an analytical theory of the concept, which aims to explain the student freelancer phenomenon.

"It is a student who is ready to employ themselves as an entrepreneur, even during their studies." – Interview

"Instead of being in an employment relationship, they work as a freelancer." – Interview 2

Primarily, it was commonly understood from the concept that the person is a student who employs themselves as an entrepreneur, even during their studies. Recent graduates are also included in this category, as their skills are still quite close to the level of a student. In addition, for example, in interview four it was mentioned that this concept can also include a student who sees a path through which they can utilize their own skills to meet customer needs as an entrepreneur, instead of being in regular employment. In other words, instead of being an employee, the student is a freelancer. Furthermore, in interview 2, it was emphasized that the student is primarily a full-time student and a part-time entrepreneur, as a baseline. This is further supported by the idea that emerged in the interview, that from the company's perspective it must also be understood that the student's studies come first. This affects the organization of the work, and the expectations placed on the student, so that the company can get the best possible out of them.

"It requires a certain degree of entrepreneurial spirit to do the freelancer thing…" – Interview 1

"There is a lot of entrepreneurial attitude there." – Interview 4

An entrepreneurial attitude also came up in the interviews when talking about students as entrepreneurs. For example, in interview one it was emphasized that even starting to do freelance work requires entrepreneurial spirit. This also means that ordinary routine jobs and perhaps working under just one supervisor are not suitable for this type of person, but instead they want to commit more on a short-term basis, which also supports part-time entrepreneurship alongside being a student. In interview four as well, the student's entrepreneurial attitude was highlighted. The entrepreneurial attitude overall also describes well the kind of mindset required from a student as a freelancer, when a certain type of experience and competence from working life is not yet present. In addition, a student freelancer must be someone who dares to take on a challenge which basically is included in the concept of entrepreneurial mindset of a student freelancer.

In summary, a student freelancer is an entrepreneurial individual who primarily acts as a student and secondarily as an entrepreneur. A student freelancer has identified the opportunity to utilize their own skills as an entrepreneur or is already working through an entrepreneurial model by invoicing instead of being in a regular employment relationship. However, in interview three, the need to reconsider the term student freelancer was raised, as it may not describe the individual in the best possible way. This is also worth noting at a later stage.

4.3.3 Student freelancers and traditional freelancers' differences

The discussion about the differences between student freelancers and traditional freelancers also came up in the interviews, mainly from the perspective that there are hardly any differences. This also led to reflections that if there clearly were differences, people would also be treated unequally. From the perspective of the study, it is also worth noting that the lack of major differences is significant. From a company's perspective, this can also create courage to utilize students as freelancers more, once it is understood that the differences do not stem from whether someone is a student or not.

"It probably does not differ that much in practice." – Interview 4

"No, from my perspective it does not differ." – Interview 2

"Well, I do not necessarily see such a big difference in that work, I believe that students can solve it." – Interview 3

Instead of large inherent differences being perceived between the two, dependence on the individual was emphasized, whether the person can complete the given task. Based on this, it can be stated to some extent that there may be more variation among students regarding what they can and cannot do. In interview one, identifying one's own limits came up, which in practice means that a student may take on a task they are not capable of completing. From the company's point of view, this leads to a clear gap between expectations and the actual outcome, which can result in disappointment.

"If we work with a familiar freelancer, the student is by default a new person." – Interview 3

"A student can come up with a new solution." – Interview 1

On the other hand, interview one also highlighted that students have not yet developed certain routines and thought patterns for performing tasks. As a result, a student can sometimes be even more effective by trying to find the best and most efficient solution for each individual task. In interview three, one difference to traditional freelancing was raised. A student freelancer is, by default, a new person to the company. Building trust and a relationship may take time compared to using a familiar freelancer, which in turn reduces the potential for efficiency. However, this does not eliminate the new perspective that a student freelancer can bring, which may be critical for a company compared to a traditionally defined freelancer who executes the same solution for several different clients.

Overall, a student freelancer does not significantly differ from a traditional freelancer. They may bring different kinds of value to a company, based on which it is the company's

responsibility to assess what kind of contributor is wanted for the need. In interview one, it was highlighted that students are lower in price, and for example, in the IT field, the price of freelancers has become somewhat too high. Based on this as well, a student freelancer can bring cost-effectiveness compared to a more traditional contributor.

4.3.4 The benefits of utilizing student freelancers

Various benefits of utilizing student freelancers also came up extensively. There are many advantages that can be observed directly, and then there are benefits that arise indirectly through the innovation brought by student freelancers. At this point, the focus is especially on analysing the first type, as the interviewees were more clearly able to identify these.

"Has very strongly brought help to many tasks." – Interview 4

"Brings value just like any other team member" – Interview 2

Student freelancers have been perceived to be of great help in many different tasks. For example, in implementing automations in the company's processes, a student freelancer has succeeded in bringing a solution that has avoided the need to change the system. Cost-effectiveness in such tasks has been an excellent additional benefit. In interview two, it was mentioned that a student freelancer can bring value in the same way as any other team member. However, in their case, a certain type of competence must continuously grow so that value creation rests on a sustainable and long-term foundation.

"If it is one person, then it is almost only temporary help." – Interview 3

In interview three, it was noted that if a student freelancer is used as an individual, it is by default considered temporary help. On the other hand, in interview four, utilizing a student freelancer was seen as a flexible way to validate recruitment. This also emphasizes a certain

difference in perspective depending on the need. In interview three, it was also discussed that a multi-person team of student freelancers would work best, as students can support each other. In the conversation in interview four, a project carried out by a student freelancer team was also brought up, which helped produce a lot of already usable material. Therefore, it is important to note that part of the value produced by student freelancers may also come from their interaction with each other. On the other hand, using a hybrid team composed of student freelancers and people from the company's core team may be an excellent way to create something new for the company in the longer term in terms of disruption and innovation, the value of which is realized only in the future. Based on this, when seeking support for change or disruption, a team consisting of student freelancers can be very valuable.

"Well, probably the lack of history" – Interview 1

"When you have done it, we go through it and look at what mistakes were made." – Interview 3

For a student, the lack of history in, for example, testing or implementing a system can be valuable for the success of the project or task. In interviews one and three, it was highlighted that student freelancers should also be allowed to make their own mistakes. In practice, it is good to let the person perform the task and then go through the successes and mistakes afterward. Even those mistakes can give new lessons and create ideas, whereas a restricted method dictated by someone in the company's core operations might hinder the potential that a student freelancer can bring. According to interview one, a student freelancer has brought new ways to implement things, which has, in turn, brought entirely new practices to the company. It was also felt that student freelancers are best suited for implementing innovative ideas.

By default, a student freelancer does not significantly fall behind other groups in their work. A student freelancer can bring companies innovative solutions, a new perspective without the burden of history, and cost-effective labour. From the company's perspective, the value

created by a student freelancer essentially stems from these factors, alongside the fact that a student freelancer also brings additional hands when needed. A team composed of student freelancers was also seen to bring benefits, which is an interesting observation especially alongside cost-effectiveness.

4.3.5 The challenges of using student freelancers

Alongside the benefits, there are also several challenges related to the use of student freelancers. From the company's perspective, both more theoretical challenges and concrete, clear challenges emerged in the interviews. In addition, many challenges were raised that stem from students themselves, societal issues, and legal matters, but especially societal and legally based issues are excluded from this analysis, as the focus is primarily on matters that the company itself can influence.

"Maybe it's that if responsibility has been given, then expectations must be fulfilled." – Interview 4

"Young people are easily idealists, and with good reason." – Interview 3

"With an employee, you always have a notice period." – Interview 2

It was strongly emphasized in the interviews that certain expectations are placed on students as freelancers. For example, if responsibility is given to the contributor, promises must be fulfilled. Due to school or other background, students may have different expectations of the tasks than what the assigner expects from them. Even if the student is very entrepreneurial as a freelancer, a certain type of idealism was also perceived in the interviews as a challenge in utilizing them. This may lead to a situation where it is difficult to let go of one's own best idea, even if it is not the best solution. In addition, the opportunism of students, especially those who are entrepreneurial, may reduce their willingness to commit. This can create a risk, as noted in interview two, that a student freelancer could in principle terminate the contract at any time. When thinking about a student as an employee, they by default have a

notice period. This provides a certain type of security for the company. On the other hand, in interview two it was also pointed out that this challenge is theoretical and may never actually materialize.

