

DELFT UNIVERSITY OF TECHNOLOGY

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Drivers and barriers of the implementation process of a digital  
B2B freelance platform

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Master Thesis to be submitted to Delft University of Technology

By

G. M. GEELEN

Student Number: 4447727

MSc. Management of Technology

**Graduation Committee**

Chair and Second Supervisor: Dr. Ir. G.A. M. de Reuver

First Supervisor: Dr. Ir. Z. Roosenboom-Kwee



# Preface

After two and a half years since the start of my Master Management of Technology, I can present to you my thesis. With this research, my academic career is concluded and my time at the TU Delft has come to an end. I am grateful for all the opportunities this university has given me, from being able to study Mechanical Engineering and a Minor in Finance, to offering the Master Management of Technology and facilitating an exchange to Madrid. Besides providing knowledge and an ability to train my analytic skills, it has developed me as a person greatly as well. I am proud to be able to say that I have studied at this institution.

The research topic was formed as a result of my work as a freelancer at a freelance platform myself. Being in contact with organisations and seeing different approaches has sparked my interest in the process that organisations have to go through in order to use such a platform. The report is intended for any stakeholder in the usage of a freelance platform, from the platform provider to organisations that wish to adopt a new way of working.

First, I would like to express my gratitude to my first supervisor Zenlin, who has been very compassionate with my personal circumstances and patient in helping me through this process. She has given me guidance at the right times, which has helped me significantly and made the research process easier. On top of that, I enjoyed our feedback meetings, as she is a pleasant person to talk to.

Second, I would like to thank my second university supervisor Mark, who has asked critical questions that made me think thoroughly about my research approach and thought process.

Third, I would like to thank the participants of this research study, who have given me their time and insights. Without these, the data used in this research would have been a lot less rich and in-depth.

Finally, I'd like to thank my family and friends, who have supported me during my academic career and especially over the course of this thesis.

I look forward to what awaits me after this completion.

*Giliam Geelen  
Delft, April 2023*

# Summary

With the introduction of digital platforms, outsourcing work has become more accessible. Corporations now have multiple ways to organise their work; they can, for example, perform their work entirely internally, opt for hiring outside workers to perform specific tasks, or outsource the majority of their work. Online freelance platforms such as Fiverr and Upwork have lowered the threshold of hiring temporary workers to perform part of the work by enabling companies to put short-term assignments or “gigs” on their platforms, which can then be picked up and carried out by freelancers from around the world (Jarrahi et al., 2020). These freelancers can apply to the assignments, and managers from the requesting company can select the right match among the applications. This saves the company’s hiring managers valuable time - as they do not actively have to look for potential freelancers themselves, but also opens up access to a larger pool of potential freelancers, unbounded by location (Corporaal & Lehdonvirta, 2017). At the same time, freelancers benefit from these platforms as they do not have to spend much time searching for new clients. They can filter for jobs and directly apply to assignments they deem fit. This new way of outsourcing work changes the status quo of the traditional workforce and brings more flexibility to both employers and employees, but it also has challenges, such as aligning internal with external workers (Scully-Russ & Torraco, 2020).

As freelance platforms gain popularity, they are also getting more attention from business managers open to outsourcing part of their work and researchers interested in the phenomenon. However, researchers in the area of freelance platforms have mainly been focussing on workers and the implications that these platforms have on them (Friedman, 2014; Huws et al., 2017; Scully-Russ & Torraco, 2020). Research on platform adoption and implementation does exist but has primarily focussed on the general topics of business-to-business (B2B) platforms or e-marketplaces, which are not as specific (Loukis et al., 2011; Saprikis & Vlachopoulou, 2012; Stockdale & Standing, 2004). Although some literature also exists on Fortune-500 companies’ motivations to adopt freelance platforms and the advantages they have for enterprises, a research gap remains in understanding how the implementation of freelance platforms works in organisations and across departments (Corporaal & Lehdonvirta, 2017).

This research aims to create an understanding of how the implementation process of business-to-business (B2B) freelance platforms works in organisations. This implementation consists of deciding to adopt the freelance platform and to use the platform after this adoption decision. To create this understanding, the main research question is divided into three sub-questions that are answered using various methods, following Rogers’ Diffusion of Innovation (DOI) (Rogers, 1995) and an extension of the Technology-Organisation-Environment (TOE) framework by Tornatzky & Fleischer (1990). A

literature study is done to research the existing knowledge on implementing B2B platforms and to understand what distinguishes freelance platforms from other B2B platforms. Furthermore, an embedded case study on a Dutch freelance platform (Platform X) is done, using two organisations (Client A and Client B) as subunits of analysis, to gather practical, in-depth insights into the implementation process. Client A has made the adoption decision but failed to implement Platform X in its organisation. Client B has also made the adoption decision and has implemented Platform X and uses it extensively. Both qualitative data (interviews) and quantitative data (usage metrics) are collected.

The following conclusions have been made by analysing the data. In the adoption decision, drivers are mainly categorised by the relative advantage they provide, such as the external capacity the platform offers, platform provider guidance, and the diversity of assignments that can be posted on the platform. On top of this, it is shown that low complexity and high accessibility have played a role in driving the adoption decision of a freelance platform, the same way they do in other B2B platforms. Finally, a positive attitude of senior management towards experimenting with new ways of working lowers the threshold to adopt the platform.

Barriers to the adoption decision mainly have to do with the uncertainty of the quality of the freelancers and the type of work that can be outsourced. As the way of working is relatively new, potential clients are unsure what the platform can do for them.

The diffusion channel and platform involvement play a significant role in the usage of a freelance platform. The level of implementation is expected to relate to the position of the individual who buys the platform license. The higher the position and the more overview this person has, the easier it is for the platform to have multiple diffusion channels and to be implemented in the organisation. At the adoption, the person who makes the adoption decision needs to be high in the organisational structure, preferably board-level, to make the further implementation of the platform later on easier. On top of that, internal workers who will use the platform should have time in their schedule to experiment with the platform and work with the platform's account managers to align freelancers and ensure the quality of the end result.

Barriers to the usage of freelance platforms mainly have to do with the amount of effort that clients (unexpectedly) need to put into the assignments. Freelancers require guidance to deliver quality work, and internal workers often do not have much time to do this properly. Additionally, the uncertainty of what freelancers are capable of and what work can be outsourced is again a reason for internal workers to look for alternatives and hinder the usage of the platform.

This research contributes to the scientific literature as it fills a research gap in the implementation of a technology in the context of freelance platforms, a relatively new topic in the academic world. Little research has been done on the adoption decision and usage of such a platform from the organisation's (buyer's) side. This research fills this gap by identifying drivers and barriers to both the adoption

decision and the platform's usage. On top of identifying these factors, preliminary relationships are proposed, and theory is developed, based on case study data. With these findings, future research on freelance platforms is guided, and researchers can study the causal relationships of the assumptions made in this report. This will further extend the (now relatively little) academic knowledge on the implementation process of freelance platforms and allows researchers to focus on explaining the (relationships between) relevant factors instead of first describing them.

This research also shows that extending the TOE framework with the collaboration category is useful considering platform technology. As platforms, and especially freelance platforms, often contain a high degree of collaboration between participants, this category helps to include collaboration factors that influence the adoption decision and the usage.

Additionally, more understanding is created on the adoption decision and implementation of a freelance platform in organisations. The freelance platform can have a significant benefit to organisations if they are able to implement the technology and service successfully. Both managerial implications for clients and platform providers are given. Managers of client organisations need to provide time for internal workers to properly align freelancers and experiment with the way of working. Furthermore, they should let platform providers help them identify and formulate suitable assignments (e.g. by inviting them to internal meetings), as they are more aware of what can be done on the platform. Platform providers, on the other hand, need to focus on commercial organisations first, as these are expected to see the advantages of using the platform more easily than non-profit organisations. Additionally, they should focus on removing uncertainty in client organisations. They should provide more insights (e.g. years of professional work experience) into the pool of freelancers they have and their capabilities, other than just the total number of freelancers.

This research includes some limitations. As this research project is limited in time and Platform X is a relatively new company without a significant number of clients, the data collection opportunities are limited. Future studies with more time can use more company data and study more clients in-depth. Furthermore, the type of companies on which data is collected are different in type (non-profit and commercial), which complicates a proper comparison of the findings. Future research could focus more on the impact of the organisational type on the identified factors. Additionally, certain features of Platform X affect identified factors, such as the rating-based payout that lowers the threshold to experiment, lowering the generalisability of this study. Future research should focus on other platforms with different features to determine their impact on the implementation process. Finally, future research could test the preliminary (causal) relationships made in this research to better explain how factors impact each other.

# Acronyms

AM	-	Account manager
B2B	-	Business-to-business
B2C	-	Business-to-customer
Client A	-	The organisation that was not able to implement Platform X
Client B	-	The organisation that was able to implement Platform X
Client B1	-	The business development manager and early adopter of Platform X
Client B2	-	The project manager that started using Platform X in a later phase
DOI	-	Diffusion of Innovation
Platform X	-	The Dutch freelance platform which the clients in the case study used
RPA	-	Robotic Process Automation
SME	-	Small and medium-sized enterprises
TAM	-	Technology Acceptance Model
TOE	-	Technology-Organisation-Environment framework

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# 1. Introduction

## 1.1. Background

With the introduction of digital freelance platforms, outsourcing work has become more accessible (Corporaal & Lehdonvirta, 2017). Corporations now have multiple ways to organise their work; they can, for example, hire an internal workforce and entirely perform their work internally, opt for hiring outside workers to perform specific tasks or outsource the majority of their work and only perform specific tasks themselves. Online freelance platforms such as Fiverr and Upwork have lowered the threshold of hiring temporary workers to perform part of the work by enabling companies to put short-term assignments or “gigs” on their platforms, which can then be picked up and carried out by freelancers worldwide (Jarrahi et al., 2020). These freelancers can apply to the assignments, and managers from the requesting company can select a suitable match among the applications. This saves the company’s hiring managers valuable time - as they do not actively have to look for potential freelancers themselves. On top of that, it gives them access to a larger pool of potential freelancers, unbounded by location (Corporaal & Lehdonvirta, 2017). For example, where one initially had to find, contact, and hire a designer to create a logo, one can now put an assignment on Fiverr, and freelance designers worldwide can apply and provide a solution. Small companies and start-ups are examples that can benefit from this as they can hire temporary workers for small tasks without having to spend many resources on hiring and training new staff. At the same time, freelancers benefit from these platforms as they do not have to spend much time searching for new clients. They can filter for jobs and directly apply to assignments they deem fit.

Furthermore, these platforms are facilitating a transformation on the employee’s side as workers are enabled to generate an income wherever, whenever, and in what way they desire, which correlates to the trend of a more flexible and, sometimes, even remote working environment (Berg et al., 2018). Recent events, such as COVID-19, have also fuelled this transformation as offices were closed, and employees were forced to work from home or were laid off and had to find an alternative way to generate income (Batool et al., 2021).

This new way of outsourcing work changes the status quo of the traditional workforce and brings more flexibility to both employers and employees, but it also has its challenges (Scully-Russ & Torracco, 2020). Freelance workers, for example, might feel exploited by jobs with little job security and experience social and professional isolation as they lack a sense of belonging when they are not part of a specific organisation. On top of this, for managers, involving freelancers complicates the alignment

between workers that work on the same project, as internal workers need to collaborate with external workers. This complicates communication and maintaining the company culture.

## 1.2. Research problem and objective

As freelance platforms gain popularity, they are also getting more attention from business managers open to outsourcing part of their work and researchers interested in the phenomenon. However, researchers in the area of freelance platforms have mainly been focussing on workers and the implications that these platforms have on them (Friedman, 2014; Huws et al., 2017; Scully-Russ & Torraco, 2020). As workers leave the security of a job and continue as freelancers using these platforms, they are also losing the consistent flow of income that comes with a job and, hence, are more vulnerable. Researchers encourage regulators to find a fitting solution for this trend, to maintain some social security (Berg et al., 2018).

Research on platform adoption and implementation does exist but has primarily focussed on the general topics of business-to-business (B2B) platforms or e-marketplaces, which are not as specific (Loukis et al., 2011; Saprikis & Vlachopoulou, 2012; Stockdale & Standing, 2004). Although some literature also exists on Fortune-500 companies' motivations to adopt freelance platforms and the advantages they have for corporations, a research gap remains in understanding how the implementation of freelance platforms works in organisations and across departments (Corporaal & Lehdonvirta, 2017). Knowing the advantages is one thing, but spreading the platform across an organisation is another and is not as straightforward - not every company can implement it companywide after managers have decided to adopt the platform. This raises the question of what factors play a role in this implementation process – the adoption decision and usage of the platform – and how companies can act on these to ensure a companywide implementation.

This thesis addresses the former issue by creating an understanding of what factors drive and hinder the implementation process of freelance platforms, and cause one organisation to be able to implement the platform and the other to fail. This understanding is created by identifying drivers and barriers of the adoption decision and the platform's usage through insights from employees who have experienced the process, and proposing preliminary (causal) relationships between factors. Future adopters can then use these insights to overcome the adoption and usage barriers. With these results, future research on these types of platforms is guided, and the preliminary relationships proposed in this research can be tested to explain their workings. This helps the academic knowledge on these platforms move forward.

This research is relevant for the TU Delft Master's program of MOT as it investigates the adoption and usage of a freelance platform – a technology – in organisations. Analysing factors that play a role in the adoption decision and usage creates an understanding that has both academic and managerial implications.

### 1.3. Research Questions

Research questions are posed to state what knowledge is needed to reach the research objective and solve the research problem. The main research question formulated in this research is as follows:

*What are the drivers and barriers in the implementation process of a freelance platform?*

A descriptive main research question is chosen, as this research aims to describe what factors play a role in the freelance platform's implementation process. In this research, the implementation process refers to the decision to adopt the platform and its actual usage. The definition of platform implementation is used to focus on the process of which the drivers and obstacles are identified. Furthermore, this research is split into multiple sub-questions to answer the main question, and these will be researched sequentially. The following sub-questions are defined:

*Sub-question 1: What are the drivers and barriers in the implementation process of a digital B2B platform?*

First, as little research has been done on freelance platforms, the implementation process of the overarching topic – B2B platforms – is studied. The answer to this sub-question provides a list of drivers and barriers found in the literature on B2B platforms, and gives guidance to the research on factors in the context of a freelance platform.

*Sub-question 2: What distinguishes a freelance platform from other B2B platforms?*

In order to determine the relevance of the identified drivers and barriers from sub-question 1 in the context of freelance platforms, it is necessary to define freelance platforms and to know what characterises them.

*Sub-question 3: When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

The list of relevant drivers and barriers resulting from sub-question 1 and 2 is complemented by factors that played a role in the implementation of a specific freelance platform. An embedded case study on this platform is used to gather insights into its implementation process, which will be further explained in the following section.

### 1.4. Research Design

A main research method needs to be chosen to answer the research questions, and for this research, a case study is designed. This method has the advantage of using prior theoretical frameworks to help guide data collection and analysis (Yin, 2018). Furthermore, Yin (2018) argues that this approach is best used when many more factors are at play than units of analysis and when the researcher does not have much control over the events, which are both the case for this study. Many drivers and barriers play a

role in the implementation process, and beforehand, it is uncertain what they are, as little research has been done on the topic of freelance platforms. Also, there is little control over the events as it is not possible to manipulate variables or control aspects of how the implementation process has unfolded. Furthermore, the case study is also the chosen approach because this study aims to understand the workings of the implementation process of digital freelance platforms in the real world. Further justification of the data collection method used in the case study and the type of case study can be found in the following chapter.

To address all the questions, the following systematic steps are taken. Figure 1 summarises these steps and their data sources.

*Sub-question 1: What are the drivers and barriers in the implementation process of a digital B2B platform?*

Sub-question 1 is answered by reviewing the literature on the adoption decision and the implementation process of B2B platforms in general. Known drivers and barriers in this area are summarised and categorised using the theoretical framework described in section 3.2. For each category, relevant drivers and barriers are listed and then used to form propositions that help guide the research in the context of freelance platforms.

*Sub-question 2: What distinguishes a freelance platform from other B2B platforms?*

Sub-question 2 is answered by a literature review on the different types of B2B platforms. As digital platforms are an emerging and broad topic, specification is necessary. This review provides insights into platform characteristics used to define a freelance platform. On top of this, participants in the case study are asked to characterise a Dutch freelance platform (Platform X), and these characteristics will be used to answer this sub-question completely. Specific features of this platform are taken into account when generalising the findings.

*Sub-question 3: When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

This sub-question is answered by extending (the small body of) literature on freelance platforms with data found in an embedded case study on a Dutch freelance platform. It extends the research of Corporaal & Lehdonvirta (2017), which only focused on the implementation of platform sourcing by S&P500 enterprises and lacked insights into the way the platform is implemented inside (smaller) organisations. This extension is done in this research by studying smaller, locally active organisations in the Netherlands that have tried to implement the same Dutch freelance platform; Platform X. Furthermore, this case study does not only involve successful clients, but will also include an organisation that has tried to implement it but has failed to do so. This is an important addition, as much information can be found in this failure, which is overlooked when focusing solely on success stories (De Reuver et al.,

2018). Propositions generated using the literature review are used for interviewing employees at Platform X's clients to gather real-world insights into the implementation process of these types of platforms. Interviewees are then asked for their best practices to help potential new clients anticipate and work around the identified barriers and increase their chance of an implementation.

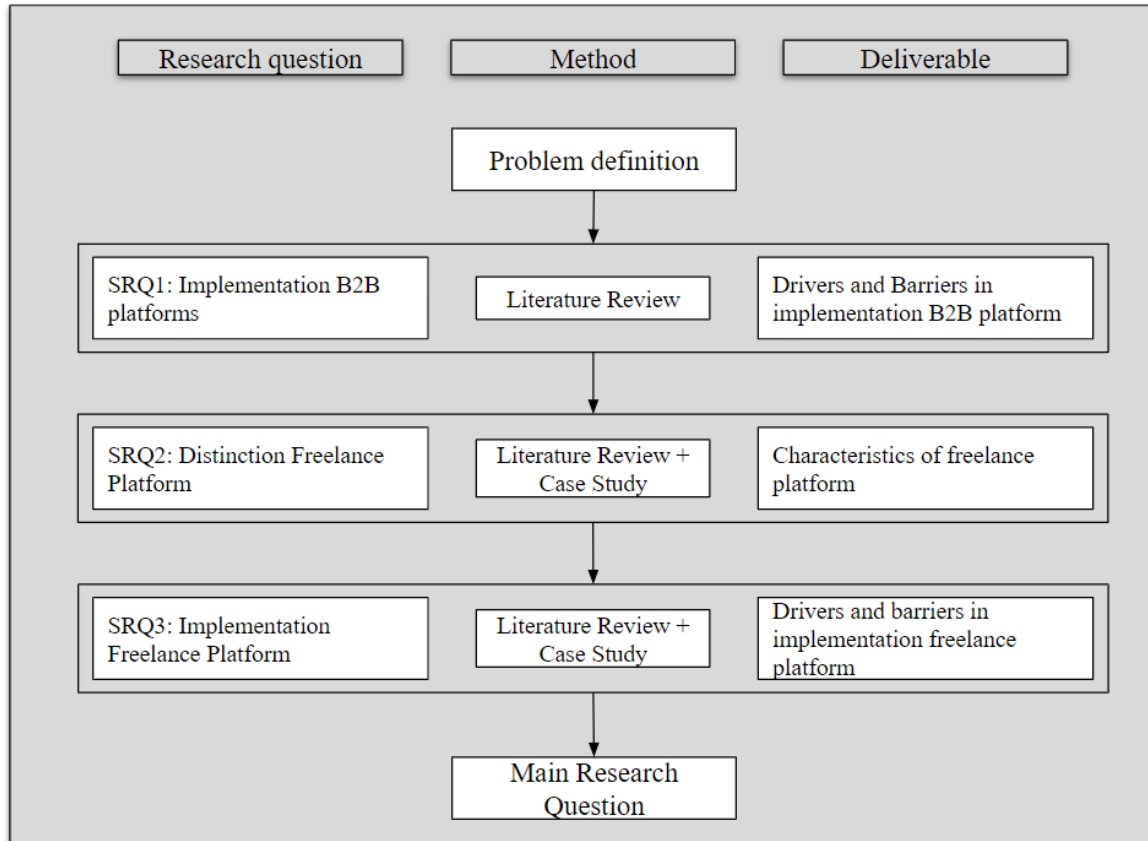


Figure 1: Research flow diagram

## 1.5. Outline

This research consists of three sub-questions and five chapters. The first chapter introduces the research topic and problem and describes the research method. Chapter 2 covers the research approach, including data collection and analysis. The literature review that answers (part of) the sub-questions is outlined in Chapter 3. This chapter includes the methodology of the review and its results. Data gathered by the case study is illustrated in Chapter 4, after which the conclusion and limitations of this study are discussed in Chapter 5.