"Quite a few have had to learn how working life operates." – Interview 4

Student freelancers may still have relatively little experience in working life, which can lead to a lack of understanding of how working life functions. In interview one it also emerged that students do not always understand the boundaries of what they are capable of and what they are not. In the freelancer role, it was considered important that the student can communicate their skills to the company and, if necessary, redirect elsewhere when skills and need do not match. On the other hand, in interview four it was also noted that this can happen to anyone and is not necessarily specific to students.

"So, in a way, there is always an organizational and cultural barrier." – Interview 3

In the conversation in interview three, an organizational and cultural barrier was also raised, which, instead of being directed at the student freelancer, is mainly related to the company offering the task. Initially, there may even be resistance within the company to this type of model. In addition, more experienced employees working in the company may feel the need to teach and guide, which is not a bad thing, but may limit the opportunities of the student freelancer to bring something unique. This was not seen as a very large problem, but it is worth noting that challenges slowing down operations may also arise from within the company. In practice, companies may find it difficult to genuinely do things differently, especially when utilizing students as freelancers is still a relatively new phenomenon overall.

There is no right of direction. – Interview 2

In addition, there are several practical challenges. Companies do not have the right of direction, when utilizing a student as a freelancer, which in practice means the employer's right to oversee and manage work. Furthermore, internal bureaucratic issues within the company can be a challenge when, for example, a company email address cannot be flexibly provided to an external contributor, access to the company's systems is difficult, and the company may not be able to ensure information security. This creates friction and slows down the integration of the student freelancer into the company's operations.

Altogether, there are many types of challenges. The opportunism and idealism stemming from students can, at best, be an important seed for change for the company, but at worst, leave the company with an unfinished task and no one to complete it. Additionally, the lack of experience among students may cause challenges in understanding working life. Finally, from the company's perspective, there are concrete bureaucratic matters that may be a barrier or even an obstacle to the use of externally employed student freelancers. On the other hand, these are personal and company-specific issues, but it is important to recognize them.

4.3.6 Most valuable roles for student freelancers

The interviews also aimed to identify the most valuable potential roles for students specifically as freelancers. A clear challenge was identifying roles beyond those in which students have already been utilized. As a result, part of the role-related analysis is also somewhat theoretical, which may not necessarily reflect reality. In addition, a challenge in analysing the most valuable roles is that this analysis occurs at a very high level, meaning that individual differences between people may have influenced the experiences of utilizing student freelancers.

"Of course, the work tasks are at first in line with your own skill level." – Interview 4

"Students crave challenges quite a lot." – Interview 1

In the interviews, the idea of the skill level of student freelancers came up, which may especially in the beginning still be relatively low. Therefore, it is important to align the tasks for student freelancers with their skill level. Students want to face challenges that they can solve independently, which means that finding the right balance between these two is important. From the company's perspective, however, it is also important to consider what brings the most benefit to the company. Based on the interviews, the benefit could come from an easier and more cost-effective way to recruit, or from the perspective that students bring to the development of a product, service, or process. For this reason, it is important to examine the use of student freelancers from the company's perspective and on a case-by-case basis.

"There were basically coders and then there were customer service people." – Interview 4

"When solving problems related to customer service and the technical solutions of the systems." – Interview 1

"Everything from customer service to supporting AI processes." – Interview 2

What stood out most clearly in the interviews was supporting customer service as a student freelancer. In three different interviews, it was said that student freelancers have been used or could be used in this role. It can be stated that this brings ease and cost-effectiveness to the company in a critical, yet skill-wise relatively low-demand role. In addition, coders, AI processes, and other roles requiring technical solutions were brought up, in which student freelancers have been perceived as good due to their up-to-date knowledge and eagerness to learn. In these roles, utilizing student freelancers can bring new knowledge into the company, which can be implemented as part of the company's practices and processes.

"Of course, if there are new projects where background or research work needs to be done in our team, then students could be pretty good at that." – Interview 4

"All those where one aims to find things beyond (the internal challenges in the organization), that's the most important angle of internal efficiency, where young people are of value to utilize." – Interview 3

Slightly more uncommon thoughts emerged in the interviews related to research work and solving internal problem areas in the company. For the topics that arose in interviews three and four, the underlying idea is that students are excellent at investigating different matters. As externals, they notice things that a core team member may not be able to see for being so intensively involved in a company's business. Students' ability to search for information is also an excellent tool for companies in investigative work. In practice, a company could flexibly use student freelancers to identify pain points or conduct, for example, market research. In addition, interviews one and three also highlighted that student freelancers could be good in innovation tasks when they are able to bring fresh thoughts into the process from the outside.

The most important points regarding the most valuable roles of student freelancers are that student tasks must be balanced between the person's skill level and a sufficient challenge, in short-term needs student freelancers can be used to achieve cost-effective operating methods, and in the longer term, the value of students lies in research, investigation, and innovation work. These observations can help companies recognize their needs and consider whether a student freelancer could be the best fit for that specific need. This evaluation could help companies to do things in a new way.

4.3.7 The student freelancers' impact on organization

The impact of student freelancers on companies was also a topic that came up in the interviews, but for which there is not yet very much concrete evidence. Young people are seen as having potential, and they are thought to be a kind of seed for process and organizational changes. In other words, mainly a student freelancer cannot directly influence

things very much, but indirectly and over a longer time span, change can come to the company from many perspectives.

"There is that potential in young people." – Interview 4

"It has helped a lot when we are working with a small team." – Interview 1

In the interviews, it was felt that using a student as a freelancer has already made operations easier. For example, according to interview one, a small team gets a lot of help from external support in general, but especially from the student freelancers they have utilized. According to the interview, there has been help in documentation, which cannot be directly automated. This has removed tasks from the company's core team, which in turn has given time for other tasks.

"Flexibility would perhaps increase in a way." – Interview 2

"Just quickly bring them in as freelancers and then build that career path into our service from there." – Interview 4

In addition, the interviews also reflected on more theoretical effects from the company's perspective. The increase in flexibility was seen as one of the major factors, which is also supported by earlier analysis. In interview four, it was felt that the ability of companies to produce and develop services could become easier if the recruitment process were much more flexible with less bureaucracy by utilizing student freelancers for specific needs. In addition, in interview two it was considered that the use of student freelancers could help in regulating production and efficiency. It is critical for a company to be able to flexibly employ workers when the need arises, in which case utilizing student freelancers could lower the threshold for employment. According to interview two, flexibility would increase in a way within the company if student freelancers could be utilized more easily and with less risk, but the structures have so far made it very rigid.

"It would help a lot if we were able to hire student freelancers." – Interview 4

"You can try those things even as a pilot idea." – Interview 4

From the company's perspective, a student could be brought into the organization quickly and efficiently as a freelancer when needed, after which a career path can be built for them into the service. Also, in interview two there was a discussion about the company's internal turnover. If some of the workers are student freelancers and the company's internal team changes, the freelancer model can be used to recruit someone who already knows the company's operations. In other words, this enables an easy validation to point from the company's perspective and helps to meet a need, in addition to which the company can potentially get a long-term contributor. It was also raised that if, from the company's point of view, utilizing a student freelancer is possible, it can be tried as a pilot idea and does not need to be fully committed to immediately. This can also lower the threshold and risk of using a student as a freelancer.

"Agility, when it is a feature of the organization's operating world, is quite a long process, it does not happen just like that." – Interview 3

In interview three, the idea came up that even if flexibility might increase from the company's perspective in a smaller sense, improvement in agility would also require many other things. Agility was seen as a characteristic of the organization's operational environment, which is why change for the better in that regard would be a much longer and larger process than the transformation of a single part. A student freelancer or a team of them acts as a small seed toward agility, but much more would also need to be done within the company and the organization to see significant change in such matters.

"How do we get our service closer to students?" – Interview 4

The influence of students on the organization can also happen through contacts. For example, in interview four, the need to get closer to students and universities came up. The fact that a company utilizes a student in general may already bring contacts to higher education institutions, but a student freelancer or a team formed of them could more clearly build project-like relationships there, where they primarily operate anyway. Through this idea, students could bring something entirely different to companies as freelancers than, for example, more traditional freelancers, who may in turn have their own strengths.

All in all, students can bring slight change to companies in a cost-effective way as freelancers. Students are perceived to have potential, it just needs to be harnessed properly. Flexibility, regulation of efficiency and productivity, and making time for the company's core people are key aspects in utilizing student freelancers. Student freelancers can thus indirectly bring change to the company and its operations. In addition, the company culture may become slightly more future-oriented.

4.3.8 The best time for using student freelancers

Situations within a company can vary greatly depending on the circumstances. It is therefore important to consider when utilizing a student freelancer is the best and most effective option for the company. It must be considered that the optimal timing for utilizing a student freelancer is company-specific and depends on the need. For this reason, the analysis has aimed to consider aspects that connect multiple different companies.

"It has been a need from our side." – Interview 4

"Recruitment costs money." – Interview 2

The need primarily always arises from the company. For example, in interview four, it was brought up that when operations need to be deployed quickly, utilizing a student freelancer could be a fast, cost-effective, and flexible way to meet the need. Recruitment processes in

large companies can be long and cumbersome, which is why using external help can be a suitable compromise. In practice, the process would be that initially the student is utilized specifically as a freelancer, and once the most critical need has passed, the person has proven themselves good, and permission for recruitment has been granted, the student's formal recruitment would be finalized. Interview two also highlighted the costs of recruitment. Using a student freelancer is at least twice as cheap a way to recruit. It can therefore be stated that to ease recruitment, using a student freelancer works excellently. For a company in a situation where quick help is needed, a student freelancer can be an excellent option for that need.

"If I needed some specific expertise, and I knew I could get it quickly, then I would take it." – Interview 2

In addition to the ease and efficiency of recruitment, finding specific expertise can be an area where a student freelancer is a good choice. For the company, this provides reassurance and reduces the risk of using a student as a freelancer, if they know that the right kind of expertise for a particular need can be found, and it can be obtained quickly and easily. On the other hand, validating the worker can be a challenge. Interview two also raised the thought that, once the right kind of work contribution has been received, and the need ends, the company can part ways with the worker at that stage. Also, if the worker is not able to perform as desired, the company can let go of the person if necessary. From the company's perspective, a situation in which the organization's team is overloaded can also be alleviated with the help of a student freelancer. In practice, such a situation could be one in which the company's basic operations consume so much time that development work is left completely undone. In addition to this, the student freelancer, as an external party, can also bring development ideas with fresh eyes to improve and enhance operations. Interview one also highlighted that an external perspective could help the company's actions. Overall, in cases of needing specific expertise or alleviating overload, the company could consider bringing in a student freelancer, which possibly is an easy, fast, and effective choice.

Mainly, in situations where the company needs an easy, fast, and efficient way to recruit, specific expertise for a particular role, relief in an overloaded organizational or team situation, and someone external to bring thoughts and ideas for business development, the company can consider a student freelancer. These situations were brought up by multiple individuals. Diving into any more specific situation than this, the needs between companies vary significantly, which makes further examination or analysis at this stage less meaningful. Based on this, however, the company can consider situations in which a student freelancer might be the right choice to perform the task.

4.3.9 Future views

The future of student freelancers is hopeful. In the interviews, it came up several times that it is something that companies would like to utilize much more. However, several structural and cultural barriers slow it down and, in some situations, even prevent it from happening. In interview four, for example, it was mentioned that they would like to do it much more, and if the structure of the company were different, they would also utilize students as freelancers much more.

"I wish it would be done more." – Interview 4

"It is worth utilizing, but you cannot imagine it going like summer jobs." – Interview 3

For example, companies' trainee programs may also in the future reduce the opportunities to utilize student freelancers, as the structure does not encourage the company to make that change. From the perspective of minimizing company risks, the student freelancer model is still relatively high-risk. In interview two, it was said that the utilization of student freelancers should happen much more and that it should be much easier. It was also added that this model should be much less risky for the employer. In interview three, it also came up that students should especially be utilized as freelancers, but one should not imagine that it would go like traditional summer jobs or internships. A new kind of attitude might require

a lot from companies, which leads to the fact that the change toward utilizing student freelancers can be slow, especially now, when the process is still quite risky.

"I do think it is a really good thing." – Interview 1

Balancing out this slowness, in interview one it was stated that the student freelancer model is considered a good thing and that it is also intended to be used much more in the future. In interview one, it was said that enough experience has already been gained, so that, for example, a student freelancer team would be seen as a good option to carry out the next major renewal of the company's systems. This creates the idea that the riskiness for companies also decreases when student freelancers are initially used in low-risk roles, which gradually leads to them also being able to show their skills more broadly. In the longer term, this may help companies to adopt a more favourable attitude toward student freelancers.

5 Discussion

The purpose of this chapter is to integrate the theoretical framework, literature review, and empirical findings into a unified discussion. It begins by revisiting the research problem and the identified research gap. The ways in which companies utilize student freelancers have been studied very little, and there are clear shortcomings in combining dynamic capabilities, flexible work models, and student involvement in working life. Based on the analysis of this study, companies can derive value from student freelancers through increased flexibility, the introduction of new knowledge, and the use of the latest technologies. Students primarily create value in roles related to innovation, problem-solving, and the introduction of new perspectives for the companies. This chapter examines these findings in greater depth through a dialogue between theory and the empirical analysis, assessing how the results support and extend the previously limited literature. Through this discussion, the research questions are also addressed.

5.1 Research problem and research gap

The aim of this study was to examine, from the perspective of companies, the benefits and opportunities that student freelancers bring to business operations. In other words, the purpose was to investigate how companies benefit from utilizing students as freelancers. The background of the research is based on the idea of a Finnish consulting startup that seeks to commercialize student freelancing, with the intention of offering companies new perspectives, support in resource shortages, and cultural help in understanding the potential students, and especially young people, possess for developing future business. Currently, companies are struggling with an increasing skills shortage across many sectors, which hampers innovation activities, project execution, and the building of long-term competitiveness (Horbach & Rammer 2022, 734; Brunello & Wruuck 2021, 1145–1147). At the same time, the market is changing due to global competition, technological development, and several worldwide issues, such as the COVID-19 pandemic (Brunello & Wruuck 2021, 1145). As a result of these challenges, companies are seeking more agility in their operations

(Ajgaonkar et al. 2022, 951). The purpose of the study is to determine whether student freelancers can have the potential to help companies with these challenges.

One solution in the pursuit of flexibility has been the use of freelancers, whose popularity has been growing for quite some time. The popularity has also been supported by the transformation of working life toward more flexible and project-based structures. Freelancers have been used, among other things, to compensate for skill shortages, to complement the company's internal competence, and to bring the latest knowledge to the specific need. (Horbach & Cowling 2022, 393; Gupta 2023, 40; Kozica et al. 2014, 421–423) In addition to complementing internal capabilities and accelerating innovation processes, utilizing freelancers has also been found to have positive effects on a company's ability to respond to changes occurring in the market (Gupta 2023, 40; Kozica et al. 2014, 423). Due to these benefits, this study utilizes the Dynamic Capabilities Theory to explain the effects of freelancers, and in particular, student freelancers as defined in this study, on the dynamic capabilities of companies. In the Dynamic Capabilities Theory, it is essential for a company to perceive changes, seize opportunities, and renew its operations, which is why the theory is suitable to be used as the explanatory framework in this study.