## 2. Research Approach

Data collection and analysis consist of a few general steps: data collection, data reduction, data display, and drawing conclusions. This process, however, is not simply done in one try – iterative steps are needed to complete this process, illustrated in Figure 2.

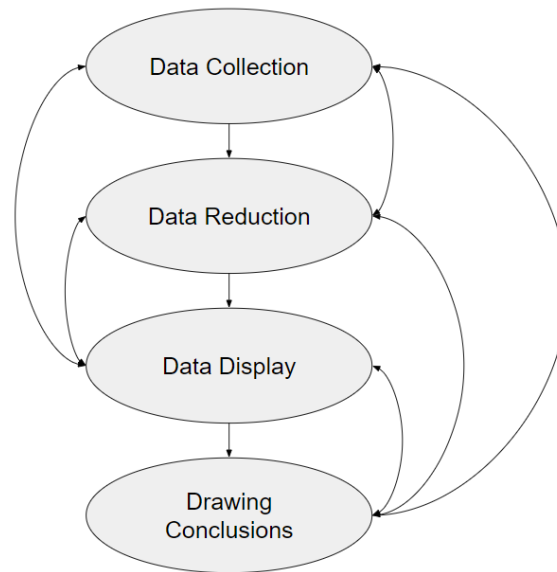


Figure 2: Iterative process of data collection and analysis

### 2.1. Data Collection

The primary chosen data collection method for this research is qualitative – data in the form of words (Sekaran & Bougie, 2016). This type of data can come from different sources such as company records, focus groups and publications by governments. The main reasons to choose this type of data collection include developing a theory on a novel phenomenon or exploring new concepts. Quantitative research, on the other hand, focuses more on questions that deal with frequency and numbers, which is often in the later stages of research. As little research has been done on freelance platforms, as they are a relatively new type of platform, the qualitative method is better suitable and, therefore, the choice of data collection for this study.

This study focuses on the implementation process of a Dutch company, Platform X hereafter, which is a B2B freelance platform provider that has been active for a few years. The company creates a network of organisations and freelancers to outsource work that cannot be done (efficiently) within the organisation itself. Platform X helps its clients identify problems and formulate assignments, which are then put on the platform. Freelancers can apply to these assignments and, once selected, carry out the

work remotely and digitally in typical periods of three weeks. These freelancers have expertise in one or more areas and are typically students, young professionals, or professionals that want to use their expertise for other companies in their spare time. Most of the platform's clients are based in Europe, but its freelancers are worldwide. The rationale for choosing a single case is the opportunity to observe and analyse the relatively new concept of an online freelance platform, which can be seen as revelatory. By focusing on a single platform, the detailed experiences of individuals playing a role in the implementation process can be studied, providing a rich understanding of the factors influencing platform implementation. Furthermore, within the Netherlands, finding a similar enough platform to study is challenging, as not many parties are active in the area of outsourcing work that requires high intensity in knowledge.

Using Platform X and its clients as a scope for this research is helpful, as a good comparison can be made - the success (or failure) of the implementation process did not depend on the different platforms used or their business models. In the case of Platform X, clients who want to put assignments on the platform need a six-month or yearly subscription and are free to post as many assignments as they desire, paying an extra commission on each completed assignment.

An embedded case study design is chosen, and subunits of analysis are used: Client A and Client B. Client A is an organisation that decided to adopt the platform but was unable to implement it in its organisation. Client B is an organisation that also adopted the platform and was able to implement it afterwards. The platform's implementation processes of the two clients are used in this research to gather insights into expert experiences and to study the relatively complex phenomenon with many factors at play. Moreover, the advantage of incorporating subunits is that they can add opportunities to analyse the process more extensively, which enhances the case insights (Yin, 2018). A threat of an embedded case study design is when the subunits are not part of the original case, and the study's orientation changes or the case study actually becomes a multiple case study. For this research, the focus is kept on the implementation process of Platform X within its clients' organisations to maintain the initial orientation, and the data collection measures are oriented towards the freelance platform. During data collection, research subjects were provided with a clear context of what this research was about.

Only a few organisations are suitable to play a role in this case study, which makes the selection process challenging. This small set of options is because the use of freelance platforms to get work done is relatively new, and only a few organisations have been able to gain experience in this. However, using Platform X, organisations can be identified and contacted to participate in this case study. For this research, which is limited in time, the focus is on two clients at different ends of the spectrum – one discontinued usage and one continued usage. This focus allows the researcher to gain an in-depth understanding of what factors were involved in these organisations. Researching more organisations would spread the focus, risking the exclusion of relevant factors.

The selection of the two organisations had the following criteria: 1) Client A must be an organisation that did not buy a new subscription after the trial period of six months. This selection criterium ensures that they have gained some experience with the usage but have been unable to continue as they faced obstacles in the implementation process. By including this client in this research, survivor bias is avoided. 2) Client B must be an organisation that did buy a new subscription to the platform after the trial period of six months. 3) Client A and Client B must have started their Trial period within 12 months of each other to ensure that the features of Platform X and the work processes of Platform X were relatively similar. As Platform X is a relatively new company, these variables change quickly, which could have affected the implementation process of the two clients when they were too different. 4) Client A and Client B should have started their Trial period more than a year before the start of this research to study the successful client's implementation process over a more extended period. 5) Employees who have played a role in the decision-making process and have used the platform should still work at Client A or Client B. 6) Client A and Client B should have at least 100 employees and multiple departments. This criterium is added to ensure that the size of the organisation is large enough that the platform usage can be spread across different departments.

The organisational type of Client A and Client B (e.g. non-profit or commercial) did not play a role in the case selection. As the freelance platform is used to optimise internal work processes (which is relevant to any organisation), it is assumed that the organisational type does not play a significant role in the implementation process.

By going over the client list of Platform X, two organisations were selected that fit these criteria, with the consent of the AMs of Platform X. By asking for consent, no interference in the business is ensured. Both clients started using the platform in the same year. Client A is a Dutch sector association that experimented with Platform X during the trial period but decided to discontinue its usage after this trial. This organisation has between 100 and 125 employees across multiple departments and already has a periphery of external workers from their own network. Client B is a technology company, active in multiple countries, with roughly 600 employees in the Netherlands. It has continued its usage after the trial period and uses Platform X extensively.

### **2.1.1. Interviews**

In the case study method, several ways to collect evidence are available. Some examples of sources are documentation, archival records, interviews and direct observation, and each of these has its strengths and weaknesses. Personal interviews are the chosen source of evidence as they can be very targeted and focus on the topic of a case study, and provide rich and insightful information. Furthermore, they can be used to clarify doubts in the responses immediately during the interview. However, a limitation of this form of data collection is the potential bias which occurs when the line of questioning is poor, and suggestive questions should therefore be avoided. Interviews are also chosen over quantitative data

collection methods because the number of clients of Platform X is not yet high enough to create a significant sample and allow a quantitative data analysis. Quantitative analysis is also problematic because the platform has experimented with different clients, and certain features were implemented and removed at specific points over the years, complicating a valid comparison.

In order to gather data from respondents who participate in this research, semi-structured interviews are used. This type of interview involves the use of a set of questions that are predetermined in order to stay focused on the topic, but also allows follow-up questions that may provide additional insights into the process. The questions are formulated so that the interviewee is first asked to describe their general experience without being influenced by factors already mentioned in the literature. This also leaves room for interpretation, letting the interviewee answer the question according to their idea. An example for this is the factor of 'trust', as this can be interpreted in several ways. Subsequently, if the interviewees do not mention the topic themselves, their opinion is asked on the applicability of a range of currently known factors.

For this research, employees of two organisations (Client A and Client B) are interviewed, following the case study protocol described in Appendix C. An overview of the organisations and research participants is given in Table 1 and Table 2, respectively. Two employees of Client A have worked with the platform in the adoption process and posted several assignments together, and both of them were interviewed for this research. In Client B's case, several individuals have been using the platform throughout the organisation, and three have been interviewed. The first interview is with an early adopter of the platform - a sales director involved in the decision to adopt the platform and who has posted assignments from the beginning. The second interview is with a project manager that only recently started using the platform, and this manager's input is used to get a different perspective on the implementation process. A third interview is with the commercial director of the company, who joined the company's board after the adoption decision was made, but who played a role in the decision to continue using the platform. Finally, the perspective of the account manager (AM) of Platform X on the implementation process is studied by conducting an interview. This AM has been present since the early stages of the platform adoption by Client A and Client B, and this manager's input is used to triangulate the data from the other interviewees.

It is important to collect as much data on the implementation process from both organisations to ensure all relevant factors are included in this study. By interviewing both employees of Client A that have used the platform, all relevant data on this organisation is collected, as these are the only two individuals that played a role in the adoption decision and implementation of the platform. In Client B's case, three individuals who used the platform at different stages of the implementation are interviewed. The first interview with the sales director (Client B1) is used to collect data from the very beginning of the implementation process. The other two interviews complement and triangulate this input. Three

perspectives who came into contact with Platform X at different time points and filled different positions in the organisation are assumed to provide enough insights to complete this research.

Table 1: Overview of organisations that play a role in this research

Organisation	Description
<b>Platform X</b>	The Dutch freelance platform of which it's clients are used for this research
<b>Client A</b>	The organisation that was not able to implement Platform X
<b>Client B</b>	The organisation that was able to implement Platform X

Table 2: Overview of participants to this research

Participants	Description
<b>Platform X's account manager</b>	The account manager working at platform X that handles the accounts of Client A and Client B
<b>Client A1</b>	Client A's IT information manager that was involved in the adoption decision and the usage of Platform X
<b>Client A2</b>	Client A's trade association coordinator who, together with Client A1, adopted and used Platform X
<b>Client B1</b>	Client B's sales director that was involved in the adoption decision and the usage of Platform X
<b>Client B2</b>	Client B's project manager that later started using Platform X
<b>Client B3</b>	Client B's commercial director who played a role in the decision to continue using Platform X

## Usage data

Besides the interviews, data gathered by the platform on its clients' usage is collected to provide more context on the usage of the platform. The first metric that Platform X collects is the rating of the assignments. Platform X allows its clients to rate the deliverables of the freelancers on a scale of 1 to 5. The second metric Platform X collects is the number of people within an organisation who have posted assignments on the platform. This metric indicates the degree the platform has spread through an organisation; if many different assignment owners are using the platform, the platform is diffusing throughout the organisation.

Client A started in the second half of 2021 and had a trial contract for six months and, during that time, posted three assignments. All three assignments were posted by the same two employees of Client A, who used these assignments to experiment with a different way of working. Two assignments went very well and were satisfactory; the third received a lower rating.

In Client B's organisation, 12 employees have posted 22 assignments since the beginning of 2021, of which 16 have been completed at the time of this research. Most of these focused on market research to innovate or were posted to test the opinion of its customers.

## 2.2. Data analysis

In data analysis, it is crucial to ensure that the gathered data is valid. Four factors need to be taken into account to ensure the quality of this research: construct validity, internal validity, external validity and reliability (Yin, 2018).

### *Construct validity*

Construct validity refers to the identification of correct operational measures for concepts that are being studied (Yin, 2018). One tactic to ensure construct validity is to use multiple sources of evidence in the data collection phase. In this study, this is done by collecting insights into the implementation process from different perspectives and triangulating the data by using multiple sources. By interviewing both Platform X's AM and different employees from each client that directly use(d) the platform, multiple perspectives on the implementation process are investigated, and triangulation is enabled. Furthermore, a chain of evidence is established throughout the research by checking for consistency and connection with the elements of the case study, such as the case study questions outlined in the case study protocol.

### *Internal validity*

Internal validity refers to “seeking to establish a causal relationship” (Yin, 2018, p. 78). This validity is primarily relevant in explanatory or causal studies, which is not the case in this research – being a descriptive study. However, as drivers and barriers of platform implementation are investigated, which are causes that affect the eventual outcome of the platform implementation, preliminary relationships are identified and proposed. To increase internal validity, one can use longitudinal studies (observations on multiple points in time), as these help to establish that a cause (independent variable) happens before an effect (dependent variable). As this research project is limited in time, this is challenging. However, in this study's data collection, interviewees are asked about their expectations at the time of the adoption decision, and their reflection at the time the trial period ended. Although these insights are not tested during the actual two time points, but at the time of this research, it does give an indication of what caused the implementation or lack thereof.

### *External validity*

External validity is determined by how well the findings of a case study can be generalised (Yin, 2018). Using theory during the research design phase is a tactic to ensure this validity. In this study, this is done by combining Rogers' Diffusion of Innovation framework (Rogers, 1995) with the extended Technology-Organisation-Environment framework of Tornatzky & Fleischer (1990), which will be further explained in Chapter 3, to categorise the factors that play a role in the implementation of the

freelance platform. Using these theories also helps to generalise the results of this research to other similar cases.

Not having the proper sample to represent the population could threaten external validity. This is prevented in this study by including both an organisation that could implement the platform and an organisation that could not. If only “successful” organisations were to be included, external validity would be decreased, as insights into failed cases would be missing.

### ***Reliability***

Reliability refers to the replicability of the research (Yin, 2018). This research design is written in such a way that other researchers can come to the same conclusion if they were to replicate this study. This reliability is ensured by developing a case study protocol, which describes all the steps taken during this case study.

#### **2.2.1. Data reduction, display and drawing conclusions**

To structurally analyse qualitative data, it first needs to be reduced. This reduction helps to process the data gathered by the qualitative research method and is made through the coding of the interviews. Secondly, this reduced data is displayed in an organised way to identify patterns and relationships between the different concepts. Finally, these two steps lead to the last phase of drawing results that help answer the research questions.

### ***Data reduction***

As qualitative data collection results in significant amounts of data, it must first be reduced to analyse it properly (Sekaran & Bougie, 2016). This reduction is made through coding and categorisation, which refer to the analytical process of reducing, rearranging, and integrating data to form a theory. Coding is used to help draw sensible conclusions from large amounts of data and is done by labelling units of texts – called codes. The coding unit varies in length, from words to complete sentences, but represents one specific theme. These codes are then grouped, and categories are formed.

Depending on the research, a fitting coding approach should be selected. Three types of coding approaches exist; the loose approach, the tight approach, and the middle-ground approach (Miles & Huberman, 1994). The loose approach refers to grounded theory, where codes and categories must be generated inductively from data as no theory is available. In the tight approach, a preliminary theory exists and forms a basis for an initial list of codes. Each of these has its risks and benefits. Where the grounded theory has the risk of the researcher getting lost in the data without a clear direction, the tight approach risks data getting bent out of context. The middle-ground approach combines the two approaches, as a list of codes is informed by theory but can be changed during the process (Miles & Huberman, 1994). This approach is chosen for this research project because existing literature on other B2B platforms is used to guide the research and is complemented with new insights by data gathered in the context of a freelance platform.

Three types of coding are used in the three phases of qualitative data analysis: open, axial, and selective coding (Corbin & Strauss, 1990).

In the exploration phase, open coding is used to sensitise concepts. It is “the process of breaking down, examining, comparing, conceptualising, and categorising data” (Corbin & Strauss, 1990, p. 61). By using open coding, a list of codes is created from the interview transcripts. In order to do this structurally, the coding software ATLAS.ti is used. With this program, relevant parts of the transcripts are marked and coded and subsequently categorised. Quotations are marked as they can be very illustrative and therefore have a positive effect on the narrative of this report.

In the analysis phase, axial coding is used. Axial coding refers to coding that “relates categories to subcategories, specifies the properties and dimensions of a category, and reassembles the data you have fractured during initial coding to give coherence to the emerging analysis”, to quote from (Charmaz, 2006, p. 60). This type of coding is used to analyse the categories by making connections between them and finding commonalities and differences. It can also be seen as putting the data back together after fracturing it by applying codes.

In the reduction phase, selective coding is used, and the core category is identified. The final core category refers to the data category around which the other categories are integrated and is the central phenomenon. Selective coding is also used to determine the reliability of the research, as the process includes the validation of categories into the theoretical constructions. Finally, preliminary causal relationships between factors are identified and proposed, which need to be further researched in future studies.

### ***Data display***

After coding the qualitative data, it needs to be displayed in an organised way, which is the second critical activity in analysing qualitative data (Miles & Huberman, 1994). Displaying data can be done in multiple ways: using charts, matrices, graphs, diagrams and displaying phrases mentioned frequently throughout the interviews. By organising the data and displaying it structurally, patterns and relationships can be recognised more easily, and valid conclusions can be made. The collected data on platform usage of Client A and Client B is also displayed. This visualisation facilitates a proper comparison between the two organisations.

### ***Drawing conclusions***

Drawing conclusions from the results is the final and essential activity in the analysis of qualitative data. Observed patterns are explained, and data is compared. These conclusions are then used to answer the research questions.



### 3. Literature Review

The amount of literature on digital platforms has grown over the past years resulting from increased academic interest. As different types of digital B2B platforms have existed for roughly two decades now, researchers have had the opportunity to gather information on this topic, and different platform types within the B2B sector have been studied in various contexts (Arica & Oliveira, 2019; Joo & Kim, 2004; Loukis et al., 2011; Wallbach et al., 2019). However, despite the growing number of B2B platforms and their success, many areas still need to be studied (Rohn et al., 2021), including freelance platforms, as will be illustrated in this literature review. This section provides an overview of the literature that has been done on the implementation process of a B2B platform. Throughout the chapter, tables are used to give an overview of the most significant factors mentioned by researchers. For a complete overview of all their mentioned factors, Appendix A can be consulted.

This literature review aims to answer (part of) the sub-questions. The sub-questions that are (partly) answered using this literature review, as defined in section 1.3, are:

*Sub-question 1: What are the drivers and barriers in the implementation process of a digital B2B platform?*

*Sub-question 2: What distinguishes a freelance platform from other B2B platforms?*

*Sub-question 3: When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

Sub-question 1 is entirely answered by the literature review, and its answer can be found at the end of this chapter. Sub-question 2 is partly answered in this chapter using descriptions and characteristics of different platform types found in the literature. The first part of this answer is outlined at the end of this chapter. Furthermore, a small part of sub-question 3 is answered by an article on freelance platform sourcing, which can also be found at the end of this chapter.

#### 3.1. Search description and selection criteria of relevant literature

In order to find and select relevant articles, a few steps are taken. First, keywords are formulated, which are used for the search queries. These keywords include synonyms of the topics used in this research to ensure that all related research is investigated. The search query is then performed and limited to the article title, abstract, and keywords to search for the most relevant articles. This selection of articles is further filtered by reading the title, filtering irrelevant titles, and then reading the abstracts. Only articles are included that focus on the client's perspective as opposed to the platform's, as this research is focused

on the internal implementation of the platform in organisations. After screening the articles and filtering the results, the snowball approach is used, where the reference list of each article is screened to find other relevant articles. SCOPUS and Delft University of Technology databases are consulted for this literature review, and Mendeley is used to store and file all the sources used in this research.

First, the literature is searched on the overarching subject of business-to-business (B2B) platforms to find articles with factors that also play a potential role in the context of freelance platforms. The results of this search query are displayed in Table 3. Research in this field is emerging and is relevant for two reasons: 1. Participants behave very differently compared to B2C markets 2. The B2B e-commerce market is roughly twice the size of its B2C counterpart (Shree et al., 2021). As freelance platforms operate in this sector, insights from the literature on B2B platforms are relevant and can be used for this research. The terms adoption, assimilation and diffusion are also included as keywords for this search query to find articles that use different terminology.