The utilization of freelancers and their role in business have been studied to a reasonable extent, but in academic literature, the use of students through the freelance model has been largely overlooked, which leaves a clear research gap. Companies already have certain prejudices toward recent graduates, which makes them easily uncertain about hiring them. Traditionally, students have been utilized mainly through internship programs, but the costs and a certain rigidity of those programs hinder the broader utilization of students for companies. (Kiseleva & Chechurin 2022, 233; Narayanan et al. 2010, 61–62) Students currently studying in higher education and recent graduates possess the latest academic knowledge, often have an entrepreneurial mindset, and are technically equipped to operate in a modern work environment (Jackson et al. 2022, 101; Pang et al. 2019, 57). Therefore, it would be important to more flexibly recognize and utilize the expertise they offer.

In addition, the concept of a student freelancer has not previously been defined in academic literature. The lack of recognition of the concept is significant, as student freelancers differ clearly from traditional employees as well as from more experienced, traditional freelancers. Therefore, students cannot, for example, be equated with traditional freelancers. It must thus be noted that the potential and opportunity of student freelancers to influence companies' flexibility and capacity for renewal has been entirely overlooked. Furthermore, entrepreneurial skills and mindset are seen as a key part of socioeconomic development, in which the role of students and recent graduates as promoters of social entrepreneurship and sustainable development is invaluable (Aboobaker & Renjini 2020, 73–74). Based on this as well, it can be stated that there is a clear gap in the academic literature, and that there is a need to define the concept.

Based on this overall framework, the study has aimed to answer the research questions and define a new concept to fill the identified research gap if necessary. The study combines a new kind of phenomenon of student freelancers with the theory of Dynamic Capabilities and the more traditional freelance model to address companies' needs in the modern, changing business environment. Through the three dimensions of the Dynamic Capabilities Theory, sensing, seizing, and transforming, the study examines whether student freelancers can be integrated into the company's critical functions related to renewal and development, as well as in the discovery of potential competitive advantages.

5.2 Bridging the gap between the literature and the analysis

This section aims to compare the material collected in the literature review with the analysis made from the interviews. At the same time, the aim is to summarize findings and insights from the theory to lay the foundation for answering the research questions, which is intended to support the achievement of the research objectives. It begins with a review of companies' needs and the sensing dimension of the Dynamic Capabilities Theory. After this, the focus shifts to student freelancers as value creators and resource completers, which refers to the seizing dimension of the Dynamic Capabilities Theory. Third, the section addresses renewal,

innovation, and the role of students in change, which refers to the transforming dimension of the Dynamic Capabilities Theory. After these, student entrepreneurial mindset, challenges, and practical realities are briefly discussed in sections four and five.

5.2.1 Companies' needs and dynamic capabilities

Based on the analysis of the interviews, companies are looking for quick and flexible support, especially during peak and transition situations. As mentioned in Interview 4, it is critical to get people into the team when they are needed. Compared to the Dynamic Capabilities Theory, according to the sensing dimension, the company aims to identify rapidly changing needs and opportunities (Teece 2009, 87–88). Based on this, the ability to make use of flexible external labour indicates that the company's sensing capability is well developed. The emergence of speed, seasonality, and temporariness as important criteria in the interviews indicates that the individuals studied, who have already utilized students as freelancers, are able to recognize situations critical for the company that require this kind of support. However, this does not mean the issue concerns only student freelancers but applies more generally to the use of freelancers. In addition, Kozica et al. (2014, 423) noted that flexible employment models help companies with flexibility. The current situation in companies was also highlighted in the interviews. For example, Interview 4 noted that utilizing freelancers is challenging. Sensing has limited value for a company if there are no tools or opportunities to respond to rapidly changing situations.

5.2.2 Students as a resource complement producing added value

In the case of students, companies and their representatives emphasize cultural fit, potential, and learning ability when considering them as new members of the team. This also shows that experience is not among the first factors considered when evaluating suitability for a certain role. For example, in Interview 2, core competences were highlighted, the mastery of which can be demonstrated in ways other than measured experience. In the seizing dimension of the Dynamic Capabilities Theory, the company has identified a value-creation

opportunity and is able to organize resources effectively to exploit it (Teece et al. 1997, 515). In previous research, freelancers have been one way of bringing new expertise and enabling increased agility (Kozica et al. 2014, 423). Freelancers also enable companies to use resources efficiently. In Interview 3, the hybrid of experience and a new perspective emerged, where students were seen as an excellent addition especially in bringing a new point of view. A student used as a freelancer brings flexibility and supports the company's operations, and thus, through cost-efficiency, also contributes to providing a better opportunity for the company to respond to the seizing dimension of the Dynamic Capabilities Theory. On the other hand, their impact is relatively small and should not be seen as a solution. Interview 3 also highlighted that when building flexibility, many different things must be done to achieve it. Therefore, the position of student freelancers in the company's operations is minor. However, the cultural impact may be greater, which needs to be measured in a different way.

5.2.3 Renewal, innovation and the role of students in change

As already mentioned in the previous paragraph, students can bring new perspectives to various company functions. In Interview 1, it was highlighted that students are not yet locked into certain company practices, and precisely for this reason, their innovativeness can provide many solutions to basic business challenges. Students may have suggested alternative ways to carry out tasks more efficiently or differently, which in the best case has even brought the company a new way of operating. In the transforming dimension of the Dynamic Capabilities Theory, the company continuously seeks to develop its operations and change its processes to maintain competitiveness in the market, and according to the theory, renewal is seen as a critical factor for maintaining long-term competitive advantage (Teece 2009, 88). The external, modern, and technology-oriented expertise brought by a student freelancer can serve as a reinforcing factor in a company's renewal.

5.2.4 Students' entrepreneurial attitude and theoretical value proposition

Based on the analysis, the student freelancer model that can be defined reflects students who are entrepreneurial and self-initiated traits that are generally valued in students. Students, and especially those acting as freelancers, are perceived to operate in a very entrepreneurial manner, even if they do not yet have experience at that stage. As mentioned in Interview 2, a student freelancer is a student who is ready to employ themselves already during their studies. This entrepreneurial student also corresponds to the view of Aboobaker & Renjini (2020, 73–74), who emphasize that the role of young people is key in driving future entrepreneurship and innovation.

In addition, Interview 4 highlighted the up-to-date knowledge of students as a strong added value, as they are familiar with new phenomena, for example in social media or technology. The concrete value that students bring is thus formed from a combination of entrepreneurial mindset, academic expertise, and a fresh perspective. Overall, the findings about entrepreneurial student freelancers and the value they bring are strongly linked to the theoretical framework, as Kozica et al. (2014, 423) state that students specifically possess the latest knowledge and are not burdened by experience. The value that a student freelancer brings to a company is therefore created from that new, previously unseen inexperience, which, through entrepreneurial behaviour, becomes a driver for future entrepreneurship and potentially companies' and society' culture.

5.2.5 Challenges and realities at a practical level

The analysis revealed that the benefits of utilizing student freelancers are clear. However, it also brought up challenges that were very practical in nature. For example, in Interview 4, it was mentioned that onboarding may take so long that the most urgent time of need has already passed. Additionally, in Interview 3, it was noted that organizational and cultural barriers may hinder getting started with the work. Furthermore, issues related to data security, access rights, and the rigidity of contract models were raised in multiple instances.

However, it can be observed that most of these challenges are specifically related to the starting phase of the assignments. Kozica et al. (2014, 423) also confirm the observation that integrating freelancer expertise requires the right timing and compatibility. The company must be able to utilize this potential to get enough value from the freelancer's contribution. According to the analysis, these are not challenges exclusive to student freelancers, but rather general challenges that occur whenever a new person joins a team. For anyone, it is difficult for potential to be realized without functional structures, acceptance, and effective integration. Based on this, it can be stated that organizational culture and operational practices are crucial for the model's success. These challenges also slightly complicate the academic integration of the Dynamic Capabilities Theory with the student freelancer model, as practical realities may slow down, or in the worst case, even prevent the realization of dynamic capabilities.

5.3 Answering research questions

This chapter addresses the main research question as well as all sub-research questions, providing answers based on the conducted study. It begins with sub-research question three (sRQ3), followed by sub-research question two (sRQ2) and sub-research question one (sRQ1). Finally, drawing on the sub-research questions, the chapter aims to provide as comprehensive an answer as possible to the main research question (RQ).

sRQ3: How is the concept of a student freelancer defined and understood by companies?

The purpose of sub-question three was to create a foundation for understanding the impact and benefits of a student freelancer in a company. For this reason, it was also important from the research perspective to find out how companies and their representatives understand the term student freelancer, and how, based on their understanding and theory, it is possible to create a more official definition for the concept of a student freelancer, which can be complemented in future research. Based on the analysis of the interviews, it became evident that a student freelancer does not, in practice, significantly differ from a traditional

freelancer. According to interviews 2, 3, and 4, companies generally work with student freelancers in the same way as with traditional freelancers. Therefore, in defining the student freelancer, the freelancer concept can be used as a basis. According to the literature review, freelancers are self-employed individuals who do not have a permanent employment relationship with the company offering the work (Kozica et al. 2014, 422). Based on the analysis, a student freelancer is specifically a student who is willing to self-employ as an entrepreneur already during their studies. This emerged in all interviews. In addition, the idea also came up that a student freelancer is primarily a student and only secondarily a freelancer, which affects how the company can utilize the student.

As mentioned in the literature review, the proportion of highly educated individuals among freelancers is relatively higher than in any other atypical employment arrangement (Kozica et al. 2014, 422). Companies specifically want to utilize the expertise of highly educated individuals in a flexible manner, which often leads them to prefer the freelancer model. Students in higher education have been found to be particularly beneficial in small companies and in the development of new business, which, among others, was highlighted in interviews 2 and 4, where more flexibility was desired. This emphasizes that there is a need to define the term student freelancer, which also helps in creating processes and support functions built around it. On the practical side, according to Pang et al. (2019, 57), recent graduates are expected to possess basic industry-specific technical skills. Students are seen as resources who are familiar with the latest technologies and, for example, social media. According to interviews 2 and 4, within these boundaries, a wide range of tasks can be offered to students. Based on theory and analysis, the student freelancer is seen as a technical resource with the latest knowledge, who companies wish to utilize as flexibly as possible.

When speaking about individuals who do not yet have much work-life experience, the literature review identified the ability and willingness to learn, initiative, effective planning and time management, and the ability to organize one’s work as the most important characteristics (Pang et al. 2019, 57). These themes also emerged strongly in the interviews, as companies tend to value individuals as individuals, especially when it comes to new workers. Cultural fit, core competencies, learning ability, and the right attitude were

considered the most important factors when evaluating students. In addition, entrepreneurship is typically important for freelancers. Certain entrepreneurial competencies, such as critical thinking and problem-solving ability, are important skills for students and recent graduates (Jackson et al. 2022, 101). Based on the interview analysis, the previously mentioned attitude and ability to learn are especially important competencies for an entrepreneurial student, more specifically a student freelancer, so that the company can find the right person, which was emphasized in interview one. A student freelancer can therefore be defined as someone who is eager to learn, adopts the right entrepreneurial mindset, can think critically, solve challenges, and create value for the company.

In the literature review, a student freelancer was defined as a student in higher education, or a recent graduate, who is temporarily hired by a company as an entrepreneur, and from whom the company can utilize up-to-date academic expertise, fast learning ability, and entrepreneurial competencies (Narayanan et al. 2010, 61–62; Pang et al. 2019, 57; Jackson et al. 2022, 101). Based on this study, a student freelancer is primarily a student, secondarily an entrepreneur, whom the company utilizes flexibly. The student freelancer possesses industry-specific technical skills, but the main competencies focus on aspects that can be measured without work-life experience. The most important of these are the willingness to learn, an entrepreneurial attitude, the ability to think critically, solve challenges, and create value for the company in the form of new knowledge or ways of working. It can therefore be stated that the theory-based definition is, to some extent, also valid in practice. Based on theory and research, the definition of a student freelancer is quite clear; however, it should be noted that the definition is very general and therefore does not cover all student freelancers.

sRQ2: In which situations or challenges is the use of student freelancers most beneficial for companies?

The characteristics of student freelancers are clearly relatable compared to the traditional flexible model in which freelancers are utilized. In other words, student freelancers can be part of improving the company’s ability to sense, seize, and adapt to the changing business

environment and thereby also strengthen the company's dynamic capabilities, although very minimally. (Teece et al. 1997, 515; Kozica et al. 2014, 423; Horbach & Cowling 2022, 396). Dynamic capabilities are central to business performance so that the company is able to create and implement new unique resources and innovations. They have also been found to be even as important as the already existing resources. (Teece et al. 1997) In the analysis it was noticed that companies indeed have many ideas and thoughts to develop and enhance operations, and even solutions have been considered, but there is no time to implement them. Students are, based on the analysis, an excellent way to improve the company's operative resources especially in the short term, but also in the long term.

In general, by utilizing freelancers it is possible to flexibly fill knowledge gaps, which in turn may improve the company's dynamic capabilities. (Kozica et al. 2014, 423). Based on the analysis, companies at the same time want to integrate external expertise into the internal team in any case but also keep the core expertise within the company. Utilizing a student freelancer increases the use of external resources, and if the student learns the ways of the company but then does not remain in the company's operations, this knowledge is at risk of being lost. For this reason, student freelancers individually are primarily an excellent choice in the short term to solve company-specific resource challenges.

This is also supported by the analysis that primarily the company even has a critical need to be able to utilize freelancers when they are needed effectively and quickly. Based on the interviews, expertise is also wanted to be purchased externally, but mainly temporary needs were the reason for acquiring external help. As was noted in the literature review, recruiting permanent employees takes more time and resources, which for temporary challenges creates a strong attraction toward freelancers, since the contract can be terminated when the need ends (Kozica et al. 2014, 423). In the case of student freelancers, however, the challenge may be the same as often also with other freelancers, that the orientation takes so much time that the busiest period for the need may already pass by.

As Kozica et al. (2014, 423) describe, freelancers are generally seen, however, as sources of innovative potential and creativity. Based on the analysis, students have succeeded as

freelancers in creating, for example, solutions to challenges through which it has been possible to avoid a complete system change. In addition to this, students are able to bring indirectly benefits with innovative solutions. A benefit is also that companies thus receive the latest knowledge from universities through the students, and at the same time the freelancer model can function for students as a lower-threshold practice both for the student and also for the company. (Narayanan et al. 2010, 61–62). In the long term, based on the research, the companies' intention is to get everyone on the payroll, which increases the commitment of the contributors, but in the beginning an easier and lighter model can also solve the company's resource shortage.

Altogether, for the company a good opportunity to utilize a student freelancer is when the company faces a sudden, shorter- or longer-term resource shortage. In this situation, the company can orient, test, and grow the student at a low threshold as a freelancer. Either at the same time, or in a completely different situation, the company can also utilize a student freelancer to support innovation activities, as the company could get the latest knowledge from universities in addition to the student's own expertise and perspective.

sRQ1: In what kind of roles students provide the best value for companies as freelancers?

Finding concrete roles for student freelancers based on the research is somewhat difficult. The company's readiness, profitability, and performance are themes around which primarily from the companies' perspective the research has sought to find competence (Pang et al. 2019, 57). The skill level of student freelancers is still relatively low, whereby also one of the results of this research was that the work tasks must at first be in line with the person's own skill level. Students, however, crave challenges quite a lot, and the student's skill level cannot be generalized.