Table 3: Results literature review B2B platforms

Keywords	Total number of articles	Filtered by title	Filtered by abstract	Articles
<b>Implement* AND B2B AND Platform</b>	27	5	0	
<b>Adopt* AND B2B AND Platform</b>	118	9	2	(Shree et al., 2021) (Arica & Oliveira, 2019)
<b>Assimilat* AND B2B AND Platform</b>	8	2	1	(Najmul Islam et al., 2020)
<b>Diffus* AND B2B AND Platform</b>	14	3	2	(Wallbach et al., 2019) (Shree et al., 2021)

This first query resulted in four usable articles on the implementation process relevant to this research. Another five papers are identified and used to fill the list of known factors using the snowball approach.

Next, a search query more focused on freelance platforms is done, and the results are shown in Table 4. Again, the terms adoption, assimilation and diffusion were used to find other articles that use this terminology. The low number of usable articles indicates the little research that has been done in this area and validates the need for further research. A second usable article by Corporaal & Lehdonvirta (2017) was added to the results through the snowball method.

Table 4: Results literature review freelance and gig platforms

Keywords		Total number of articles	Filtered by title	Filtered by abstract	Articles
<b>Freelance Platform</b>	<b>AND</b>	123	18	1	(Scully-Russ & Torracco, 2020)
<b>Implement* gig AND platform</b>	<b>AND</b>	27	1	0	
<b>Adopt* AND platform</b>	<b>AND gig</b>	41	1	0	
<b>Assimilat* AND platform</b>	<b>AND gig</b>	2	0	0	
<b>Diffus* AND platform</b>	<b>AND gig</b>	5	0	0	

### 3.2. Implementation theories

In order to define the implementation process and to categorise the process' drivers and obstacles, a theoretical framework is used. Multiple models to explain IT usage can be found in the literature; Diffusion of Innovation (DOI) (Rogers, 1995), Technology Acceptance Model (TAM) (Davis, 1985), and Technology-Organisation-Environment (TOE) (Tornatzky & Fleischer, 1990) are a few prominent examples. In this research project, the DOI Theory framework (Rogers, 1995) and the TOE framework (Tornatzky & Fleischer, 1990) are chosen to assess the implementation of the freelance platform. Rogers' DOI model is preferred over Davis' TAM framework as it contains more attributes and thus creates a bigger picture of the adoption process. Whereas the TAM framework focuses on two aspects that determine the adoption process – the perceived ease of use and usefulness of a technology – the DOI model contains five: relative advantage, compatibility, complexity, trialability, and observability. The two factors of TAM are also somewhat related to DOI's complexity and relative advantage attributes, making the three other attributes an addition. The TOE framework is chosen because it is a well-accepted model and considers environmental factors besides the technology and organisation category. For this research, the framework is extended by a fourth category: collaboration. Collaboration between internal workers and freelancers plays an essential role in the context of freelance platforms, and factors of this category must also be included. An alternative to this extended TOE framework would be the adoption barrier framework used by Hsiao (2003), which contains the categories of technology, organisation, collaboration, and infrastructure to categorise adoption barriers in his research on e-marketplaces. However, the infrastructure category is more limited than 'environment' as it only contains legal and regulatory frameworks, and infrastructures in logistics and finance (Farhoomand et

al., 2000). This limitation forms an issue in this research, as factors such as external pressure from competitors cannot be included. An overview of the discussed theories can be found in Table 5.

Table 5: Overview of implementation theories and their characteristics

Theory	Characteristics / categories	Pros	Cons
<b>Diffusion of Innovation (Rogers, 1995)</b>	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Compatibility</li> <li>• Complexity</li> <li>• Trialability</li> <li>• Observability</li> </ul>	<ul style="list-style-type: none"> <li>• Well-known theory on implementation</li> <li>• Large number of characteristics</li> </ul>	
<b>Technology Acceptance model (Davis, 1985)</b>	<ul style="list-style-type: none"> <li>• Perceived ease of use</li> <li>• Perceived usefulness</li> </ul>	<ul style="list-style-type: none"> <li>• Well-known theory on implementation</li> </ul>	Only two characteristics
<b>Technology-Organisation-Environment (Tornatzky &amp; Fleischer, 1990)</b>	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Organisation</li> <li>• Environment</li> </ul>	<ul style="list-style-type: none"> <li>• Well-known theory on implementation</li> </ul>	Does not include collaboration factors
<b>Extended Technology-Organisation-Environment adapted from Tornatzky &amp; Fleischer, 1990)</b>	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Organisation</li> <li>• Environment</li> <li>• Collaboration</li> </ul>	<ul style="list-style-type: none"> <li>• Well-known theory on implementation</li> <li>• Includes collaboration factors</li> </ul>	
<b>Adoption barrier framework (Hsiao, 2003)</b>	<ul style="list-style-type: none"> <li>• Technology</li> <li>• Organisation</li> <li>• Collaboration</li> <li>• Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Contains category of collaboration</li> </ul>	Relatively unknown framework

With platform implementation, both the adoption decision and the actual usage of the platform – implementation - are included. As Rogers (1995) stated, implementation is frequently seen as an extension of adoption and follows naturally; however, this is not automatically the case. So solely looking at the adoption – the decision to start using a technology – will not explain whether the technology will be used. In his Innovation Decision Process Theory, he identifies five stages in the diffusion process, as illustrated in Figure 3; knowledge, persuasion, decision, implementation and confirmation, and he describes this process as the reduction of uncertainty. This research focuses on the decision and implementation stage.

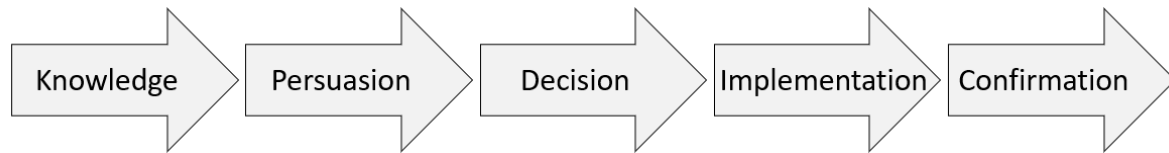


Figure 3: Innovation Decision Process Theory adapted from Rogers (1995)

Attributes of this uncertainty are defined by the perceived relative advantage, compatibility, complexity, trialability and observability. An overview of these attributes and their definitions is shown in Table 6.

Table 6: Definitions of attributes of uncertainty and their definitions adapted from Rogers (1995)

Characteristic	Definition
<b>Relative Advantage</b>	The degree to which an innovation is perceived as better than the idea, work practice or object it supersedes
<b>Compatibility</b>	The degree to which an innovation is perceived as being consistent with the existing values, past experiences, and needs of potential adopters
<b>Complexity</b>	The degree to which an innovation is perceived as difficult to understand, implement and use
<b>Trialability</b>	The degree to which an innovation may be experimented with on a limited scale base
<b>Observability</b>	The degree to which the results of an innovation are visible to others

In the third stage – decision – the organisation has to decide whether it wants to adopt the technology, and the uncertainties related to the abovementioned characteristics need to be perceived as little enough for the technology to complete this stage (Rogers, 1995). When the decision is made to adopt the technology, the implementation phase commences, and the technology is put into practice. In this research, how the characteristics were perceived at the adoption decision is compared to the eventual outcome of the implementation phase.

In the implementation stage, the four categories of the extended TOE framework are used to categorise the drivers and barriers (Tornatzky & Fleischer, 1990). The technology category is associated with systems integration and hardware and software compatibility. This refers to integrating the platform software into its clients' systems. The organisation category concerns internal processes and aspects such as management commitment and employee resistance to change. How management promotes or discourages the usage of the platform, the awareness of benefits the platform offers, and the resistance to change from internal workers are of concern in this category. The third category associated with collaboration deals with barriers of trust and collaboration between participants. In the context of freelance platforms specifically, this category is interpreted as the collaboration between internal and

external workers and aspects such as the level of trust and their alignment. The last category – environment – concerns barriers associated with legal and regulatory frameworks, and financial and logistics infrastructures. In the case of freelance platforms, the contractual conditions and the influence other platform participants have on the usage are included in this category. An overview of the four categories of this extended TOE framework is given in Figure 4.

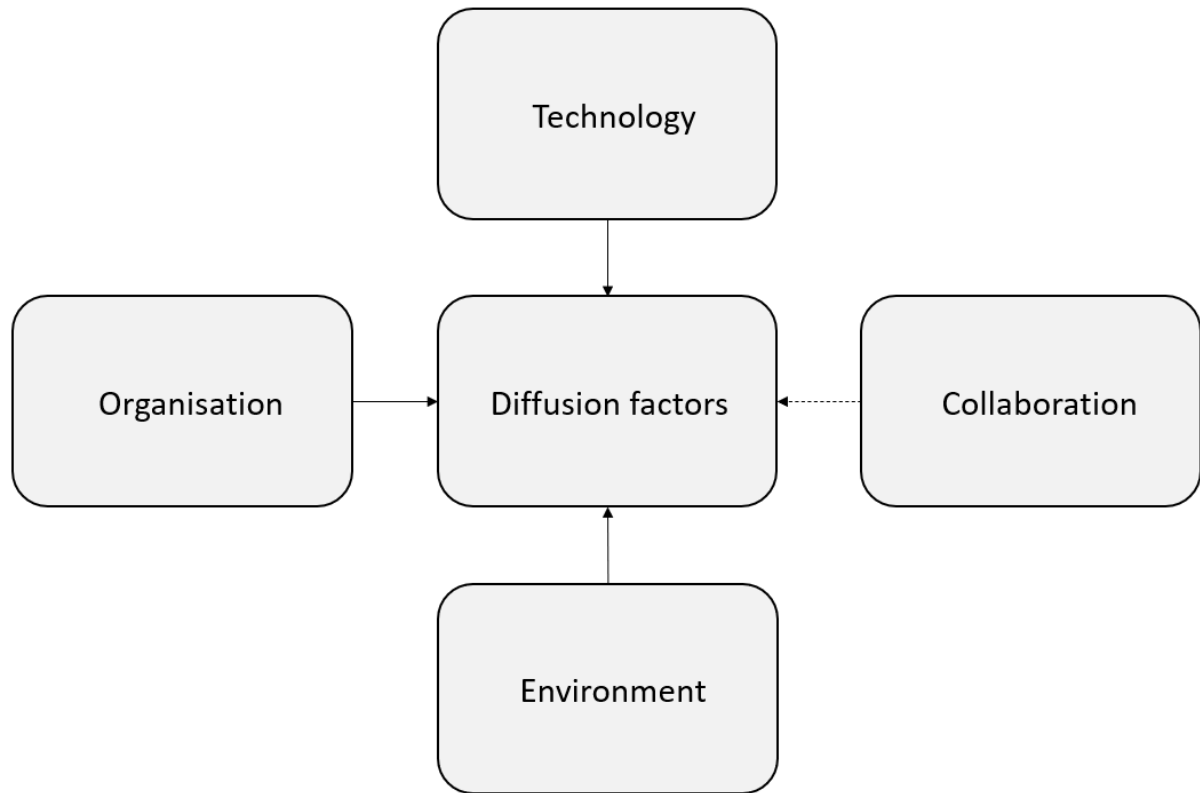


Figure 4: Extended TOE framework adapted from Tornatzky & Fleischer (1990)

### 3.3. B2B platforms: types and implementation

#### 3.3.1. B2B platform types

First, definitions and characteristics of different platform types are discussed, as different types are mentioned in prior research.

##### *Multi-sided platforms*

*Multi-sided platforms* are a type of online marketplace that facilitates communication between two or multiple actor groups, mediated by the provider of the platform (Wallbach et al., 2019). Two things characterise this type of platform (Hagiu & Wright, 2015): First, they allow direct communication between two or multiple independent groups. These consist of multiple organisations or users. Second, each of these groups is connected to the platform.

***e-marketplace***

An *e-marketplace* is an inter-organisational information system providing a digital space where communication and transactions are facilitated between different buyers and sellers (Stockdale & Standing, 2004). This differs from a freelance platform, as frequently, sellers display their products on the platform and are looking for buyers, as opposed to organisations posting assignments that sellers can fill in the freelance platform context.

Another category of B2B platforms includes *online work* or *labour platforms*. These platforms use technology to create multi-sided, online marketplaces, which together form the ‘gig economy’ (Meijerink et al., 2021). The gig economy is described as the economic system that connects on-demand workers with organisations. Examples of these platforms are Uber (transportation), Deliveroo (food delivery) and Fiverr (freelance services) (Duggan et al., 2020). Online work platforms do not have freelancers on the payroll but claim that they provide intermediation services and are brokers between self-employed freelancers and organisations that want to outsource activities with a fixed term (Kuhn & Maleki, 2017).

In the area of work platforms, a distinction can also be made; *crowdsourcing* and *outsourcing platforms*. These facilitate online work in some form (Corporaal & Lehdonvirta, 2017).

***Crowdsourcing platforms***

*Crowdsourcing platforms* are the first type of online work platform and allow customers to source work using a group of people which is largely undefined. Multiple people can hand in their solutions to a question in the form of contests, which is helpful when creative solutions are desired.

***Outsourcing platforms***

*Outsourcing platforms* differ from crowdsourcing platforms as they facilitate sourcing from individual people or organisations instead of from a crowd. These platforms match specific buyers with specific sellers and are best used for clearly defined work with workers on an on-demand basis. Outsourcing platforms can be further divided into *microwork platforms* and *online freelance platforms* – the topic of this research. Microwork platforms are best used for small, repetitive tasks and have a low managerial overhead for the matching process. Online freelance platforms differ from this and are characterised by a higher focus on specialised projects which require a high intensity in knowledge, such as software development. The matching process of these requires a higher managerial overhead, and the quality of the matches is of significant importance. Frequently, the platform provider assists its clients in the sourcing process. This higher involvement of the freelance platform provider differs from other B2B platforms, where transactions are mostly automated and require little involvement (Corporaal & Lehdonvirta, 2017).

### 3.3.2. B2B platform implementation

In order to better understand the adoption of B2B platforms, Shree et al. (2021) have done a systemic review of the relevant work that has been done on the B2B adoption process. What can be concluded from this study is that a literature body on the adoption of B2B platforms already exists but has limitations. Other researchers have confirmed this, claiming that most studies are context-specific, leaving gaps and uncertainties for unstudied industries (Cen & Li, 2020).

Sila (2013) has focused on the adoption process of a B2B electronic commerce platform by analysing factors that affect the firm's decision to adopt the platform, including contextual variables that potentially affect the factors. Using responses from an online survey and testing their hypotheses using Multiple Regression and ANOVA analysis, they conclude what factors contribute the most to e-commerce usage. Furthermore, they also looked at different contexts that affect these factors, such as firm size and type, the management level of the respondents and the country of origin. Nine adoption factors were identified, illustrated in Figure 5, of which only complexity and trust have not shown to have an association with the eventual usage. In the case of the contextual variables, the country of origin has not shown to have an effect on the factors.

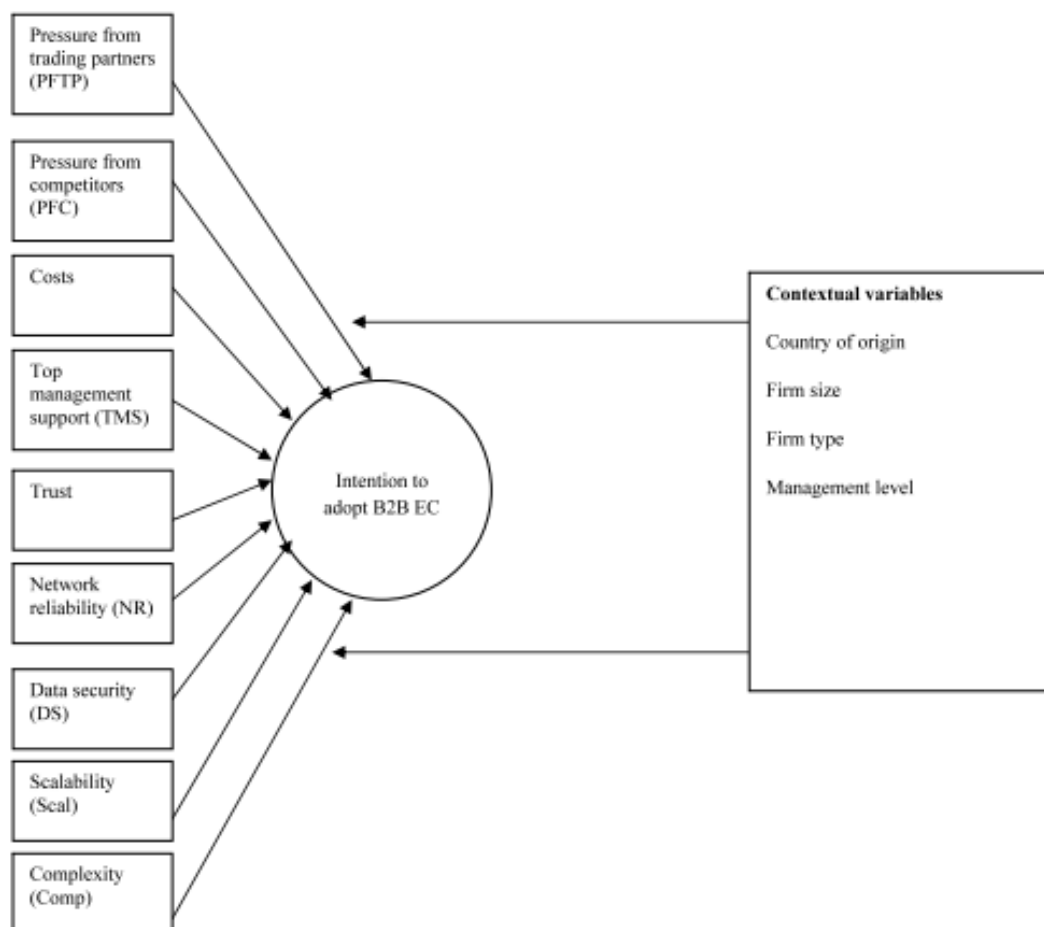


Figure 5: B2B e-commerce adoption factors with contextual variables (Sila, 2013, p. 208)



Scalability has been identified as the most significant contributor to adopting the e-commerce platform, according to multiple regression results. This suggests that managers value the platform's potential to reach more customers and realise economies of scale. When the contextual variables are excluded, the findings indicate that network reliability, pressure from competitors, scalability, top management support and trust are essential factors firms' decision making to adopt an e-commerce platform.

Intention to adopt B2B e-commerce platforms differs across management levels, and the factors of data security, trust and pressure from competitors are affected by this level. CEOs have indicated that what distinguishes adopter and nonadopter firms are mainly due to top management support and trust, as these factors play a key role in the adoption decision.

Najmul Islam et al. (2020) have researched B2B platform assimilation from the perspective of the buyer and investigated the platform's service functionality. Assimilation is the degree to which the platform is diffused in an organisation and deployed in its purchasing processes (Rai et al., 2009). Without thorough assimilation, an organisation might not realise all the expected benefits, and researchers have noted a large gap between initial adoption and complete assimilation (Wright et al., 2017). In their study, Najmul Islam et al. (2020) have recruited a panel of experts in B2B purchasing, which has identified inhibitors and enablers of platform usage to fill this gap, illustrated in Table 7. Their results show that top management support is an important factor in the assimilation of a platform. This support can be shown by providing the necessary financial resources to assimilate the platform completely. Furthermore, important factors that enable the assimilation of a platform are the benefits, both direct and indirect. Cost savings and other efficiencies that a company experiences internally are included in the direct benefits. Indirect benefits concern the potentially improved relationship with suppliers and the opportunity to reengineer processes (Kuan & Chau, 2001). Besides these enablers, they identified critical inhibitors including managerial complexity and assimilation costs. However, they show that the negative effects of these inhibitors diminish when the assimilation process progresses, and they advise managers to make the necessary changes to incorporate the B2B platform early in the process.