In general, IT, management consulting, media, as well as engineering activity are typical functions for freelancers (Kozica et al. 2014, 422). The company representatives who were the subject of the research also highlighted, in the case of student freelancers, development

and the IT side, the operational side, as well as the development of new ways of working. In addition to this, based on the research, student freelancers are good at solving challenges related to customer service and to the technical solutions of systems. Nowadays, also students in general know how to utilize artificial intelligence broadly in everyday work. A student freelancer can therefore support AI processes in companies innovatively. Multifariously, roles suitable for student freelancers are innovative roles inclined toward out-of-the-box thinking. In these roles, a student freelancer is able to utilize their up-to-date knowledge and learning ability and bring new knowledge to the company for the development of practices and processes.

As the demand for skilled knowledge workers grows, the demand for skilled recent graduates has also grown widely (Pang et al. 2019, 55). Altogether, the roles of students, and thereby of student freelancers, are very diverse. Students as a group are very heterogeneous, which is why the utilization of a student as a freelancer is based on the person's interest, skills, and the company's needs. However, a framing for the role of student freelancers can be created from the perspective that a student is able to bring a fresh viewpoint to the development of a service or process with out-of-the-box thinking and with modern methods. In addition to this, background and investigative work are an excellent way for student freelancers to create concrete value for the company.

RQ: How can the use of temporary and flexible labour contribute to the development of dynamic capabilities in companies?

Companies can benefit from using temporary and flexible labour in many ways. One clear advantage, which applies to freelancers in general, is flexibility and quick response. Workforce flexibility can be seen as one of the company's dynamic capabilities, since it improves the ability to react to changes quickly and efficiently, and allows resources and skills to be reallocated when needed. This supports continuous improvement through learning and teamwork (Muduli 2016, 1567). By hiring freelancers, companies can close internal skill gaps with outside help, which in turn strengthens their dynamic capabilities (Kozica et al. 2014, 423).

Within this broader context, student freelancers represent a unique form of flexible labour. The findings of this study also showed that it is very important for companies to get the right skills and people at the right time, quickly and efficiently. Hiring a permanent employee usually takes much more time and resources, whereas the freelancer model makes this process faster and lighter. Freelancer contracts are useful because they can easily be ended when the extra help is no longer needed (Kozica et al. 2014, 423). At the same time, there is a risk that the knowledge created stays with the freelancer instead of becoming part of the company's processes. In the case of student freelancers, the skill level may be somewhat lower, but they can still improve a company's seizing capability by providing support without expensive and time-consuming recruitment. Companies can also use student freelancers to test whether a person fits the role and company culture before making a long-term commitment.

Companies can access a wide range of versatile contributors at a low threshold by engaging student freelancers. Freelancers in general, as mentioned earlier, are often concentrated in fields such as IT, management consulting, media, and engineering (Kozica et al. 2014, 422). Students, depending on their skills and experience, can be used for tasks ranging from customer service to supporting artificial intelligence processes. As freelancers, students can try out different roles without heavy long-term commitments, while companies can also test the student's suitability for a role, particularly from the perspective of personal and cultural fit. By utilizing students as freelancers, companies gain another tool for allocating resources, since students can be found across a wide range of fields in addition to those traditionally common for freelancers.

Another benefit is that student freelancers bring in new knowledge and fresh skills. Freelancers in general contribute outside expertise that, when integrated properly, supports learning and innovation within the company (Kozica et al. 2014, 423). For student freelancers, this is often visible in areas such as coding, AI projects, and other technical tasks where their up-to-date knowledge and motivation are especially valuable. They can also support companies by developing new ways of working, where their "outside-the-box"

thinking is highly welcome. Through this contribution of external knowledge and adaptability, student freelancers can enhance companies' sensing and transforming capabilities, helping them spot new technologies and trends and turn them into internal capabilities.

A final clear advantage for companies in using students as freelancers is the positive impact on corporate responsibility, and consequently on the company's attractiveness to talent, customers, and other stakeholders. From the company's perspective, it is naturally important to ensure that the worker's readiness, efficiency, and performance are sufficient (Pang et al. 2019, 57). With students, guaranteeing this can be more challenging, but through the lightweight freelancer model, companies are able to provide opportunities for future talent. As Narayanan et al. (2010, 61) pointed out, working with students is often seen as a way for companies to build visibility and attract future professionals. A company can engage student freelancers whenever there is a need for their skill level, while at the same time increasing its visibility and offering opportunities to younger talents. This again connects flexible labour to the transforming dimension of dynamic capabilities, as companies learn from and renew themselves through interactions with the next generation of professionals.

6 Conclusion and recommendations

The purpose of this chapter is to bring together the key findings of the study and reflect on their theoretical and practical implications. The starting point of the research was the limited understanding of how companies can effectively utilize students as freelancers. From this basis, a theoretical foundation for the study was built through the lenses of dynamic capabilities, workforce agility, and flexible work. Integrating these theoretical perspectives into a single framework enabled the development of a conceptual basis for the student freelancer as a new phenomenon. The key findings of the study indicate that companies primarily benefit from student freelancers through increased flexibility, the utilization of up-to-date expertise, and access to the latest technological knowledge. However, the extent of these benefits varies between companies. The chapter begins with a summary in relation to the research questions, highlighting the key perspectives related to the use of student freelancers. This is followed by a discussion of the theoretical and practical applications, as well as suggestions for future research. The aim is to outline ways in which the findings can be used in future academic work and to present practical approaches for applying the model in a corporate context. Finally, the limitations of the study are addressed, and opportunities for further development are identified.

6.1 Summary of key findings

The study examined how temporary and flexible labour can contribute to the development of dynamic capabilities, using student freelancers as a specific example of this phenomenon. This chapter aims to summarize the main findings of the study focusing on the benefits of student freelancers. Companies primarily benefit from student freelancers by gaining flexible and fast access to resources that meet their situational needs. Students also bring into the organization the latest academic knowledge and up-to-date understanding of current technologies, which more experienced freelancers or permanent employees may not be able to contribute on. Companies tend to value learning ability, attitude, and cultural fit as the most important qualities in students, especially when prior work experience is limited.

The starting point of this study was to use the theory of dynamic capabilities as a framework for assessing the impact of student freelancers on companies. Student freelancers can contribute to sensing capabilities by recognizing new trends and opportunities, since they may have the most up-to-date awareness of what is currently happening. They do not directly affect the seizing dimension, but their involvement can help companies organize work in a more cost-effective way. Regarding transforming capabilities, student freelancers can support the creation and integration of new working methods as well as innovation activities. Overall, however, the effect of student freelancers on these capabilities remains minimal and depends mainly on the company's own willingness and ability to develop them. On the other hand, student freelancers may bring significant cultural change to organizations, which over time can have a greater influence on capabilities than this study was able to fully capture.

In recruitment practices, student freelancers were also found to be beneficial, as the risks related to hiring are reduced when companies can first test a person's suitability before a potential permanent employment relationship. This is particularly useful in longer projects, where the need may later be converted into a permanent role. On the other hand, a challenge for companies lies in the heavy onboarding process, which can be especially demanding in time-sensitive and urgent projects. In addition, students' limited work experience, organizational barriers within the company, and cultural challenges, combined with, for example, legal restrictions, may discourage companies from engaging student freelancers. Nevertheless, the student freelancer model offers significant potential for companies, and as young people's interest in entrepreneurship continues to grow, the topic is becoming increasingly relevant from the perspective of companies as well. Based on the key findings, student freelancers represent a distinct form of flexible work. Through this model, companies can strengthen their sensing and transforming capabilities by enhancing learning, adaptability, and cultural development.

6.2 Theoretical contributions

This chapter discusses the effects of the study on theoretical contributions in relation to dynamic capabilities theory and research on workforce flexibility from the perspective of students. The study expands dynamic capabilities theory (Teece et al. 1997; Teece 2009)

into the context of workforce agility. Workforce agility can be interpreted as an expression of dynamic capabilities, which is built both from a company's internal resources and from the utilization of external, temporary resources. In previous research, the focus of dynamic capabilities has mainly been from the viewpoint of management and resources (Eisenhardt & Martin 2000; Harsch & Festing 2020). Through the perspective of this study, student freelancers act as micro-level elements of dynamic capabilities. In practice, student freelancers are individuals that companies can use to improve their sensing, seizing, and transforming dimensions, although to a very minimal extent.