Table 7: Factors of platform assimilation adapted from Najmul Islam et al. (2020)

Encouraging Factors	Discouraging Factors
<ul style="list-style-type: none"> <li>• The degree of benefits</li> <li>• Top Management Support</li> </ul>	<ul style="list-style-type: none"> <li>• Managerial Complexity</li> <li>• Assimilation costs</li> </ul>

Another study in this area has focused on the needs and requirements of companies that use B2B platforms to find and share manufacturing capacity (Arica & Oliveira, 2019). Platforms are used in the manufacturing industry to optimally use the available production capacity. Their study involved interviewing 34 senior executives from various types of companies to collect data on potential platform adopters, and priority was given to manufacturers that were key users of the platform. After these

interviews, they identified two requirements for platform adoption: 1. Overcoming the critical mass and 2. Overcoming constraints of information sharing. The first requirement entails having enough and the right participants on the platform for other users to be attracted to the platform. The latter constraint is caused by a reluctance to share information with the platform due to trust issues.

In a study by Wallbach et al. (2019), 21 inhibitors of the diffusion process of B2B multi-sided platforms in competitive networks are unravelled. Using five overarching themes – Technical and Regulatory requirements, Mindset, Characteristics of the system provider, Competition, and Process – they categorise these 21 inhibitors and reveal their impact on same-side, cross-side and mixed-side network effects. An overview of these 21 inhibitors is illustrated in Table 8. Their results show that inhibiting factors related to mixed-side network effects play a critical role, especially in B2B networks with high competitiveness. These are: legal requirements and community-specific (missing implementation of needs) requirements in the category of technical and regulatory requirements, community idea (prioritising common goals over individual goals) in the competition category, and implementation of workarounds (individual advantages that are generated by actions that infiltrate official processes) in the mindset category.

Table 8: Inhibitors of B2B platform diffusion adapted from Wallbach et al. (2019)

Overarching Theme	Factor
<b>Technical and Regulatory Requirements</b>	<ul style="list-style-type: none"> <li>• Legal requirements</li> <li>• Community-specific requirements</li> </ul>
<b>Mindset</b>	<ul style="list-style-type: none"> <li>• Implementation of workarounds</li> </ul>
<b>Competition</b>	<ul style="list-style-type: none"> <li>• Community idea</li> </ul>

In their paper, Saprikis & Vlachopoulou (2012) systematically investigate different factors that impact the level of use by suppliers on B2B e-marketplaces in the post-adoption phase. As confirmed by the literature review in this paper, this phase of platform diffusion is not investigated as thoroughly as the adoption phase and requires further study to understand the level of usage by its users. To help them understand and structure the different factors, they categorise them into three domains; internal environment, external environment, and B2B e-marketplace characteristics. Using a literature review and collecting data from suppliers that use a Greek B2B e-marketplace, they found eleven different variables and tested their formulated hypotheses in practice. Their results show that the factors from the third category – concerning B2B e-marketplace's characteristics – impact the process the greatest and are therefore seen as most important, illustrated in Table 9. This finding contrasts the conclusion of studies on the adoption process, as the external environment is seen as the most vital domain (Wang et al., 2006; White et al., 2007). On top of that, Saprikis & Vlachopoulou (2012) show that the external environment shows the least impact on platform usage by suppliers, indicating that no matter how much pressure the potential user gets from its external environment, e-marketplace's characteristics determine

whether it is being used or not. Finally, similar to findings from Najmul Islam et al. (2020), this research shows the importance of management commitment and support in the internal domain. The intention to invest in the platform's usage in the form of providing additional financial resources by managers has shown to play a vital role in the usage of the e-marketplace (Pflughoeft et al., 2003).

Table 9: Factors impacting user level e-marketplace adapted from Saprikis & Vlachopoulou (2012)

Domain	Factors
<b>Internal factors</b>	<ul style="list-style-type: none"> <li>• Top management strategic support</li> </ul>
<b>Characteristics of the applied B2B e-marketplace</b>	<ul style="list-style-type: none"> <li>• B2B e-marketplace's mission and provided e-services</li> <li>• Profile and extent of participating firms</li> </ul>

The adoption process of e-marketplaces by larger companies has also been studied. Loukis et al. (2011) conducted a study focusing on the adoption of e-marketplaces in the B2B context by large enterprises using the case of a public Greek Aerospace company. Their study contributes to the academic literature by identifying barriers large organisations must overcome to adopt a digital B2B platform. In contrast, most prior research had focused on barriers that SMEs face and solely on the benefits of using these B2B e-marketplaces. Loukis et al. (2011) argue that researching barriers experienced by larger companies is important for two reasons: 1) enterprises' usage of B2B e-marketplaces was relatively low. 2) A small increase in the usage of e-marketplaces by enterprises would significantly impact the total number of transactions and value in the e-marketplaces due to their big volume of purchases and sales. This would also lead to a virtuous circle, as more (smaller) parties would be attracted to the e-marketplace due to network effects, increasing the number of transactions even further.

Using the case study method combined with the innovation diffusion theory by Rogers (1995) and by comparing their findings to other related studies, they found nine basic adoption barriers. They concluded that the basic barriers were mainly of organisational and technological nature: the integration of e-marketplaces in their complex internal information systems proved difficult, and some employees lacked trust towards suppliers they did not know. Also, due to their lack of experience, employees could not use these technologies to their full potential, overlooking novelty and complementary benefits. By comparing these results to studies done from the small and medium-sized enterprises (SME) perspective, they conclude that large enterprises face different barriers in adopting digital B2B platforms than SMEs, validating the necessity of their research (Stockdale & Standing, 2004). An overview of the most critical barriers is given in Table 10.

Table 10: Adoption barriers of e-marketplaces by enterprises adapted from Loukis et al. (2011)

Barriers
<ul style="list-style-type: none"> <li>• Difficulties of integration with internal information systems</li> <li>• Hesitation and unwillingness of some employees</li> <li>• Lack of trust of unknown suppliers</li> <li>• Results provided in an unstructured and difficult to process form</li> <li>• Deficiencies of the internal regulations and the legal framework</li> </ul>

One such study on the SME perspective was done by Stockdale & Standing (2004), who investigated the problems SMEs face while implementing e-marketplaces in their business. By reviewing the literature, they identified and divided eight barriers into the categories of internal and external barriers. Internal barriers refer to the barriers that SMEs face inside the business, and external barriers are associated with the outside environment of the business. Their identified barriers include a lack of understanding of the needs of SMEs, a low level of competencies in the online environment, and financial constraints of smaller firms. An overview of these barriers is shown in Table 11. However, this research was done in the first years of this decade, meaning that some of these barriers, such as understanding the nature of the Internet, are less relevant now. Based on the literature review and by synthesising their findings, Stockdale & Standing (2004) also identify the main potential benefits of participating in e-marketplaces for SMEs, illustrated in Table 11.

Table 11: Adoption factors of e-marketplaces in SMEs adapted from Stockdale &amp; Standing (2004)

Benefits	Barriers
<ul style="list-style-type: none"> <li>• Access to a wide range of markets</li> <li>• Flexibility in administration and communication</li> <li>• More and updated information</li> <li>• Improved customer service</li> <li>• Lower transaction costs</li> </ul>	<p>Internal barriers:</p> <ul style="list-style-type: none"> <li>• Financial constraints</li> </ul> <p>External barriers:</p> <ul style="list-style-type: none"> <li>• Lack of understanding of and supporting the special needs and peculiarities of the SMEs by most B2B e-marketplace makers</li> <li>• External environment not favouring such innovations</li> </ul>

Finally, a study on e-marketplace adoption from the perspective of IT innovation has been done using the Technology, Organisational, and Environmental contexts (Joo & Kim, 2004). The technological context concerns the relative advantage of the innovation, the organisational context concerns slack resources and the size of the company, and the environmental context involves external pressure and buying power. An overview of these contexts and factors can be seen in Figure 6.

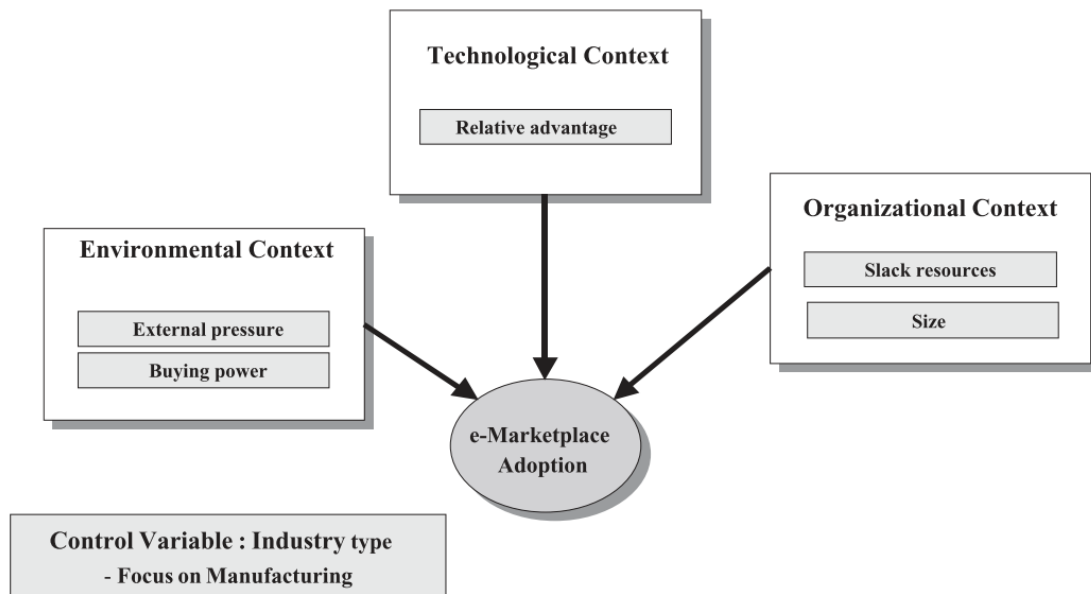


Figure 6: Factors of e-Marketplace adoption (Joo & Kim, 2004, p. 93)

The focus of this study is on manufacturing firms and for these, external pressure and firm size appear to be the main factors that determine the decision to adopt the e-Marketplace. Firms that perceive more external pressure and firms of larger size tend to adopt an e-Marketplace earlier.

### 3.3.3. Freelance platforms

Freelance platforms allow a growing number of workers opportunities to generate an income independently – in 2016, 10% of the U.S. workforce was employed through this new form of work, and this share was expected to continue to grow (Scully-Russ & Torraco, 2020). However, only a handful of articles has been found that deal with this topic, and only one article has been found that deals with the implementation issue of freelance platforms in a specific context.

A case study by Corporaal & Lehdonvirta (2017) has looked at how Fortune 500 companies adopt online freelance platforms, and their results are displayed in Table 12. Their findings suggest that different forms of flexibility motivate companies to adopt such a platform. By creating a layer of on-demand workers, they can cope with the changing intensity of work without the need to expand or decrease their internal workforce. The main drivers of platform usage have been creating a space to experiment and learn, where members were allowed to try and experiment in ways to use the platform and to identify valuable practices. This also allowed the alignment of their in-house teams with external workers, stimulating collaboration. An important notion is that only large corporations have been studied in this research, with vast financial resources to afford this experimentation. The question remains whether these factors also apply to smaller organisations with different internal dynamics and fewer resources.

Some challenges identified in implementing the platform were internal resistance, as managers were reluctant to outsource their work in fear of becoming abundant. Also, as large corporations have

structured processes to organise the sourcing of new personnel, the complexity of integrating this new way of sourcing can become a barrier.

*Table 12: Drivers and potential challenges for implementing sourcing platform*

Drivers	Potential challenges
<ul style="list-style-type: none"> <li>• Flexibility</li> <li>• Creating a safe environment for experimentation</li> <li>• Creating a supportive climate for implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Overcoming internal resistance</li> <li>• Developing tailor-made solutions to address risks (legal issues and information risks)</li> <li>• Preventing increased coordination costs</li> <li>• Learning new practices to complement internal with external work</li> <li>• Creating socio-technical infrastructures for platform organizing</li> </ul>

### 3.4. Conclusion Chapter 3

From Chapter 3, sub-question 1 and a part of sub-question 2 and sub-question 3 can be answered, and the conclusions are outlined in this section.

#### 3.4.1. Sub-question 1

*Sub-question 1: What are the drivers and barriers in the implementation process of a digital B2B platform?*

First, a frequency analysis is done on the factors mentioned in the literature that play a significant role on either the adoption decision or the usage level. These are ranked and shown in Table 13. The factors mentioned by multiple sources are considered more likely to also play a role in the context of freelance platforms.

Table 13: Frequency of mentioned factors in literature

Factor	1	2	3	4	5	6	7	8	9	Tot.
<b>Trust</b>	1		1			1			1	<b>4</b>
<b>Complexity</b>		1				1	1		1	<b>4</b>
<b>External pressure</b>	1	1						1		<b>3</b>
<b>Management support</b>	1	1			1					<b>3</b>
<b>Cost</b>		2					1			<b>3</b>
<b>Functionalities</b>				1	1		1			<b>3</b>
<b>Scalability</b>	1						1			<b>2</b>
<b>Flexibility</b>							1		1	<b>2</b>
<b>Network reliability</b>	1									<b>1</b>
<b>Overcoming critical mass</b>			1							<b>1</b>
<b>Legal requirements</b>				1						<b>1</b>
<b>Community idea</b>				1						<b>1</b>
<b>Implementation of workarounds</b>				1						<b>1</b>
<b>Awareness of benefits</b>						1				<b>1</b>
<b>Firm size</b>								1		<b>1</b>
<b>Experiment</b>									1	<b>1</b>

An important factor that needs to be considered in this research is that it focuses on the client (the buyer of the freelance platform) as opposed to the seller (the freelancer). Furthermore, considering the difference in characteristics between platforms, not all factors mentioned in the literature are included.

#### *Adoption decision*

Previous literature is reviewed to study the factors influencing the adoption decision of B2B platforms, and the DOI framework is used (Rogers, 1995). In his framework, Rogers argues that the adoption level is determined by five characteristics of the technology: its relative advantage, its complexity, its compatibility, its trialability, and its observability.

Several factors have been mentioned that discourage B2B platform adoption. If clients lack trust in the platform's ability to fill their needs or whether it can handle sensitive company information well, this can be seen as an obstacle. A second barrier to the adoption decision is the B2B platforms' complexity. If potential users consider the platform too difficult to understand, they are unlikely to adopt it. The platform should therefore be explained very well in the beginning, and internal workers should feel confident enough that they will be able to use it. Furthermore, the barrier of assimilation costs has been mentioned in the literature, also because potential clients realise the risk of lost investments when it does not manage to assimilate the platform.

**Proposition 1:** A lack of trust and complexity are barriers to the adoption decision of a B2B platform.

A large number of known factors that play a role in the adoption decision of a B2B platform can be characterised by the relative advantage they offer compared to the prior situation. For digital B2B platforms, these include cost savings, flexibility, and scalability. Scalability plays a significant role in the adoption decision of a platform, as the platform offers an adopter the possibility to easily access many different trading partners (Sila, 2013). Furthermore, the platform's functionality acts as a driver of the adoption decision if the technology seems to answer the needs of its users (Najmul Islam et al., 2020). If the platform contains features that address problems that potential users face, it has a high chance of getting adopted. Furthermore, organisations are more likely to adopt a platform if they feel external pressure from competitors (Joo & Kim, 2004). This pressure is mainly seen in marketplaces where different manufacturers offer their products.

**Proposition 2:** Many factors driving the adoption decision of a B2B platform relate to the relative advantage attribute.

An overview and categorisation using Rogers' characteristics (explained in section 3.2) of the most frequently mentioned adoption factors is displayed in Table 14.

Table 14: Overview adoption factors literature

Adoption factors	Drivers	Barriers
Relative advantage	Scalability Costs savings Flexibility	Assimilation costs
Complexity		Complex
Compatibility	Functionality Top management support	Lack of trust
Trialability		
Observability	External pressure	



### **Usage**

The literature is also reviewed to study the factors influencing B2B platforms' usage. To categorise the most frequently mentioned factors, the extended TOE framework (Tornatzky & Fleischer, 1990) described in section 3.2 is used.

The first category of factors in the extended TOE framework concerns technology. These factors are mainly associated with the pool of technologies, complexity and compatibility. The complexity of using the freelance platform plays an important role in the level of implementation and has been identified as a potential barrier, especially in large companies with heavily structured internal systems (Corporaal & Lehdonvirta, 2017). However, Sila (2013) argues that in the case of an e-commerce platform, complexity does not play a role in the eventual usage. These contrasting conclusions are tested in the context of organisations participating in this research to better understand the role of technological complexity.

**Proposition 3:** Integration complexity of the digital technology into organisation practices might play a role in the implementation of a freelance platform.

The second category concerns organisational factors, mainly associated with the resources and features of the firm, including communication processes and management support. Management commitment and support have been mentioned as important factors in prior studies on B2B platforms and are expected to also play an important role in adopting a freelance platform. By supporting the implementation through financial investments, managers can show their commitment and send a message across the organisation to use these B2B platforms. However, Najmul Islam et al. (2020) argue that managers can be unaware of the potential benefits when complete platform assimilation has not occurred or if the technology's complexity is too great for adopters to understand the possibilities. The lack of awareness of these potential benefits can become an important barrier to the implementation of the platform and can prevent managers from continuing its implementation.

**Proposition 4:** In the organisation category, awareness of benefits in using B2B platforms plays a critical role in their implementation.

**Proposition 5:** In the organisation category, top management support and commitment play a critical role in the implementation of a B2B platform.

The collaboration category refers to how the different parties work together, and the factors associated with this are the level of trust and strategic alignment. Lack of trust by managers can form a barrier in the adoption decision and cause employees to be reluctant to use platforms. In the case of freelance platforms, this trust could refer to the sharing of sensitive company information but also trust in the capability of outside workers to deliver quality work. Furthermore, the collaboration between internal and external workers can form a barrier, as internal workers can feel threatened by outside workers to

take over their job. However, these teams need to be aligned for the company to exploit the benefits that a freelance platform offers.

**Proposition 6:** In the collaboration category, the level of trust from management and employees is critical in the implementation of a B2B platform.

**Proposition 7:** In the collaboration category, the level of alignment of internal and external workers plays a critical role in the implementation of a freelance platform.

The final category refers to the environment, and factors associated with this category include financial and regulatory frameworks. External pressure, mentioned in prior studies on e-marketplaces, is also included in this category. The interpretation of external pressure in freelance platforms is the pressure organisations sense when they see what assignments other organisations post. It is, however, expected that this factor plays a minor role - contrarily to B2B e-marketplaces - in the usage of a freelance platform, as most freelance projects are used to optimise internal work processes and do not focus on commercial activities. Therefore, this pressure does not influence the level of usage significantly.

**Proposition 8:** In the environment category, external pressure is not expected to play a role in the implementation of a freelance platform.

An overview of the implementation factors is created and displayed in Table 15. As in the case of the adoption decision, a selection is made of factors that play a role in the context of a freelance platform. These are categorised using the extended TOE framework, explained in section 3.2.

Table 15: Overview implementation factors literature

Implementation factors	Drivers	Barriers
<b>Technology</b>	Ease of use Functionalities	Integration complexity
<b>Organisation</b>	Management commitment Awareness of benefits	Lack of trust
<b>Collaboration</b>	Experimentation	Internal resistance Bad alignment
<b>Environment</b>	External pressure	

### 3.4.2. Sub-question 2

*Sub-question 2: What distinguishes a freelance platform from other B2B platforms?*

Current literature on freelance platforms and their characteristics is reviewed to partly answer this sub-question. In the following chapter, this will be appended by insights from the research participants.

Freelance platforms allow a growing number of workers opportunities to generate income independently (Scully-Russ & Torraco, 2020). These platforms are part of the online labour or work platforms category that use technology to create multi-sided, online marketplaces, which together form the ‘gig economy’ (Meijerink et al., 2021). They are characterised in the literature by a high focus on specialised projects which require a high intensity of knowledge, such as software development. The matching process of these requires a higher managerial overhead compared to other B2B platforms, and the quality of the matches is of significant importance. Frequently, the platform provider assists its clients in the sourcing process. This higher involvement of the freelance platform provider differs from other B2B platforms, where transactions are mainly automated (Corporaal & Lehdonvirta, 2017).