The study combines three previously very separate theoretical domains: dynamic capabilities theory (Teece et al. 1997), workforce agility (Ajgaonkar et al. 2022; Muduli 2016), and the freelance economy and project work (Kozica et al. 2014; Horbach & Cowling 2022). These theories create the possibility to produce a conceptual model of the student freelancer as a new form of flexible workforce. The formation of the student freelancer concept also functions as a theoretical contribution in the academic context, filling a gap in the literature regarding the combination of students and freelancers. The study shows that smaller groups of individuals, in this case student freelancers, can act as catalysts for learning and renewal in companies, even if their direct impact on dynamic capabilities is limited. Through this, it can also be highlighted that macro-level effects may originate from micro-level actors.

In addition, the study specifies dynamic capabilities theory in the context of small companies. Based on the study, in companies with very limited resources, student-based external workforce can function as a cost-effective way to strengthen especially sensing and transforming capabilities (Muduli 2016, 1567). Overall, the study expands the theory of the freelance economy from the perspective of companies, as it considers the future workforce consisting of students and temporary workforce as part of the company's strategic renewal capability (Kozica et al. 2014, 423; Horbach & Rammer 2022, 734). Based on this, the study renews the understanding that flexible and student-based workforce is not only an operational solution but can also act as a strategic resource towards improving dynamic capabilities and renewal capability.

6.3 Practical applications and future research suggestions

There are several ways in which companies can make small changes to increase their flexibility in relation to student freelancers. Companies can implement light processes that allow student freelancers to be integrated into their operations without heavy bureaucracy. Not all bureaucracy can be removed, as contract preparation and onboarding processes can be difficult to streamline. In addition, for larger projects that require up-to-date knowledge of trends or technologies, active involvement in research or investigations, and fresh perspectives, utilizing students as freelancers can be particularly cost-effective. Students are also able to create more value when they work in small teams, where they can challenge and support each other. Overall, the easiest way for companies to benefit is to use student freelancers as a recruitment channel, where their skills can be validated with a low threshold. This can take place in projects that require only one person, or in larger projects involving several students.

These concrete suggestions have not yet been scientifically tested, but they can also serve as hypotheses for future research. Looking ahead, there is a need to strengthen the concept of the student freelancer by studying in more depth the fields in which it can be applied. It is also important to examine companies that have not used student freelancers to understand their attitudes, preconceptions, and expectations towards this model. These can then be compared with the experiences of companies that have already engaged student freelancers.

From the companies' perspective, it would also be valuable to study the long-term effects of the student freelancer model on innovation, organizational culture, and possibly competitiveness. Comparing this model with other forms of flexible work, such as university internships or the use of more experienced freelancers, could help clarify its challenges. From the students' perspective, it is equally important to research the freelancer model, so that company processes and student preparation can be aligned with both sides' needs and expectations.

6.4 Limitations

This study faced several limitations. First, the sample size was very small, which also made the data relatively limited. The research is based only on interviews with a few company representatives. A larger number of interviews could have made the discussion around establishing the concept of the student freelancer more convincing. The study was also intentionally focused on the perspective of companies, but leaving out students limited the understanding of what students themselves can offer.

From a theoretical perspective, the phenomenon was explained through existing theories, especially the framework of dynamic capabilities. Since no prior research has been conducted specifically on student freelancers, building the theoretical framework was challenging. Defining the term student freelancer also required combining several theoretical bases. As the study was conducted in Finland, with a small sample size and limited theoretical background, the generalizability of the findings is restricted. The results cannot be directly generalized to different industries, countries, or organizational cultures. However, the study contributes to the development of the concept of the student freelancer and highlights the opportunities students can bring to organizations in a freelance capacity.

7 References

Aboobaker N & D R (2020) Human capital and entrepreneurial intentions: do entrepreneurship education and training provided by universities add value? On the Horizon 28(2): 73–83.

Abrantes BF & Madsen JL, (2023) Essentials on Dynamic Capabilities for a Contemporary World : Recent Advances and Case Studies. Cham: Springer.

Ajgaonkar S, Neelam NG & Wiemann J (2022) Drivers of workforce agility: a dynamic capability perspective. International Journal of Organizational Analysis (2005) 30(4): 951–982.

Alavi S, Abd. Wahab D, Muhamad N & Arbab Shirani B (2014) Organic structure and organisational learning as the main antecedents of workforce agility. International Journal of Production Research 52(21): 6273–6295.

Alpaydın UAR & Fitjar RD (2024) How do university-industry collaborations benefit innovation? Direct and indirect outcomes of different collaboration types. Growth and Change 55(2): n/a.

Arend RJ (2014) Entrepreneurship and dynamic capabilities: how firm age and size affect the 'capability enhancement-SME performance' relationship. Small Business Economics 42(1): 33–57.

Barreto I (2010) Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. Journal of Management 36(1): 256–280.

Bellucci A & Pennacchio L (2016) University knowledge and firm innovation: evidence from European countries. The Journal of Technology Transfer 41(4): 730–752.

Breu K, Hemingway CJ, Strathern M & Bridger D (2002) Workforce Agility: The New Employee Strategy for the Knowledge Economy. Journal of Information Technology 17(1): 21–31.

Burke A & Cowling M (2020) On the critical role of freelancers in agile economies. Small Business Economics 55(2): 393–398.

Chesbrough H (2003) The Logic of Open Innovation: Managing Intellectual Property. California Management Review 45(3): 33–58.

Eisenhardt KM & Martin JA (2000) Dynamic capabilities: what are they? Strategic Management Journal 21(10-11): 1105–1121.

Eriksson P & Kovalainen A, (2008) Qualitative Methods in Business Research. Los Angeles, Calif.] ;: SAGE.

Flick U. (2007) Designing Qualitative Research. Los Angeles, Calif.] ;: SAGE.

Galletta A. (2012) Mastering the Semi-Structured Interview and Beyond : From Research Design to Analysis and Publication. New York: New York University Press.

Gaur A & Kumar M (2018) A systematic approach to conducting review studies: An assessment of content analysis in 25 years of IB research. Journal of World Business : JWB. 53(2): 280–289.

Gupta V, (2023) Freelancer Supported Innovation in Startups. In: Anonymous Cham: Springer International Publishing, 39–58.

Harsch K & Festing M (2020) Dynamic talent management capabilities and organizational agility—A qualitative exploration. Human Resource Management 59(1): 43–61.

Horbach J & Rammer C (2022) Skills shortage and innovation. Industry and Innovation 29(6): 734–759.

Huovinen J (2025) Tutkimus: Nuorten Yrittäjyy-sa-senteet Ennätysmyön-teisiä – Puolet Harkitsee Yrittäjäksi Ryhtymistä. Available at: https://ek.fi/ajankohtaista/tiedotteet/tutkimus-nuorten-yrittajyysasenteet-ennatysmyonteisia-puolet-harkitsee-yrittajaksi-ryhtymista/?utm_source=chatgpt.com.

Jackson D, Shan H & Meek S (2022) Enhancing graduates' enterprise capabilities through work-integrated learning in co-working spaces. Higher Education 84(1): 101–120.

Kapasi I (2023) How university internships benefit microbusiness owners: Beyond anticipated value. Industry & Higher Education 37(1): 80–93.

Kässi O & Lehdonvirta V (2018) Online labour index: Measuring the online gig economy for policy and research. Technological Forecasting & Social Change 137: 241–248.

Kiseleva O & Chechurin L (2022) Financial Benefits for Companies Through Collaboration with an Academic Organization Using a Project-Based Learning Approach. In: Anonymous Switzerland: Springer International Publishing AG, 233–246.