### 3.4.3. Sub-question 3

*Sub-question 3: When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

One article has been found on freelance platform sourcing by Fortune 500 companies (Corporaal & Lehdonvirta, 2017). They stress the flexibility aspect of freelance platforms that plays a significant role in adopting freelance platforms. Furthermore, experimentation and alignment between external and internal workers have been identified to influence the usage level. An overview of their findings is shown in Table 16.

*Table 16: Implementation factors sourcing platform adapted from (Corporaal & Lehdonvirta, 2017)*

Drivers	Potential challenges
<ul style="list-style-type: none"> <li>• Creating a safe environment for experimentation</li> <li>• Creating a supportive climate for implementation</li> </ul>	<ul style="list-style-type: none"> <li>• Overcoming internal resistance</li> <li>• Developing tailor-made solutions to address risks (legal issues and information risks)</li> <li>• Preventing increased coordination costs</li> <li>• Learning new practices to complement internal with external work</li> <li>• Creating socio-technical infrastructures for platform organizing</li> </ul>

## 4. Analysis and Results

After all the data is collected from different sources, it needs to be analysed. In this section, qualitative data reduction is outlined, collected data from all sources is displayed using various methods, and the results are illustrated. At the end of this chapter, the answers to sub-questions 2 and 3 are completed.

### 4.1. Case study findings

#### 4.1.1 Characteristics Platform X

Six factors are mentioned by direct users of Platform X that characterise the platform. Each of these characteristics also influences the adoption decision and/or usage of the platform, which is explained in the following two sections. An overview of the characteristics can be found in section 4.2.3.

First, Platform X is *highly involved* in the usage of its platform. Its AMs help clients identify, formulate and post assignments, and guide meetings between freelancers and internal workers. Through brainstorming sessions with clients, they inspire them and actively make them aware of the benefits and possibilities of the platform. This characteristic differs from other B2B platforms where transactions are often facilitated by automation and platform involvement is low.

The second characteristic is the *low entry costs*. To experiment with the platform, clients pay for a relatively low trial license and commission fee per posted assignment. Where high usage costs can form an adoption barrier in other B2B platforms, they do not play a significant role in the adoption decision of Platform X.

The third characteristic is the *high speed* with which the assignments are formulated, posted and carried out. Especially for conservative and slower organisations like Client A, this execution pace is very different from what they are used to and much faster. “As soon as you confirm an assignment, one or two people come your way, they start working immediately and they just want to have the documents within a week in order to do their work (..) and we also have to make room to discuss the interim solutions. That was kind of a realisation that it's really throttle down and ready immediately” (Client A1).

*Diversity* is also considered a characteristic of Platform X, as clients can post various assignments on the platform because of the many freelancers with different expertise. Client B1 mentions the limited scope of a different B2B platform it uses to sell a specific product. The scope of this platform is very narrow as it only facilitates the transaction of a specific product group. Assignments posted on Platform

X, however, can vary greatly, from designing a logo or website to coding specific apps, which makes it highly diverse.

Furthermore, the interviewees characterise the platform by its *high accessibility*. The low complexity of using it and the approachability of the AMs are mentioned by Client A and Client B. The platform does not have complicated features for which much training is required. Furthermore, as the platform and the collaboration it facilitates are completely online, no physical exchange of services or products needs to take place.

Finally, a relatively unique characteristic of Platform X is its *rating-based payout* system – clients can rate the deliverables of the freelancers and accordingly give them a financial reward. Before the assignment is put on the platform, the maximum reward is determined in agreement with Platform X's AM. The entire amount is transferred if the freelancer works according to the desired quality. However, if the deliverable lacks on certain points, the client can give a lower rating (on a scale of 1 to 5 stars with an incremental scale of 0.5) and the reward is lowered proportionally.

#### 4.1.2. Adoption decision

**Client A** already had a periphery of external workers – mainly from the us-knows-us circuit – with whom they had good relationships and who usually carried out work over a more extended period. However, what drove their adoption decision was the desire to *experiment* with a new working method. It sees itself as a conservative, complex organisation where things progress slowly, and when the platform appeared on its radar, it wanted to get some *speed* into its organisation. Furthermore, different thoughts and ideas not picked up internally come along frequently in their IT department as they lack the internal capacity to carry them out. For this, it saw a potential role for Platform X in helping them to get over the threshold to follow up on these ideas by using the *external capacity* it provides. Furthermore, they expected Platform X to be *highly involved* (Platform X's AMs helping them identify and formulate assignments and find suitable freelancers), which would allow them to put little *effort* into the usage of the platform and the creation of assignments. As they had very busy schedules, this appealed to them. The platform's *ease of use* was also seen as a driver of the adoption decision, as they expected it to be of low complexity since Platform X is a relatively new company and does not have complex features.

Another aspect that appealed to them was the *transparency* created by the platform's rating system. Both the freelancer and the organisation can rate each other and provide feedback on the collaboration. "What Platform X cleverly does, in this case, is that it gives me as an organisation and you as a freelancer a stage" (Client A1). This feedback allowed them to better evaluate the delivered work.

Besides the drivers of the adoption decision, Client A also mentioned a few barriers. Initially, the two colleagues had *uncertainty* about the quality of the freelancers on Platform X, given their large number and their unknown background. Platform X also did not remove this uncertainty with clear insights into

their pool of freelancers, as they only provided the total number of registrations. “The more freelancers is not necessarily the better. (..) If Platform X could say that they have 5.000 freelancers and they all have done 10-plus jobs in this area in the last year, that would give me a lot more confidence than the fact that there are 5.000 people doing jobs” (Client A1). The *quality* of the delivered work was therefore expected to be relatively low. This also related to the *impact* Platform X would have on the organisation. As they had low expectations on the quality, at first, they did not want to post assignments of high priority or difficulty on the platform, and therefore were sceptical on the impact the platform would have on the organisation. Another barrier to the adoption decision was formed by the second part of the business model: the *license fee costs*. Although these were perceived relatively small to what they were used to when hiring external workers, they had to think about them, as they would be forced to use the platform often to make the investment feasible.

All things considered, they decided to start a trial period. This decision received *higher management support*, as employees of Client A are encouraged to experiment with tools that might add value to the organisation.

**Client B** was looking for a way to receive information from an external partner without making significant investments. In contrast to Client A, they were more in *need* of extra help than wanting to experiment with a new way of working. They were used to making large investments by hiring big consultancy firms to conduct their research, so they were interested when a low-cost alternative crossed their path. “There is a big gap between doing nothing and a professional organisation where you pay a lot of money to do a very professional and a very outstanding market investigation, (...) and Platform X fills that gap” (Client B2). Especially the *low commission* costs were appealing to them, as they did not have to pay much if they wanted to post multiple assignments. Furthermore, the *speed* of delivery played a role in the decision to adopt the platform; they wanted the information quickly. Usually, projects for which they lacked the time internally would be left aside. These projects, however, were essential for their long-term business strategy. By adopting the platform, *external capacity* would become available, and someone would be able to carry out the work for them and provide the necessary information. On top of that, a large variety of questions and assignments can be put on the platform, as it has a large pool of talent with different skill sets. This *diversity* appealed to the early adopters within the organisation. The *low complexity* and the *accessibility* of the digital platform, especially at the time of their adoption when COVID was present (all meetings were online, and everybody was working from home), were drivers of the adoption decision. Employees would need little instruction to start using the platform, and since everything was online already, the platform would be easily accessible.

The only thing Client B doubted on at the decision to adopt the platform was the level of *impact* the platform would make on the organisation, since it was uncertain about the type of problems and their level of complexity that could be solved by using Platform X.

#### 4.1.3. Usage

**Client A** experienced a handful of drivers in their usage of the platform. The two colleagues described the *accessibility* and *ease of use* of the platform as pleasant, which stimulated their usage. At several points during the process, they were triggered to visit the platform as the deliverables and feedback were displayed there. They also wanted to *experiment* with different assignments and freelancers to form an opinion on the process and the participants on the platform, which stimulated them to post several assignments. Also, the *contractual conditions* of using the platform played a role in their usage. Because they had to pay for the trial license fee and a small commission per assignment, with every extra posted assignment, the total cost per assignment would decrease, which drove their usage. This was also highlighted by Platform X's AM.

However, the usage was hindered by the collaboration aspect: the *alignment* between internal and external workers. It took much *effort* for them to guide the relatively inexperienced freelancers during the process, and they had a bad experience with two freelancers on one assignment, who were unprofessional and did not align with the internal workers. On top of this, despite using the external capacity to outsource work, their regular workload was not reduced. As they were using assignments of lower priority to experiment with, their regular work (of higher priority) was not taken off their plate.

The *speed* of the process – what was considered to be an advantage - turned out to also hinder them from posting new assignments as all the extra work was squeezed into the short amount of time. On top of this, this time shortage hindered the platform's spreading throughout their organisation. They were more occupied with posting and handling assignments than making the platform known and explaining its way of working to other colleagues. “It takes a lot of energy from the internal organisation to make Platform X known” (Client A1). As Platform X's AM was not in contact with higher management or other department managers, it relied entirely on the two internal workers to convince their colleagues to use the platform, which failed to happen. Having only a *single diffusion channel* to promote the platform inside an organisation, therefore, formed a barrier.

Finally, what stimulated them to search for assignments in their trial phase, formed a reason for them to quit using the platform; the contractual conditions. Clients can only post assignments on the platform if they have either a trial license or a contract, so they can not use the platform for one-off assignments. The *uncertainty* of the availability of time and assignments to be posted on the platform, in combination with the low *quality* of the deliverables, made Client A decide not to continue their usage of the platform after the trial period. They felt strangled by the contract, which deteriorated their view of the platform's trialability.

Moreover, as Platform X's AM illustrated, Client A could not realise all the benefits the platform offers during the short time of the trial period as the two employees of Client A wanted to experiment without much involvement from the platform. They first wanted to form an opinion of the platform themselves,

before involving other colleagues (from different departments). With other organisations, the AM would have brainstorming sessions to inspire internal workers and let them know what Platform X could take off their plate. The absence of extensive brainstorming sessions resulted in low awareness of the possibilities in the organisation of Client A. Also, there were no clear agreements on review meetings with the client during the process, so by the time they had to renew their contract, it was too late to change their minds.

What drove **Client B** to post assignments was the *necessity* for quick information and the lack of internal capacity to deliver this. Platform X offered them an easy and quick solution to fill this need. The *accessibility* and *ease of use* of the technology encouraged Client B's usage, especially during the COVID period. As everything was online and everyone was getting accustomed to working from home, the platform was implemented more quickly in the new way of working. The platform's integration also did not form an obstacle to post assignments; as the technology is a stand-alone solution and is accessible through the web, it did not need to be integrated into the client's current systems and could be used independently. This, in combination with the low complexity, allowed internal workers to start using it immediately. Furthermore, the manager that decided to experiment with the platform (Client B1) was *aware of the benefits* of the platform early on and started promoting it within its department, creating *management support* to use the platform. On top of this, Client B1 realised the *low-costs* and the *diversity* of assignments that could be posted on the platform, which resulted in increased usage by posting different assignments on multiple topics.

The manager also gave the Platform's AM permission to contact other colleagues and explain the benefits and possibilities of using the platform. By having *multiple diffusion channels*, soon other internal workers started to implement the platform in their way of working, and the usage increased. This was also confirmed by Client B2, the project manager who only recently started using the platform. This manager was aware that their organisation had adopted Platform X from the beginning but had not used it so far and, through an explanation from colleagues and Platform X's AM, decided to start using it. Client B1 had told this manager that Platform X was very approachable and easy to use, and this lowered the threshold to also start using it.

Collaboration between external and internal workers also played a role in the platform's usage, both with positive and negative effects. A positive effect is that *trust* would build once the same internal worker and freelancer have done multiple assignments together. This increased trust encouraged the internal worker to post more assignments for that freelancer because it knew the work would be done satisfactorily. "Getting yourself acquainted and getting several times the same solver helps in doing more, because then the trust builds" (Client B1). A negative effect of the collaboration between freelancers and internal workers is the *effort* that needs to be put into the alignment; it struggles to find the internal capacity to use the platform even more. In order to get a deliverable with the desired quality,



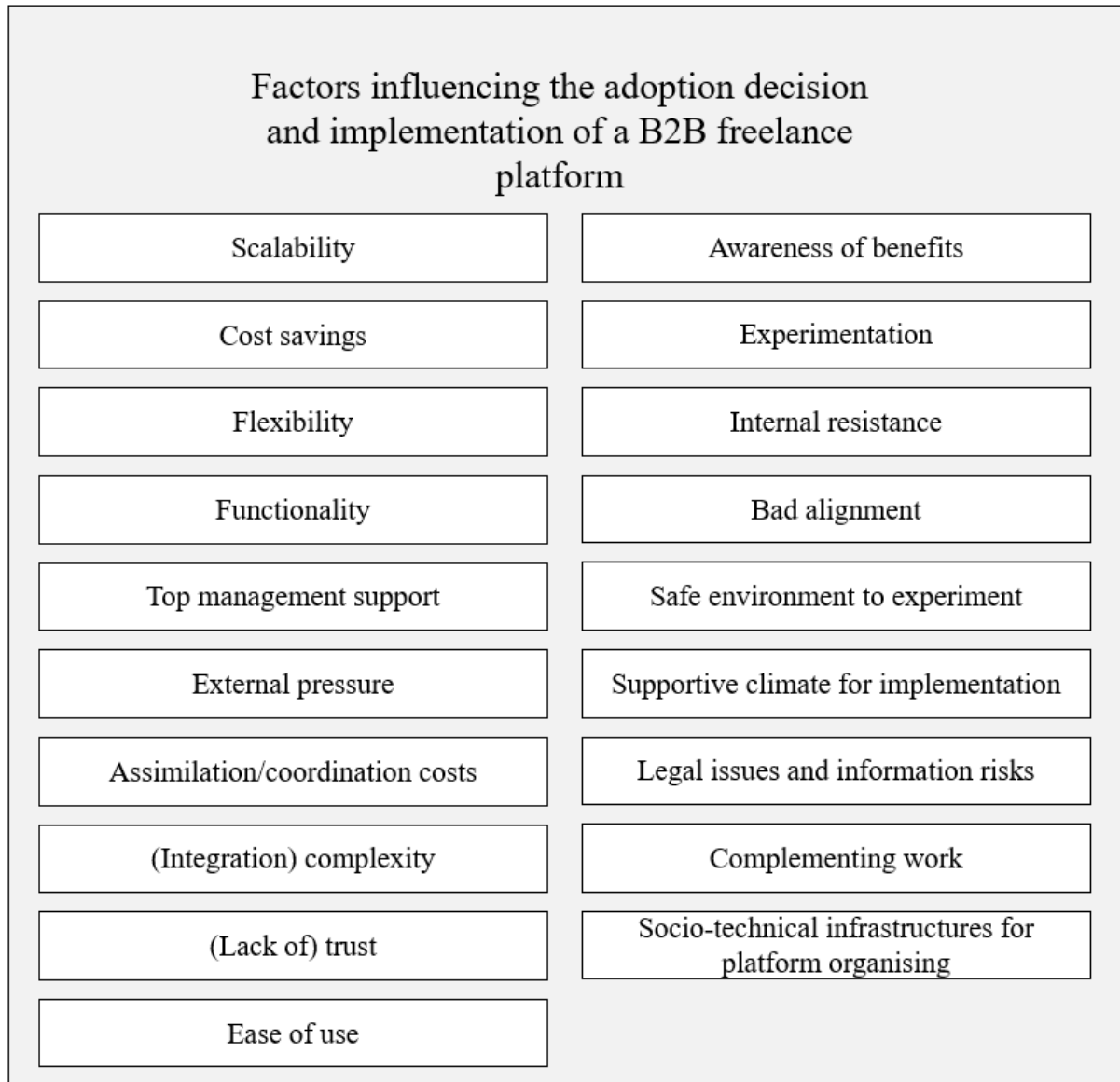
it takes effort and time for internal workers to provide clear input for the assignment and keep the freelancers aligned during the process. At the start of using the platform, they did not have sufficient touch points during the execution phase of the assignment, and they noticed that freelancers would defer from the expected result. After experimenting, however, they noticed that increasing the touch points (even short meetings of half an hour) would align the expectations and improve the quality of the result. Furthermore, even though managers were aware of the benefits of the platform, they realised that they still did not know all the possibilities that the platform could be used for. Also, as the commercial director stated, they tried to avoid taking the risk of posting critical assignments that needed to be done well on the platform. For this, Client B used other alternatives.

Platform X's AM added that the *platform involvement* also helped increase their usage. The usage increased by inspiring internal workers by showing what else is possible or done on the platform by other clients. Also, the *external pressure* by other platform users in the same industry that were investigating certain topics would make the client want to post similar assignments. Finally, as Client B is a commercial organisation and profit-oriented, it is easier to see a return on investment when using the platform. Assignments can make more *impact* on the organisation, which has a positive effect on the platform's usage.

## 4.2. Data Analysis

### 4.2.2. Data Reduction

As the middle-ground approach of coding is chosen, a list of codes informed by theory was used as a base for coding. This list is created from factors that have been identified in the conclusion of Chapter 3. An overview of the codes informed by theory is given in Figure 7.



*Figure 7: Initial list of codes informed by theory*

This initial list of codes is altered after analysing data on Platform X, and the relationships and changes between the codes are outlined in section 4.3.

The first phase of coding consists of the first round of reading and coding the transcripts of the interviewees. It results in a long list of codes organised in a codebook, including relevant quotations. The coding units vary from a few words to paragraphs, and multiple codes overlap for some text parts. A second coding round combines and eliminates specific codes from the list that resulted from the first round. ‘Unburdening’ is an example of this, as it refers to both the unburdening aspect of using freelance platforms to outsource work for client organisations and the unburdening support of the platform’s AM in formulating and executing assignments. The related pieces of text are now divided into ‘external capacity’ and ‘platform involvement’.

After the first phase is completed, the codes are grouped and categorised. Three different categories are identified: characteristics of Platform X, factors in the adoption decision of the platform, and factors in the usage of the platform. Relationships between the categories are identified, and specific codes are used in either one or multiple categories.

Finally, the codes generated from the transcripts are compared to those derived from the theory. Almost all codes from the literature are found in the coding of the transcripts, and new codes are added. The resulting list of codes and their definitions can be found in Table 17. Furthermore, codes are identified that have a positive or negative effect on the core category, and these are divided in either a driver category or a barrier category for the adoption decision and the implementation. An overview of the categories, including the core category, is given in Figure 8.

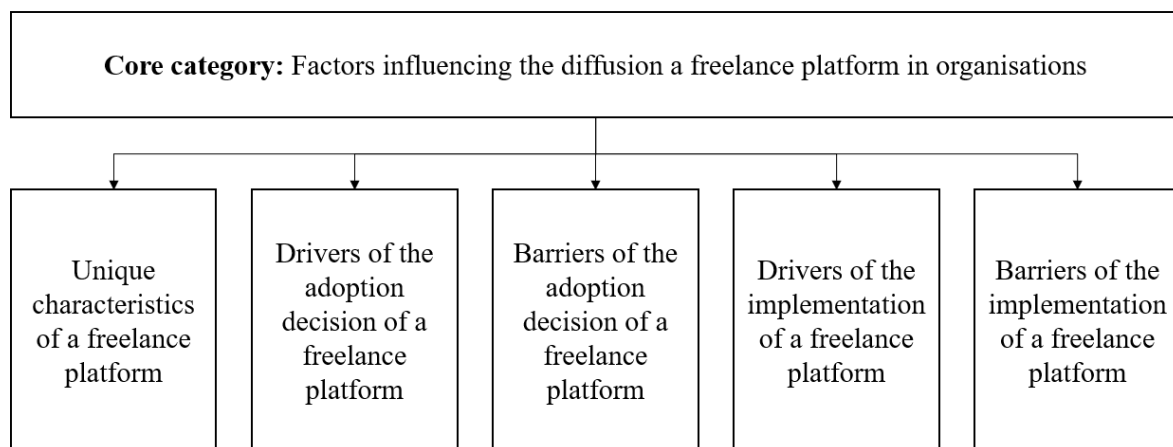


Figure 8: Categories identified through coding

Table 17: List of codes after data reduction process

Code	Description & quotes
<b>Accessibility</b>	<p>The threshold to start using the platform and contact its account managers</p> <p><i>“It is relatively easy to enter them” (Client B1)</i></p> <p><i>“My colleagues said they (Platform X) are very accessible and approachable, and it was all true.” (Client B2)</i></p>
<b>Alignment</b>	<p>The alignment between freelancers and internal workers during the execution of assignments</p> <p><i>“You have to guide the freelancer, because you can’t let them alone with the assignment and send them blindly into the organisation” (Client A1)</i></p> <p><i>“A best practice was to keep alignment, and these alignment meetings sometimes were 1/2 an hour, but it appeared that if you don't make it a real, real smart assignment, you need alignment, calibration meetings, and if you don't have the time in your daily work to do those collaboration meetings, the result is not as expected” (Client B1)</i></p>
<b>Awareness of benefits</b>	<p>The client’s awareness of all the benefits the platform has to offer</p> <p><i>“The critical thing is early adoption of people that see the benefit. You need the wide adoption and also that the person working with it sees the organizational benefit of this” (Client B1)</i></p>
<b>Ease of use</b>	<p>The complexity of using the technology and service</p> <p><i>“If you can operate an iPhone, then you can operate that platform as well” (Client A1)</i></p> <p><i>“The ease to use is big” (Client B2)</i></p>
<b>Contractual conditions</b>	<p>The contractual conditions of using Platform X</p> <p><i>“Ideally, I don't want to be stuck with a contract at all. I have work today, so I need someone today, and that doesn't fit Platform X's line of thinking. Platform X assumes that, with a trial or not, I will take on x number of jobs and that is not in line with how we are in the game” (Client A1)</i></p>
<b>Cost</b>	<p>The financial costs of using the platform</p> <p><i>“Platform X is mainly betting on a cost-interesting service” (Client A1)</i></p> <p><i>“For this costs we could easily trial it” (Client B1)</i></p> <p><i>“Pricewise it's very competitive” (Client B2)</i></p>

<b>Diffusion channel</b>	<p>The way the platform is promoted through the organisation</p> <p><i>“It takes a lot of energy from the internal organisation to make Platform X know” (Client A1)</i></p> <p><i>“My role was to inform other colleagues to say what could be the benefit of the platform” (Client B1)</i></p> <p><i>“It's an organic growth at the moment within the sales operation, but it won't grow from inside an organisation that much, because everybody's working on their own part and they're not looking how can we talk to someone else? There is more needed I think from the platform to make it grow within the organisation” (Client B1)</i></p> <p><i>“What you see with big companies, buying is at the C-level, but they always choose a main point of contact who helps us really do the mailings internally, setting up all the get to knows. That definitely helps.” (AM)</i></p>
<b>Diversity</b>	<p>The broad scope the platform offers in picking up different assignments</p> <p><i>“The main difference for me is the flexibility and the width of topics you can outsource or use it for. This freelance platform is really wide in the scope where we can put a lot of things” (Client B1)</i></p> <p><i>“Once you have done a few challenges in a certain area, you tend to stick with challenges in the area because you know that that's possible” (Client B1)</i></p>
<b>Effort</b>	<p>The level of time and work internal workers need to put in the platform to post assignments and guide freelancers</p> <p><i>“We expected it to be less time intensive than it really was. It takes time, and adds work to what you already have to do, because it doesn't replace your regular work on projects with higher priority” (Client A1)</i></p> <p><i>“What hindered us in doing more assignments was that we saw that we still didn't even have the time to really guide the freelancers” (Client B1)</i></p>
<b>Experimentation</b>	<p>The level of experimentation for employees to try out different things on the platform and get to know the process and stakeholders</p> <p><i>“We actually saw it as a fun exercise; could we do something with that” (Client A1)</i></p> <p><i>“I had to basically try to understand the way of working of the platform. See what the pros and cons are and how you can work with this platform properly” (Client B1)</i></p>

<b>External capacity</b>	<p>The capacity that is created by freelancers that help internal workers carry out projects, follow up on ideas, and provide information</p> <p><i>(We have a lot of thoughts and ideas that we often don't get around to. And so we thought; we have a department where chores are lying around, which is a waste, and where Platform X could play a role)" (Client A1)</i></p> <p><i>"You are asking the platform because you have no capacity to do it yourself" (Client B2)</i></p>
<b>External pressure</b>	<p>The influence that external factors such as competitor behaviour have on client's platform usage</p> <p><i>"If clients see that competitors, for example, also make use of us and they want to know something about some benchmarking, they realise that they also would like to do it. Or they see that we did something with a certain technology and they also want to do it" (AM)</i></p>
<b>Impact</b>	<p>The level of impact the assignments have on the client's organisation</p> <p><i>"The impact of what we do at Client B is much bigger than with Client A, because it was really focused on their internal processes. But with Client B, we were focusing on their clients, so commercial is much more interesting for them. Also, with the benchmarking and stuff like that so" (AM)</i></p>
<b>Management support</b>	<p>The encouragement or discouragement of the platform's usage by higher management</p> <p><i>"The organisational structure at our organisation is such that senior management says that if we need something and it provides value, we should just do it" (Client A)</i></p> <p><i>"If the department heads don't personally see the benefit of doing this, it doesn't help" (Client B1)</i></p>
<b>Necessity</b>	<p>The need for information that can be provided through the platform</p> <p><i>"There is a lot of work in the organization, which is not core or urgent, but needed for the long term strategy development, which is often left aside where you don't have capacity for" (Client B1)</i></p>
<b>Platform involvement</b>	<p>The involvement of the platform's account managers in guiding the client and helping it understand its usage</p> <p><i>"I see Platform X being good at spotting those jobs and working on them together with at least our organisation" (Client A1)</i></p>

<b>Quality</b>	<p>The quality of the delivered work and the freelancers on the platform</p> <p><i>“The sheer number of freelancers makes you wonder if those freelancers are all skilled and how many are doing one-offs” (Client A1)</i></p> <p><i>“If you don't have the time in your daily work to do collaboration meetings, the result is not as expected. And so as a company, we've got an influence on the quality of the result” (Client B1)</i></p> <p><i>“I will not accept new freelancers so easily anymore. I would use freelancers which are already known in Platform X and who have already delivered some result” (Client B2)</i></p>
<b>Rating</b>	<p>The rating of the quality of the deliverables by the clients</p> <p><i>“The positive of the platform, that transparency is created. It feels a bit like Marketplace or Vinted. Buyer and seller are both assessed and that makes people want to do business with you” (Client A1)</i></p>
<b>Speed</b>	<p>The pace of identifying, formulating and executing assignments on the platform</p> <p><i>“As soon as you confirm an assignment, one or two people come your way, they start working immediately and they just want to have the documents within a week in order to do their work and then those agreements have to be made and we also have to make room to discuss the interim solutions. That was kind of a realisation of okay, it's really throttle down and ready immediately” (Client A1)</i></p> <p><i>“The advantage of using the platform was I think the speed” (Client B2)</i></p>
<b>Transparency</b>	<p>The transparency which is created by the rating system of the platform</p> <p><i>“What Platform X cleverly does, in this case, is that it gives me as an organisation and you as a freelancer a stage” (Client A1)</i></p>
<b>Trust</b>	<p>The trust in the process, freelancers' capabilities and quality of the work</p> <p><i>Regarding trust in Platform X, it is basically a given that information is treated properly, but it's the relationship between solver and the one that's giving the challenge. Getting yourself acquainted and getting several times the same solver helps in doing more, because then the trust builds” (Client B1)</i></p>
<b>Uncertainty</b>	<p>The uncertainty of the availability of work and whether freelancers will be able to do it</p> <p><i>“I won't enter into a contract if I don't yet know what jobs I have” (Client A1)</i></p> <p><i>“There's always the uncertainty which freelancer you get, which is a risk” (Client B2)</i></p>

### 4.2.3. Data Display

Both the reduced qualitative data from the interviews and the quantitative data collected on platform usage are displayed in this section to identify relationships and patterns. In order to display the data in an organised way, the software ATLAS.ti is used in combination with Microsoft Excel and Microsoft Powerpoint. In section 4.3, the results are explained.

#### *Characteristics of Platform X*

First, the interviewees have mentioned characteristics of Platform X. Their answers are displayed in Figure 9.

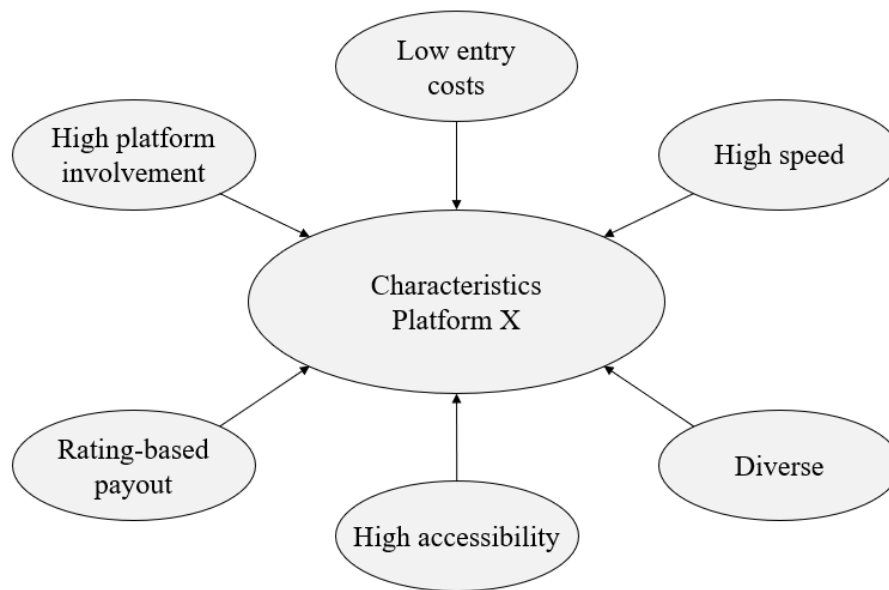


Figure 9: Characteristics Platform X

Some factors have also been mentioned in prior literature and can be used to generalise the findings. Other factors, however, are specific features of Platform X, that limit the generalisation. These are discussed in Chapter 5.

#### *Adoption decision*

Secondly, the interviewees were asked to describe their thoughts on the adoption decision and whether their expectations before the start of the trial period were fulfilled at the end. After elaborating on their experience, each gave a score to Rogers' adoption characteristics (Rogers, 1995), using the scale:

1. Not applicable
2. Slightly inapplicable
3. Neutral
4. Slightly applicable
5. Applicable



Results of these experiences are displayed in Table 18.

Table 18: Adoption characteristics Client A and Client B

Characteristic	Client A			Client B		
	Expectation	Reality	Change	Expectation	Reality	Change
<b>Relative Advantage</b>	3	4	+1	5	4	-1
<b>Compatibility</b>	4	2	-2	5	3	-2
<b>Complexity</b>	4	4	-	5	5	-
<b>Trialability</b>	4	2	-2	5	5	-
<b>Observability</b>	2	2	-	3	3	-

At the time of the adoption decision of **Client A**, it had neutral expectations of the platform's relative advantage. However, these were slightly exceeded at the end of the trial period, which mainly had to do with the realisation of the added benefit of the transparency the platform facilitates by the rating system. Formerly, Client A did not have an official way to structurally give feedback to its existing freelancers or to receive feedback from them.

The expectations of the platform compatibility dropped from slightly applicable to slightly inapplicable, as the expectation that it would unburden them to a high degree was not met. This need was not fulfilled, as Client A still had to put significant time and effort into formulating the assignments and aligning freelancers to get to a desired deliverable.

The complexity of the platform was not seen as an adoption barrier, as they expected it to be easy to use, since Platform X is a relatively new company and does not have complex features. This expectation was also met at the end of the trial period.

For the trialability characteristic, Client A wanted to experiment with the platform by doing a few assignments, and given the relatively low costs, they thought this would be slightly applicable. When they made the adoption decision, they did not have assignments to post on the platform but were confident of finding these shortly. However, they felt the trial license period and fee (although very small) to be strangling during the process. As they gradually realised they were not going to be able to post assignments on a regular basis, the platform's trialability disappointed them.

Finally, they did not expect that they would see noticeable advantages by using Platform X at the moment they made the adoption decision. The impact and quality of the delivered work by using Platform X were expected to be relatively low and also stayed relatively low compared to what Client A was used to.

For **Client B**, the expected relative advantage of the platform was high and played a large role in the adoption decision, as it was expected that the platform would provide external capacity and would help pick up the work that was left aside. The way in which the freelancers carried out this work did not completely meet the organisation's expectations, however, as some assignments were of lower quality.

Its compatibility was seen as very applicable at the adoption decision and also played a large role, mainly because the platform was seen as fulfilling the need of unburdening the internal organisation. However, at the end of the trial period, it was slightly less, as the amount of effort in the form of time and work to align freelancers was more extensive than anticipated, similar to Client A.

The low complexity and the accessibility of the digital platform, especially at the time of their adoption when COVID was present (all meetings were online, and everybody was working from home), were expected to be highly applicable and this expectation was also fulfilled.

Client B was also satisfied with the level of trialability, as was expected from the beginning, as it perceived the platform as low-cost, quick, and easy to use. They would therefore be able to post enough assignments to form a solid opinion on Platform X.

Finally, the observability was neutral, as they did not know if the impact of the platform would be noticeable, and after the trial period, this stayed neutral, because, at that time, they did not yet roll the platform out on a larger scale. This meant that the noticeable impact of the first assignments was not significant in their organisation.

What can be noticed from the scores is that Client A had lower expectations than Client B on all characteristics, and for two, the score even dropped further as time progressed. Although scores also dropped for Client B, the lower limit was still neutral. Based on the insights from the interviews with Client A1 and A2, it is assumed that the unexpectedly high amount of effort that made the compatibility score drop, in combination with the low impact and the low quality of the deliverables, played the largest role in the discontinuance of their usage.

Specific factors have been coded during the data reduction. The code frequency is shown in Table 19, to display the content of the interviews with the employees who have been involved in the entire process of the platform implementation and Platform X's AM. Column "AM" indicates statements Platform X's AM mentions that account for all clients – not only for Client A and B. Columns "AM A" and "AM B" refer to statements made by Platform X's AM specifically on Client A or Client B, respectively. Columns "A" and "B" indicate statements mentioned in the interviews with Client A1 and Client B1, respectively.

Table 19: Code frequency adoption decision

<i>Code</i>	<b>AM</b>	<b>A</b>	<b>AM A</b>	<b>B</b>	<b>AM B</b>	<b>Total</b>
<i>Experimentation</i>	1	5	2	1		<b>9</b>
<i>External capacity</i>		2	1	5	1	<b>9</b>
<i>Speed</i>		1	1	3		<b>5</b>
<i>Cost</i>	1	1		2		<b>4</b>
<i>Ease of use</i>		1		3		<b>4</b>
<i>Necessity</i>		2	1	1		<b>4</b>
<i>Platform involvement</i>		2	1			<b>3</b>
<i>Effort</i>		1		2		<b>3</b>
<i>Diversity</i>		1		1		<b>2</b>
<i>Quality</i>		2				<b>2</b>
<i>Accessibility</i>				1		<b>1</b>
<i>Management support</i>		1				<b>1</b>
<i>Uncertainty</i>		1				<b>1</b>
<i>Transparency</i>		1				<b>1</b>

Because the number of interviews is low, these frequencies should not be interpreted as a direct indicator of the importance of each factor – interviews with other stakeholders could easily change the order of the codes. What can be noticed in this table, however, is that Client A1 mentioned the desire for experimentation frequently, whereas the advantages of external capacity were the main topic in the interview with Client B1. It is assumed, therefore, that the need for external capacity is a stronger driver than the experimentation with a new way of working, which could explain Client B's higher usage later on.

### **Usage**

Quantitative data on platform usage is collected for each client. Both the number of posted assignments and their rating is illustrated.

Client A posted three assignments on Platform X, of which two assignments received 5 stars because of satisfying deliverables, and one received a rating of 2.5, as it was perceived as lower quality. A bar chart is used in Figure 10, which clearly shows both the number of assignments and the rating distribution in one overview.

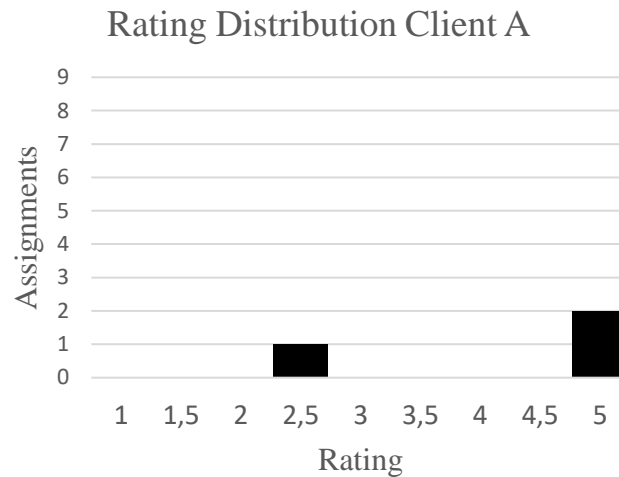


Figure 10: Rating distribution Client A

What can be noticed from this figure is that Client A had a low number of posted assignments and that one of them had significantly lower quality. If they had done more assignments with high-quality deliverables before having that bad experience, it might have changed their view on the overall quality of the platform in a positive way.

Client's B usage resulted in 22 assignments, of which 16 were completed. The remaining assignments are still pending or have been cancelled at the time of this research. The rating of these assignments is spread between 3.5 and 5, illustrated in Figure 11. Again a bar chart is used to show the two metrics and to allow for proper comparison with Client A.

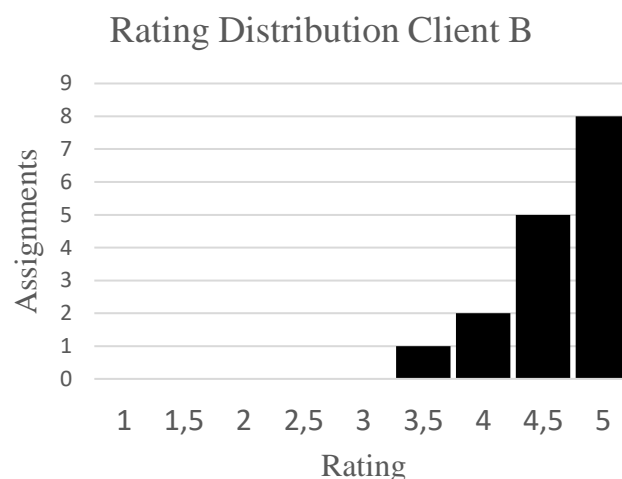


Figure 11: Rating distribution Client B

What can be noticed from this figure is that the deliverables of most assignments received a high rating, and only one deliverable received a rating of 3.5. This indicates that managers of Client B were satisfied with most assignments, which is assumed to have increased the awareness of the benefits of the platform across the organisation.

A list of code frequencies from the interviews with the employees that played a role in the entire implementation process is displayed in Table 20. For each code, the numbers indicate the interview statements of each interviewee that correspond to the usage.