Kozica A, Bonss U & Kaiser S (2014) Freelancers and the absorption of external knowledge: practical implications and theoretical contributions. Knowledge Management Research & Practice 12(4): 421–431.

Maertz Jr C,P., Stoeberl P,A. & Marks J (2014) Building successful internships: lessons from the research for interns, schools, and employers. Career Development International 19(1): 123–142.

Mayring P. (2022) Qualitative Content Analysis : A Step-by-Step Guide. Thousand Oaks: SAGE Publications Ltd.

Mgaya K & Mbekomize C (2014) Benefits to host organizations from participating in internship programs in Botswana. International Journal of Work-Integrated Learning 15(2): 129.

Muduli A (2016) Exploring the facilitators and mediators of workforce agility: an empirical study. Management Research Review 39(12): 1567–1586.

Narayanan VK, Olk PM & Fukami CV (2010) Determinants of internship effectiveness: An exploratory model. Academy of Management Learning & Education 9(1): 61–80.

OECD (2019) Skills for 2030.

Pang E, Wong M, Leung CH & Coombes J (2019) Competencies for fresh graduates' success at work: Perspectives of employers. Industry & Higher Education 33(1): 55–65.

Popiel P (2017) "Boundaryless" in the creative economy: assessing freelancing on Upwork. Critical Studies in Media Communication 34(3): 220–233.

Porter ME. (1980) Competitive Strategy : Techniques for Analyzing Industries and Competitors. New York: Free Press.

Puusa A, Juuti P & Aaltio I, (2020) Laadullisen Tutkimuksen Näkökulmat Ja Menetelmät. Helsinki: Gaudeamus.

Rae D (2007) Connecting enterprise and graduate employability: Challenges to the higher education culture and curriculum? Education & Training (London) 49(8): 605–619.

Rothman M & Sisman R (2016) Internship impact on career consideration among business students. Education & Training (London) 58(9): 1003–1013.

Shaw S & Fairhurst D (2008) Engaging a new generation of graduates. Education & Training (London) 50(5): 366–378.

Sherehiy B & Karwowski W (2014) The relationship between work organization and workforce agility in small manufacturing enterprises. International Journal of Industrial Ergonomics 44(3): 466–473.

Sherehiy B, Karwowski W & Layer JK (2007) A review of enterprise agility: Concepts, frameworks, and attributes. International Journal of Industrial Ergonomics 37(5): 445–460.

Short JC & Palmer TB (2008) The Application of DICTION to Content Analysis Research in Strategic Management. Organizational Research Methods 11(4): 727–752.

Smulowitz SJ, Cossin D & Lu H (2023) Managerial Short-Termism and Corporate Social Performance: The Moderating Role of External Monitoring. Journal of Business Ethics 188(4): 759–778.

Teece DJ (2014a) A dynamic capabilities-based entrepreneurial theory of the multinational enterprise. Journal of International Business Studies 45(1): 8–37.

Teece DJ (2014b) The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms. Academy of Management Perspectives 28(4): 328–352.

Teece DJ. (2009) Dynamic Capabilities and Strategic Management Organizing for Innovation and Growth. Oxford ;: Oxford University Press.

Teece DJ, Pisano G & Shuen A (1997) Dynamic capabilities and strategic management. Strategic Management Journal 18(7): 509–533.

Tisdell EJ, Merriam SB & Stuckey-Peurot H, (2025) Qualitative Research : A Guide to Design and Implementation. Hoboken, New Jersey: Jossey-Bass.

Tomlinson M (2017) Forms of graduate capital and their relationship to graduate employability. Education & Training (London) 59(4): 338–352.

Tuomi J & Sarajärvi A, (2018) Laadullinen Tutkimus Ja Sisällönanalyysi. Helsinki: Kustannusosakeyhtiö Tammi.

Wang CL & Ahmed PK (2007) Dynamic capabilities: A review and research agenda. International Journal of Management Reviews : IJMR 9(1): 31–51.

Weible R & McClure R (2011) An Exploration of the Benefits of Student Internships to Marketing Departments. Marketing Education Review 21(3): 229–240.

Wood AJ, Graham M, Lehdonvirta V & Hjorth I (2019) Good Gig, Bad Gig: Autonomy and Algorithmic Control in the Global Gig Economy. Work, Employment and Society 33(1): 56–75.

Zahra SA, Sapienza HJ & Davidsson P (2006) Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda. Journal of Management Studies 43(4): 917–955.

8 DECLARATION OF AI USAGE

ChatGPT has been use for sentence formation and spelling as well as in ideation process for the whole thesis.

Appendices

Appendix 1. Interview Framework

- Minkä alan yrityksessä toimit?
- Voisitko lyhyesti kertoa roolistasi yrityksessä?
- Minkälaisia tehtäviä suoritat yleisesti ottaen?
- Koetko, että tarvitsisit lisäapua tehtävien suorittamiseen?
- Minkälaista apua voisit kuvitella tarvitsevasi tehtävissäsi?
- Oletko sisäisesti tai ulkoisesti hyödyntänyt apua oman roolisi tehtävien suorittamisessa?
- Oletko rekrytoinut tai ollut mukana rekrytoimassa henkilöitä oman roolisi kautta?
- Oletko rekrytoinut opiskelijoita tai vastavalmistuneita?
- Jos joo, niin minkälaisiin rooleihin?
- Jos ei, niin miksi?
- Oletko työllistänyt freelancereitä tai yrittäjiä?
- Oletko työllistänyt opiskelijoita tai vastavalmistuneita freelancereinä?
- Jos joo, niin mistä aloitteesta tai tarpeesta tämä yhteistyö on lähtenyt liikkeelle?
- Jos ei, niin onko sille jotain erityistä syytä?
- Miten määrittelet termin student freelancing?
- Miten koet, että se eroaa perinteisestä freelancingistä?

Jos on käyttänyt:

- Millaisiin tehtäviin opiskelijafreelancerit on tyypillisesti otettu mukaan?
- Minkälaisissa rooleissa koet, että opiskelijat tai vastavalmistuneet ovat olleet arvokkaimpia nimenomaan freelancereinä?
- Ovatko nämä tehtävät poikenneet esimerkiksi harjoittelijoiden tai vakituisten työntekijöiden tehtävistä?
- Missä tilanteissa opiskelijafreelancerien käyttö on ollut erityisen hyödyllistä?
- Minkälaisia haasteita heidän käyttöönsä on liittynyt?

Jos ei ole käyttänyt:

- Millaisiin tehtäviin opiskelijafreelancerit voitaisiin tyypillisesti ottaa mukaan?
- Missä rooleissa he voisivat tuottaa eniten arvoa?
- Miten koet, että nämä tehtävät voisivat poiketa esimerkiksi harjoittelijoiden tai vakituisten työntekijöiden tehtävistä?
- Missä tilanteissa opiskelijafreelancerien käyttö voisi olla erityisen hyödyllistä?
- Minkälaisia haasteita heidän käyttöönsä voisi liittyä?

- Minkälaisia ajatuksia opiskelijafreelancereiden hyödyntäminen herättää sinussa?
- Onko opiskelijafreelancereiden hyödyntäminen / ajatus siitä muuttanut asenteitasi opiskelijoita tai freelancereitä kohtaan?
- Oletko huomannut opiskelijafreelancereiden hyödyntämisellä olevan jotain vaikutuksia yrityksesi toimintatapoihin?

- Oletko kokenut, että opiskelijafreelancereillä voisi olla vaikutuksia organisaation joustavuuteen? Millaisia?
- Oletko sinä tai teidän organisaationne saanut jotain oppeja opiskelijafreelancereistä?
- Millaisena näette opiskelijafreelancerien roolin tulevaisuudessa omassa yrityksessänne?
- Jos saisit esittää yhden suosituksen muille yrityksille, jotka harkitsevat opiskelijafreelancereiden käyttöä, mikä se olisi?
- Onko jotain muuta, mitä haluaisit nostaa esiin liittyen opiskelijafreelancereihin?