Table 20: Code frequency usage

<i>Code</i>	<i>AM</i>	<i>A</i>	<i>AM A</i>	<i>B</i>	<i>AM B</i>	<i>Total</i>
<i>Diffusion channel</i>	4	3	6	5	2	<b>20</b>
<i>Platform involvement</i>	1	1	4	2	2	<b>10</b>
<i>Alignment</i>		5		4		<b>9</b>
<i>Quality</i>		1	2	3	1	<b>7</b>
<i>Necessity</i>		2	2	1	1	<b>6</b>
<i>Effort</i>		2	1	2		<b>5</b>
<i>Ease of use</i>	1	1		1	1	<b>4</b>
<i>Speed</i>		3		1		<b>4</b>
<i>Management support</i>	1			3		<b>4</b>
<i>Cost</i>		1		2		<b>3</b>
<i>Trust</i>		1	1	1		<b>3</b>
<i>Awareness of benefits</i>			1	1	1	<b>3</b>
<i>Contractual conditions</i>		2	1			<b>3</b>
<i>Accessibility</i>		1			1	<b>2</b>
<i>Experimentation</i>		1		1		<b>2</b>
<i>Diversity</i>				2		<b>2</b>
<i>External pressure</i>					2	<b>2</b>
<i>Uncertainty</i>				1		<b>1</b>

Again, because the number of interviews is low, these frequencies should not be interpreted as if they directly indicate the importance of each factor – interviews with other stakeholders could have changed the order of the codes. What can be noticed, however, is that the diffusion channel is mentioned twice as frequently as the following ranked factor. Special attention is given to the discussion of this factor with other interviewees.

Saturation of data collection is reached by interviewing all individuals that played a role in the implementation process in the case of Client A and by gathering enough perspectives on the implementation process in the case of Client B to triangulate the data. As Client A only had two employees that came into contact with the platform and who went through the process together, most provided information by Client A1 was confirmed by Client A2. Only a few nuances were given, which have been taken into account in this section. For Client B, most insights were given by the early adopter of the platform. These were triangulated by interviewing two other colleagues who used the platform at different time points and who filled different positions in the organisational hierarchy. The final interview with the commercial director did not provide new information, indicating that saturation was reached. On top of this, the data from both clients are triangulated by interviewing Platform X's AM, who provided insights from the freelance platform's perspective.

### 4.3. Results

The initial list of codes informed by theory is altered by analysing the data collected in the case study interviews. Some factors that apply to other B2B platforms have been identified to also influence the implementation process of a digital freelance platform, and others have not. The relationships and changes between the codes from the initial list and the resulting coding list are explained in this section.

The literature already mentioned factors on the collaboration aspect of platform participants, such as *alignment* and *trust*, to play a role in the implementation of B2B platforms, and these are confirmed during this research to also play a role in the case of Platform X. Additional factors mentioned by the interviewees in the case study have to do with the collaboration aspect, such as the amount of *effort* internal workers have to put into the guidance of freelancers, and the *platform involvement*. Client B even sees platform involvement as a critical aspect of using the platform. On top of this, a causal relationship is expected between internal workers' effort and the assignment's quality. As both clients have stated, the level of *alignment* and the resulting *quality* of the deliverable is dependent on the effort they put in. In order for freelancers to deliver desirable results, clients have to guide them and make sure that they are aware of what is needed, and this takes time and work. Therefore, it is expected that the more effort the client puts into the assignment by having more alignment meetings, the higher the quality of the results and, consequently, the higher the rating of the delivered work.

Another factor that plays a role in the implementation process of a freelance platform is *trust*. Unlike what is stated on trust in the literature on B2B platforms, (where 'trust' primarily concerns the risk of sharing sensitive information) the factor 'trust' in the context of freelance platforms is more focused on the client's trust in the capabilities and qualities of the freelancers. Both clients indicated that they were sceptical beforehand, but when a few collaborations between the same internal worker and freelancer were successful, the client's trust in the platform was built, which had a positive effect on its usage. Furthermore, Client A indicated that the *transparency* created by the platform's rating system is a driving factor in implementing freelance platforms, which has not been mentioned specifically as a driver in prior research on B2B platforms. On the other hand, *internal resistance* and a negative effect of a *lack of trust* in sharing sensitive information, which are mentioned in the literature on B2B platforms, have not been identified in this case study. Client A indicated they would only do assignments that would not require an NDA, and Client B saw the proper handling of sensitive information as a given.

Factors added to the final coding list are *uncertainty* and *speed*. Uncertainty of the quality of freelancers is mentioned by both clients to act as a barrier of the adoption decision. Although this did not happen in the case of Client A, platform involvement is expected to be able to (partly) remove this uncertainty, as the AM can provide insights into the pool of freelancers and their skills. A suggestion on how this can be done is given in Chapter 5. Both Client A and Client B indicated that the high pace of assignment

execution was a driver of the adoption decision. Client A wanted more speed in the organisation, and Client B wished to get desired information quickly. Whereas this speed was still seen as an advantage while using the platform in the case of Client B, Client A's usage was discouraged by it, as it was difficult for the two colleagues to fit the required alignment sessions into their schedule.

*Scalability* has been identified as a driver of the adoption decision of B2B platforms, but is different in the context of freelance platforms. Scalability for clients in freelance platforms is more interpreted in the context of *external capacity* at the client's disposal by having access to the large and diverse pool of freelancers active on the platform, which can optimise internal processes. In B2B platforms that are used to sell products, this scalability refers to the number of buyers that can be reached through the platform, which allows the client to grow its revenue.

Flexibility has also been mentioned in prior literature, and is included in the factor of external capacity. Furthermore, the level of the platform's *flexibility* experienced by the clients is expected to depend on their necessity for information and the availability of (internal) resources. In the case of Client A, the need for external capacity to do small assignments was not that high, and they experienced the financial terms<sup>1</sup> of the platform to be strangling and inflexible. Client B, on the other hand, considered the use of the platform relatively flexible, as they had enough assignments lying around to make the investment feasible. This created flexibility for individuals in the organisation, as employees were free to decide whether they would use the platform or perform the work in another way. The *awareness of benefits* of the platform was also much higher in this organisation (also in the management layer), which influenced the number of diffusion channels that promoted the platform within the organisation. Since board members themselves realised that Platform X was useful, they facilitated the promotion of the platform across the organisation by allowing Platform X's AM to contact different department heads, opening up *multiple diffusion channels*. This is expected to play a large role in the success of the implementation in this organisation and the failure in Client A, which had a *single diffusion channel* consisting of the two employees who experimented with the platform.

On top of this, allowing Platform X's AM to promote the platform to different potential users within an organisation can increase the awareness of benefits even further. The AM knows what assignments other clients are posting on the platform and can inspire internal workers by showing these opportunities. When internal workers realise the value of the platform and follow up on these inspiration sessions, more relevant assignments are posted, which can be seen in the case of Client B. Therefore, a high degree of *platform involvement* is expected to positively influence the *impact* of the freelance platform on its clients' organisations.

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<sup>1</sup> The business model of Platform X consists of a fixed license fee and variable commission costs per assignment. To lower the overall costs per assignment, a client should therefore maximise the number of assignments.

Furthermore, both clients indicated that they could use the first few assignments to *experiment* with the platform, which has also been identified as a driving factor in prior research. Additionally, in this case, the *rating-based payout*<sup>2</sup>-feature of Platform X is assumed to have increased the room for experimentation for its clients. As clients try to figure out for which assignments the freelance platform can be used, their risk of paying high amounts for unsuccessful experiments is lowered, as the assignment's costs are proportional to the value they receive. If they think the quality of the deliverable is low, they can give the assignment a low rating, and thereby lower the costs. If this feature were absent and clients would have to pay a fixed or hourly-based payment, the financial risk of experimentation would be significantly higher, presumably creating an adoption barrier.

The *accessibility* and *ease of use* of the platform have also played an important role. As the platform can be used entirely online and does not need to be integrated into internal systems, the threshold to start using the platform (especially during COVID, as indicated by Client B) was very low. Clients can schedule alignment meetings with freelancers through the platform, and all documentation is stored on Platform X. On top of that, the online aspect allows freelancers worldwide to apply for an assignment, which means that the location of experts does not play a role. When someone from the US, for example, contains specific knowledge on a certain topic, this individual can offer their services to organisations from other countries without needing to relocate. This feature of freelance platforms differs, for instance, from gig platforms, which require a physical presence of workers to provide the service (e.g. Uber).

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<sup>2</sup> The commission costs and payout to freelancers depend on the rating clients give to the assignment's deliverable. The lower the rating, the lower the payout.



## 4.4. Conclusions Chapter 4

In this chapter, data is analysed and results are discussed. With this information, the answers to sub-questions 2 and 3 are supplemented.

### 4.4.2. Sub-question 2

*Sub-question 2: What distinguishes a freelance platform from other B2B platforms?*

Six factors are mentioned by direct users of Platform X that characterise the platform. Of these six characteristics, some are specific features that limit generalisations of results, which is discussed in Chapter 5. Platform X is highly involved in the usage of its platform. Its AMs help clients identify, formulate and post assignments, and guide meetings between freelancers and internal workers. This characteristic differs from other B2B platforms where only transactions are facilitated, often automatically. The second characteristic is the low entry costs. To experiment with and use the platform, clients pay a relatively low trial license fee and a small commission fee per posted assignment, unlike other B2B platforms where large investments are needed in the assimilation and managerial costs. Diversity is also considered a characteristic of Platform X, as clients can post a wide variety of assignments on the platform because of the many freelancers with different expertise. Other B2B platforms can be very narrow in scope as they only facilitate the transaction of a specific product group. Assignments posted on Platform X can vary greatly, from designing a logo or website to coding specific apps. The third characteristic is the speed with which the assignments are formulated, posted and carried out. Especially for conservative and slower organisations like Client A, this execution pace is very different from what they are used to and much faster. Furthermore, the interviewees characterise the platform by its accessibility. The low complexity of using it and the approachability of the AMs are mentioned by Client A and Client B. The platform does not have complicated features for which training is required. Furthermore, as the platform and the collaboration it facilitates are entirely online, no physical exchange of services or products is needed, which increases accessibility. Finally, a relatively unique characteristic of Platform X is its rating system and the correlating payout – clients can rate the deliverables of the freelancers and accordingly give them a financial reward. In other B2B platforms, the rating is not linked to the payment, and clients have to pay for products, regardless of their quality.

### 4.4.3. Sub-question 3

*Sub-question 3: When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

The answer to this sub-question is completed by interviewing stakeholders of two organisations involved in the adoption decision and implementation of Platform X. Furthermore, their input is triangulated by the perspective of Platform X's AM, who is responsible for their accounts.

### ***Adoption decision***

Drivers of the adoption process are mainly characterised by trialability and relative advantage. The fact that it is relatively low in costs (especially the commission costs per assignment) lowers the threshold for clients to try out this new way of working (also a frequently mentioned driver) and encourages them to save costs on receiving external information. However, this price level at the adoption also has a disadvantage later in the implementation process, which will be discussed in the next section on implementation. A second relative advantage that encourages potential clients to adopt the platform is the speed of execution. Assignments are formulated, posted and executed quickly compared to what organisations are used to – mainly within a timespan of a few weeks as opposed to months. Especially for Client A, this played an essential role in the adoption decision, as it is a complex, slow organisation that wanted to speed up its processes. However, this factor hindered the platform's usage later in its implementation phase, which will also be explained in the next section. The third relative advantage is the external capacity offered through the platform. Clients notice that they cannot carry out all of their work themselves, and projects of lesser priority end up in a drawer. Platform X is seen as the solution for this, as freelancers can be used to follow up on these projects and carry them out for the organisation. Furthermore, a driver characterised by complexity is the platform's ease of use. Client A and Client B were looking for a simple tool and thought Platform X would be low in complexity. Finally, a need for information can play an essential role in the decision-making process of platform adoption. Although projects can be of lesser priority to the organisation, they can be critical in the business development strategy in the long term. Organisations that realise this and can formulate suitable assignments see this as a driver for the adoption decision.

Uncertainty, level of impact, and license costs are indicated as barriers of the adoption decision. The uncertainty of the quality of the freelancers on the platform and the potential impact they could make played a negative role in the adoption decision. Furthermore, the license costs, although relatively low, formed a barrier for Client A, as it would mean that they had to post a certain amount of assignments to make the investment feasible.

An overview of all mentioned drivers and barriers of the adoption decision of Platform X (including their contextualisation in the cases of Client A and Client B) can be found in Table 21 and Table 22.

Table 21: Drivers of adoption decision

Drivers	Context	Category
<b>Experimentation</b>	<b>Client A</b> wanted to experiment with a new way of working	Trialability
<b>External capacity</b>	<b>Both clients</b> were looking for a way to use external capacity to take work of their plate	Rel. advantage
<b>Speed</b>	<b>Both clients</b> were appealed by the faster pace of assignment execution	Rel. advantage
<b>Cost:</b>		
<b>Cost per assignment</b>	<b>Both clients</b> were appealed by the low commission costs per assignment	Rel. advantage
<b>Ease of use</b>	<b>Both clients</b> thought the platform would be easy to use	Complexity
<b>Transparency</b>	<b>Client A</b> appreciated the feedback opportunity created by the platform's rating system	Rel. advantage
<b>Platform involvement</b>	<b>Both clients</b> were appealed by the hands-on approach of Platform X in unburdening them	Rel. advantage
<b>Necessity</b>	<b>Client B</b> was in need for quick information that could not be generated internally	Compatibility
<b>Effort</b>	<b>Both clients</b> were appealed by the low effort they would have to put in to use the platform	Rel. advantage
<b>Diversity</b>	<b>Client B</b> was appealed by the large variety of assignments that could be posted on the platform	Rel. advantage
<b>Accessibility</b>	<b>Both clients</b> thought the online platform would be easily accessible, especially during the COVID period	Complexity
<b>Management support</b>	<b>Client B</b> had senior employees that supported the platform's adoption	Compatibility

Table 22: Barriers of adoption decision

Barriers	Context	Category
<b>Uncertainty</b>	<b>Both clients</b> were uncertain about the quality of the freelancers and whether they could fill its need	Compatibility
<b>Impact</b>	<b>Both clients</b> were sceptical of the level of impact the platform would have on their organisation	Observability
<b>Cost:</b>		
<b>License costs</b>	<b>Client A</b> indicated that the fixed costs of the trial license were undesirable	Trialability

### Usage

With diffusion channel as the most frequently mentioned factor in implementing Platform X, factors in the organisation category are assumed to play a significant role in the platform's usage. How the platform is known in organisations and the individuals who promote its usage is a critical driver or barrier, and it already starts with the adoption decision. The eventual usage level of the studied clients is related to the position of the individual making the adoption decision and the individual assigned to experiment – which is crucial to understand its workings and building best practices – with the platform from the beginning. If the buyer is in senior or higher management, it is easier for the platform to be spread through an organisation, as it is easier to find different users and assignments. This is because individuals

on higher levels in the organisational structure either lead larger departments or even multiple departments where more work can be found to be put on the platform. Furthermore, if employees in higher positions are aware of the benefits and allow the platform AM to contact different points of contact within the organisation to discuss different projects with, usage is increased. The platform AM can then communicate the potential ways the platform can be used and make the client aware of all its benefits. If the client is shown what type of assignments are posted by other clients, this can also inspire them to do the same and drive the usage even more.

Usage drivers can also be seen in the technology category. The platform's ease of use due to its low complexity and accessibility allows companies to post assignments entirely online and independently. As more internal workers work from home more frequently, the threshold of hiring other digital workers – freelancers – is lower, driving the platform's usage. On top of that, once internal workers use the platform and work with the same freelancer, trust builds, and more assignments are posted. Although the diffusion channel can be a driver of usage, it can also slow down usage. The disadvantage of Platform X's low costs is that managers from lower layers in the organisations have the authority to decide to adopt the platform without having to ask permission from higher management. When the platform is bought in by such an individual, the implementation by other internal workers is more complicated.

The alignment between internal workers and freelancers is most frequently mentioned in the collaboration category of the platform implementation. This alignment is needed to allow freelancers to produce deliverables that are of a desirable quality. In order to realise this alignment, however, internal workers need to provide much input and put in significant effort to keep the freelancers on track, which proves to be difficult when the internal capacity is already limited. This absence of alignment can lead to deliverables of lower quality, which lower the usage by other internal workers. Also, the speed of the execution process, seen as an adoption driver initially, can form an obstacle during the implementation phase. As some organisations are not used to the fast way of working with a freelance platform, they can be discouraged by the pace with which an assignment is formulated, posted and executed. Especially when they are busy with regular work, they can not take on the burden of preparing and guiding a freelancer in a short time for an assignment with lesser priority.

Through this study, certain factors have been identified that promote or hinder the platform's usage. An overview of all identified factors, categorised by the extended TOE framework, can be found in Table 23 and Table 24. Again, a contextualisation of the factors in the cases of Client A and Client B is given.

Table 23: Drivers of usage

Drivers	Context	Category
<b>Multiple diffusion channels</b>	<b>Client B</b> had multiple diffusion channels which promoted the platform's usage	Organisation
<b>Platform involvement</b>	<b>Both clients</b> were supported by the platform's AM in using the platform, by identifying and formulating assignments and guiding the process	Collaboration
<b>Ease of use</b>	<b>Both clients</b> considered the platform to be of low complexity, which lowered the threshold to use it	Technology
<b>Trust</b>	<b>Client B</b> trusted specific freelancers after having a few good experiences, which increased their usage	Collaboration
<b>Awareness of benefits</b>	<b>Client B's</b> management was aware of the platform's benefits and how it could be used in the organisation	Organisation
<b>Management support</b>	<b>Client B's</b> management supported the usage of the platform, because of the awareness of benefits	Organisation
<b>Necessity</b>	<b>Client B</b> needed information to form their long-term business strategy	Organisation
<b>Cost</b>	<b>Client B</b> saw the low costs per assignment as a driver to use the platform instead of other, more expensive consultancy firms	Environment
<b>Contractual conditions</b>	<b>Both clients</b> were motivated by their contract to post assignments, as they wanted to get a return on their investment	Environment
<b>Accessibility</b>	<b>Client B</b> indicated that the completely online, independent process of using the platform drove their usage, especially during COVID	Technology
<b>Experimentation</b>	<b>Both clients</b> were given room to post assignments on the platform initially to experiment with and get to know the way of working	Organisation
<b>Diversity</b>	<b>Client B</b> was aware of multiple ways the platform could be used, which stimulated their usage	Collaboration
<b>External pressure</b>	<b>Client B</b> was inspired by Platform X's AM on what other clients were posting on the platform and occasionally posted similar assignments	Environment

Table 24: Barriers of usage

Barriers	Context	Category
<b>Single diffusion channel</b>	<b>Client A</b> only relied on two employees to promote the platform	Organisation
<b>Alignment</b>	<b>Both clients</b> indicated that the alignment of external workers hindered the platform's usage, as these required significant guidance and clear input to perform the work well	Collaboration
<b>Quality</b>	<b>Both clients</b> indicated that the quality of the delivered work was lower than what they were used to, so they could not use the platform for critical high-priority projects	Collaboration

<b>Effort</b>	<b>Both clients</b> indicated that the platform required more effort than what was expected	Collaboration
<b>Speed</b>	<b>Client A</b> felt the fast pace of the assignment execution to hinder their usage, as they had to fit all meetings in a short time period, which did not fit their schedule	Collaboration
<b>Uncertainty</b>	<b>Both clients</b> felt uncertain about the quality of the freelancers and whether they would be able to solve more complex assignments, so these were done internally or through another way	Organisation

## 5. Discussion and Conclusions

### 5.1. Conclusions

#### 5.1.2. Sub Research Question 1

*Sub-question 1: What are the drivers and barriers in the implementation process of a digital B2B platform?*

##### *Adoption decision*

Many known factors that play a role in the adoption decision of a B2B platform can be characterised by the relative advantage they offer compared to the prior situation, as illustrated in Chapter 3. For digital B2B platforms, these include cost savings, flexibility, and scalability. Scalability plays a significant role in the adoption decision of a B2B platform, as the platform offers an adopter the possibility to easily access many different trading partners, which increases revenue. Furthermore, the platform's functionality drives the adoption decision if the technology is perceived to answer the needs of its users. If the platform contains features that directly address problems that potential users face, it has a high chance of getting adopted. Furthermore, organisations are more likely to adopt a B2B platform if they feel external pressure from competitors. This pressure is mainly seen in marketplaces where manufacturers offer their products. If a specific manufacturer is not present on that platform, it fears that it is missing out on revenue and needs to be present as well. Finally, management support can be a driving factor in the adoption decision of a B2B platform. If senior managers have a positive view on being present on certain platforms, this can encourage employees to adopt B2B platforms as well.

There are, however, also factors that discourage B2B platform adoption, as illustrated in Chapter 3. If clients lack trust in whether the platform provider can handle sensitive company information well, this can be seen as an obstacle. A second barrier to the adoption decision is the assimilation costs, also because potential clients are aware of the risk of lost investments when it does not manage to assimilate the platform. Furthermore, B2B platforms' complexity has been mentioned in the literature. If potential users consider the platform too difficult to understand, they are unlikely to adopt it. The platform should therefore be explained very well in the beginning, and internal workers should feel confident enough that they will be able to use it.

##### *Usage*

Ease of use and B2B platform's functionalities can act as drivers for the usage of the platform. When users understand how the platform works and its functionalities solve a problem they have, they use the platform more. Management commitment and support have also been identified as important driving

factors in prior studies on B2B platforms' implementation. By supporting the implementation through financial investments, managers can show their commitment and send a message across the organisation to use these B2B platforms. Another driving factor is the room for employees to experiment with a platform. If they are allowed to try the platform's functionalities, it will have a positive effect on their usage. Finally, external pressure, mentioned in prior studies on e-marketplaces, is also included in this category. Users can be stimulated to increase their platform usage when they feel pressure from competitors to also be present on these platforms.

There are, however, also barriers to the usage of B2B platforms. For instance, a lack of trust by managers can form a barrier in the adoption decision and cause employees to be reluctant to use freelance platforms. Another barrier arises if potential benefits are not realised when complete assimilation of the platform has not taken place or if the complexity of the technology is too great for adopters to understand the possibilities. The lack of awareness of these benefits can become an important barrier to the implementation of B2B platforms and can cause companies to quit their usage. Moreover, the complexity of integrating B2B platforms plays an important role in the level of implementation and has been identified as a barrier, especially in large companies with heavily structured internal systems.

### 5.1.3. Sub Research Question 2

*What distinguishes a freelance platform from other B2B platforms?*

Freelance platforms allow a growing number of workers opportunities to generate an income independently. These platforms are part of the online labour or work platforms category that use technology to create multi-sided, online marketplaces, which together form the 'gig-economy'. They are characterised in the literature by a high focus on specialised projects which require a high intensity in knowledge, such as software development. The matching process of these requires a higher managerial overhead of the platform compared to other B2B platforms, and the quality of the matches is of significant importance. Frequently, the platform provider assists its clients in the sourcing process. This higher involvement of the freelance platform provider differs from other B2B platforms, where transactions are mainly automated.

These findings from the literature are supplemented by characteristics mentioned by interviewees during the case studies, as illustrated in Chapter 4. Six factors are mentioned by direct users of Platform X that characterise the platform. Of these six characteristics, three are general characteristics for freelance platforms and three are considered specific features of the platform, which are discussed in section 5.3. As has been mentioned in prior literature, clients of Platform X consider a freelance platform to be highly involved in the usage of its platform. Its AMs help clients identify, formulate and post assignments, and guide meetings between freelancers and internal workers. This characteristic differs from other B2B platforms where only transactions are facilitated. Diversity is also considered a characteristic of a freelance platform, as clients can post a wide variety of assignments on the platform



because of the many freelancers with different expertise, similar to Fiverr and Upwork (other digital freelance platforms). Other B2B platforms can be very narrow in scope as they only facilitate the transaction of a specific product group, as mentioned by Client B. Assignments posted on freelance platforms can vary greatly, from designing a logo or website to coding specific apps. Finally, the interviewees characterise the freelance platform by its accessibility. Like Fiverr and Upwork, the platform and the collaboration it facilitates are entirely online (no physical exchange of services or products is needed), which increases accessibility - only an internet connection is needed to use it.

#### **5.1.4. Sub Research Question 3**

*When studying a case, what are the drivers and barriers in the implementation process of a freelance platform?*

##### ***Adoption decision***

Drivers of the adoption process are mainly characterised by trialability and relative advantage. The fact that it is low in cost – both in trial and usage – lowers the threshold for clients to try out this new way of working (also a frequently mentioned driver) and encourages them to save costs on receiving external information. However, this price level at the adoption also has a disadvantage later in the implementation process, which will be discussed in the next section on implementation. A second relative advantage that encourages potential clients to adopt the platform is the speed of execution. Assignments are formulated, posted and executed quickly compared to what organisations are used to – mainly within a timespan of a few weeks as opposed to months. Especially for Client A, this played an essential role in the adoption decision, as it is a large, slow organisation that wanted to speed up its processes. However, this factor hindered the platform's usage later in its implementation phase, which will also be explained in the next section. The third relative advantage is the external capacity offered through the platform. Clients notice that they cannot carry out all of their work themselves, and projects of lesser priority end up in a drawer. Platform X is seen as the solution for this, as freelancers can be used to follow up on these projects and carry them out for the organisation. Furthermore, a driver characterised by complexity is the platform's ease of use. Client A and Client B were looking for a simple tool and thought Platform X would be low in complexity. Finally, a need for information can play an essential role in the decision-making process of platform adoption. Although projects can be of lesser priority to the organisation, they can be critical in the business development strategy in the long term. Organisations that realise this and can formulate suitable assignments see this as a driver for the adoption decision.

##### ***Usage***

With diffusion channel as the most frequently mentioned factor in implementing Platform X, the organisational domain plays a significant role in the platform's usage. How the platform is known in organisations and the individuals who promote its usage is a critical driver or barrier, and it already starts with the adoption decision. The eventual usage level is related to the position of the individual making

the adoption decision and the individual assigned to experiment – which is crucial to understand its workings and building best practices – with the platform from the beginning. If the buyer is in senior or higher management, it is easier for the platform to be spread through an organisation, as it is easier to find different users and assignments. This is because individuals on higher levels in the organisational structure either lead larger departments or even multiple departments where more work can be found to be put on the platform. Furthermore, if the platform AM is allowed to be involved in the identification and the formulating of assignments and has different points of contact within the organisation to discuss different projects with, usage is increased. The platform AM can then communicate the potential ways the platform can be used and make the client aware of all its benefits. If the client is shown what type of assignments are posted by other clients, this can also inspire them to do the same and drive the usage even more. Usage drivers can also be seen in the technology category. The platform's ease of use due to its low complexity and accessibility allows companies to post assignments entirely online and independently. As more internal workers work from home more frequently, the threshold of hiring other digital workers – the freelancers – is lower, driving the platform's usage. On top of that, once internal workers use the platform and work with the same freelancer, trust builds, and more assignments are posted. Although the diffusion channel can be a driver of usage, it can also slow down usage. The disadvantage of Platform X's low costs is that managers from lower layers in the organisations have the authority to decide to adopt the platform without having to ask permission from higher management. When the platform is bought in by such an individual, the implementation is more complicated, as it has little reach in the organisation to promote it.

The alignment between internal workers and freelancers is also an important factor that can obstruct the usage. This alignment is needed to allow freelancers to produce deliverables that are of a desirable quality. In order to realise this alignment, however, internal workers need to provide much input and put in significant effort to keep the freelancers on track, which proves to be difficult when the internal capacity is already limited. This absence of alignment can lead to deliverables of lower quality, which lower the usage by other internal workers. Also, the speed of the execution process, seen as an adoption driver initially, can form an obstacle during the implementation phase. As some organisations are not used to the fast way of working with a freelance platform, they can be discouraged by the pace with which an assignment is formulated, posted and executed. Especially when they are busy with regular work, they can not take on the burden of preparing and guiding a freelancer in a short time for an assignment with lesser priority.

### 5.1.5. Main Research Question

*What are the drivers and barriers in the implementation process of a freelance platform?*

#### **Adoption decision**

By combining findings from the literature and the case study, certain drivers have been identified that stimulate the adoption process of a freelance platform. The external capacity and the guidance by the platform provider are characteristics of these types of platforms stimulating the adoption decision. Clients see this as unburdening, and hence think the platform's usage does not require much effort from their side, which appeals to them. This expectation can also lead to a disappointment, however, which is discussed in the following section. Whereas scalability is an important factor in the adoption decision of B2B platforms, as illustrated in Chapter 3, diversity of the platform is an important factor in the context of freelance platforms, as illustrated in Chapter 4. The diversity of assignments that can be posted on the platform has also shown to have a driving impact on the adoption decision of a freelance platform. When managers are made aware of what types of tasks can be posted on the platform, they see the platform as a diverse tool, which can take many operational tasks off their plate. On top of this, when senior management supports the adoption and experimentation of new types of work, this has a driving effect on the adoption decision. Furthermore, when there is a need for information, the platform has a higher chance of getting adopted. Additionally, the low complexity and high accessibility (little training and only an internet connection are required to use it) encourage employees to adopt the platform as well.

Barriers to the adoption decision of freelance platforms are mostly related to the uncertainty of the quality of freelancers and the type of tasks that can be outsourced to these kind of platforms. As the freelance platform facilitates a relatively new way of working, organisations are unsure what assignments can be posted on the platform and if the assignment's deliverables will be of desired quality. Furthermore, platform's costs, which have been identified as a barrier to the adoption decision in other platforms, have also played a negative role in the decision to adopt the platform in one of the units of analysis in this study. The relevance of this factor, however, depends on the business model of the platform provider.

#### **Usage**

Many drivers have been identified in the usage of freelance platforms. A high level of platform involvement, a low complexity, and high accessibility are examples of drivers given in the literature, which have been also been identified in the studied organisations in this research. Another driver of the platform's usage is the room for experimentation with the way of working of the platform. When clients realise what can and cannot be done on the platform, they can better promote the platform within their organisation and, with the help of the freelance platform provider, stimulate its usage. By having multiple diffusion channels (groups or individuals within the company that can promote the platform) through which the platform is promoted, the usage can be increased even more.

In the same way, by having only one diffusion channel through which the platform is promoted, a barrier can be formed for the platform's usage. Especially if this person does not have a big reach (i.e. is not on a high management level) or does not see the advantage of the platform, the spreading of the platform is hindered. Furthermore, the effort that needs to be put into the clear formulation of assignments and the alignment of freelancers forms a barrier to its usage. As internal workers need to collaborate with external workers, which require guidance and clear instructions to deliver a desired result, there is a barrier in posting multiple tasks on the platform, as it does not fit their busy schedule. Especially when clients are unsure and sceptic of the quality of certain deliverables, they opt for alternatives.

## 5.2. Implications of Key Findings

### 5.2.2. Scientific Implications

This research contributes to the scientific literature as it fills a research gap in the implementation of a technology in the context of freelance platforms, a relatively new topic in the academic world. Most current literature that exists on the topic of freelance platforms focuses on the consequences these platforms have for freelancers, and the vulnerability of their position when they decide to give up a steady flow of income. However, little research has been done on what role freelance platforms can play for their clients, and what they need to do to make good use of them. This research fills this gap by identifying drivers and barriers to both the adoption decision and the platform's usage. It also shows that some factors, such as scalability, are not as relevant in the context of freelance platforms as they are in other B2B platforms. Additionally, the factors of uncertainty and the number of diffusion channels, which have been identified in the case study, are not explicitly mentioned in prior literature on B2B platforms. As freelance platforms facilitate a collaboration over several weeks instead of a single transaction of a product, the impact of a bad match can be significantly higher, explaining the importance of the uncertainty factor in the context of freelance platforms. The number of diffusion channels is expected to play a large role in the usage of freelance platforms, as each assignment requires much effort and time. A single internal worker can only do one or a few assignments in a timespan of a month, so in order for the usage to increase, the number of internal workers to get in touch with the platform should be maximised. On top of identifying these factors, preliminary relationships are posed and theory is developed, based on case study data. With these findings, future research on the topic of freelance platforms is guided and researchers can study the causal relationships of the assumptions made in this report. This will further extend the (now relatively little) academic knowledge on the implementation process of freelance platforms and allows researchers to focus on explaining the (relationships between) relevant factors as opposed to first describing them.

Furthermore, where other studies on B2B platforms focus either on the adoption or the implementation of the technology, this research combines the two by studying factors influencing the adoption decision and its usage. On top of that, the influence of certain factors that play a role in the adoption decision is

investigated in the implementation phase, and relationships are identified. This research shows that studying this influence is relevant as it provides additional understanding of the implementation process. An example of this is the position of the individual that makes the adoption decision. In the studied organisations, the level of this decision-maker relates to the eventual usage when the platform is implemented in the organisation. The higher the position of this decision-maker, the more overview this person has on the jobs to be done in the organisation, and the higher its platform usage. This relationship would be overseen when the focus of the study is on only one of the stages.

This research also shows that extending the TOE framework with the collaboration category is useful considering platform technology. As platforms, and especially freelance platforms, often contain a high degree of collaboration, this category helps to include collaboration factors that influence the adoption decision and the usage.

More research is needed to determine the causal relationship between the different factors. Throughout the interviews, statements were given that indicated a relationship between the codes of each group. For example, the assumption is made that a high degree of platform involvement is expected to positively influence the impact of the freelance platform on the client organisation, as more relevant assignments can be posted. Moreover, client's uncertainty about the quality of the freelancers (a barrier to the adoption decision and the usage) can be removed by higher platform involvement. In the studied cases, this has not been done properly, and the barrier was still present. Furthermore, an awareness of benefits is expected to positively influence the number of diffusion channels. Especially when senior managers are aware of what the platform can mean to the organisation, the promotion of the platform across different departments follows much easier. The findings of this research also suggest a relationship between the level of implementation and the position of the individual who buys the platform license, as explained in Chapter 4. The higher the position and the better overview this person has, the easier it is for the platform to be implemented in the organisation. Preliminary relationships are further outlined in section 4.3. The causal relationship can be tested in further research.

### **5.2.3. Managerial Implications**

More understanding is created on the adoption decision and implementation of a freelance platform in organisations. The freelance platform can have a significant benefit to organisations if they are able to implement the technology and service successfully, as is outlined in Chapter 4. Managers of organisations that decide to adopt the platform should be aware of specific drivers and barriers to implement the platform in their organisation.

At the adoption, the person who makes the adoption decision needs to be high in the organisation structure, preferably C-level, to make the further implementation of the platform later on easier. This person needs to have an overview of what projects are active in the organisation or needs to assign someone with this overview to be in contact with the platform's AM.

Furthermore, to leverage the external capacity the freelance platform offers, managers should allow employees that work with the platform to schedule enough alignment sessions with freelancers to give proper guidance, which eventually will help improve the quality of their work.

In order to implement the platform in an organisation, the diffusion channel and platform involvement play a significant role. Additionally, to increase the usage, the freelance platform's AMs should be allowed to be involved in the internal organisation by getting into contact with different project managers and promote the platform within the organisation. As internal workers already lack time, they should, initially, focus more on the execution of their assignments than promoting it in their organisation.

Furthermore, employees should be allowed room to experiment with the platform. In order to know the benefits, they need to be aware of what is possible and what is not possible by using the platform. This knowledge can be used to encourage others within the organisation to also start posting assignments.

Freelance platform providers can also use drivers and prevent or act on barriers to help its clients implement the platform.

First of all, based on the case study findings, commercial organisations are expected to be better organised to use a freelance platform. As freelance platforms can help these organisations on commercially-oriented assignments, such as researching business opportunities in different markets, these companies can see a return on investment more easily, and platform providers should focus on this type of organisation first.

To remove the barrier of uncertainty about the qualities of the freelancer pool, the platform provider could take a few measures. A dashboard with insights into freelancers (such as their years of full-time work experience, availability, previously completed assignments and ratings) could be created that provides clients with an overview of the freelancer pool that helps them decide which type of assignments they can post. This lowers the uncertainty about the quality and capabilities of these freelancers. Furthermore, another dashboard could be created that provides insights into the assignment topics per organisational type. As the two colleagues at Client A mentioned, looking at posted assignments of branch members (commercial organisations) did not work to get inspired, as the organisational type, and therefore the assignment types, differed. Client A does not have a real need for assignments on marketing, for example, whereas this is an important topic for other commercial clients. Instead, clients like Client A could focus on what other non-profit organisations, such as governmental departments, are posting. Platform X's AM confirmed that other non-profit organisations have been able to implement the platform, so the conclusion cannot be made that the organisational type is a decisive factor.

Additionally, expectations of the client's amount of effort it takes to use the platform should be managed. From the very beginning, the client should be made aware that increasing the number of alignment

meetings has a high chance of increasing the resulting quality of the deliverable. The freelance platform provider should therefore urge the client to schedule enough time to use the platform properly, especially in the beginning. This might cause some potential clients to be discouraged, but this eventually results in less disappointment.

Furthermore, the freelance platform provider should aim to sell the platform as high as possible in the hierarchical structure to get multiple diffusion channels and management support. One way of doing so is by (counterintuitively) increasing the price of the platform to ensure that the person who makes the adoption decision has the authority to make decisions over larger budgets. This person is often positioned higher in the organisation, and can open up multiple diffusion channels more easily, as it has a bigger reach. Although this individual might be harder to convince initially, it is expected to have a positive effect on the eventual usage of the platform in that organisation. On top of this, the platform provider can make this individual aware of the benefits by discussing what the freelance platform can do for their organisation. If the manager sees the value, it has a positive effect on the usage of the rest of the organisation.

### 5.3. Limitations and Future Research

The data collection is limited due to a combination of factors. First, Platform X is a relatively new company, and the total number of clients is not significantly high. Besides, Platform X has experimented with different features and work processes with different clients, making it hard to make a proper quantitative comparison without knowing the context. Finally, the availability of interviewees was limited, and the time scope of this research was not adequate to study more organisations in depth. If this study were done in a few years and over a longer period, more clients could be studied, and more quantitative data would be available to confirm the findings. By studying organisations from multiple sectors, for example, findings could be more generalisable.

A second limitation is the type of companies that were used during the interview. As Platform X is used to optimise internal work processes, the assumption was made that the type of companies would not play a significant role. However, as commercial companies also use the platform for commercial purposes, it is easier for them to see the impact and the return on their investment. Therefore, future research should focus on two organisations of the same type to better compare the findings. Furthermore, both clients in this study have decided to adopt the platform initially, creating a bias towards the expected benefits of using Platform X. To better understand barriers present at the adoption decision, companies should be included that have decided not to adopt the platform.

A third limitation is the specific features of Platform X that limit generalising this research's findings, such as the low entry costs and the rating-based payment. An implication of these features is that they lower the threshold to experiment with the platform, as organisations do not have to pay a large amount for an assignment if they perceive the quality of the result to be low. This lowers their risk of investing

in the platform, as they are not required to pay if the deliverable does not add value. The barrier which is created by the uncertainty of the quality at the adoption decision is therefore lowered by these features. Another feature of Platform X that affects certain drivers and barriers is the speed with which assignments are executed. For Client A, this was a specific driver to adopt the platform, but this is not necessarily generalisable to other freelance platforms, whose execution pace could vary significantly. The speed also played a role in the usage of the platform. Clients of Platform X only have a small time period in which they need to schedule alignment meetings and guide the freelancers. When all this effort is squeezed in a short amount of time, it could influence the perception of the clients, as they would consider the amount of effort to be a lot more than it actually is. In order to investigate the impact of these features, a different study should be done on companies that use a platform with different features.



# Reflection on MOT

This thesis is written to complete the master's program in Management of Technology, offered by Delft University of Technology. To explain the link between the program and this thesis, the study goals formulated by the study guide are discussed (Verburg, 2022).

- The final deliverable must contain analytical components.

This thesis contains components of analysing the current literature, the qualitative data results generated through a case study, and the quantitative data collected on the technology's usage.

- The final deliverable is multidisciplinary in nature.

This research combines the data collected through a literature review, case study interviews and quantitative data from the platform provider. After the collection, the data is combined and analysed. Furthermore, both the adoption decision and the implementation process of a digital technology are analysed, which has not been done before on this topic, and this thesis can therefore be seen as multidisciplinary in nature.

- The final deliverable focuses on a technical application or domain.

This research focuses on the implementation of a digital platform throughout organisations, a software used to optimise business operations. The complexity of this software and its effect on the adoption decision and its usage is studied.

- The final deliverable shows the understanding of technology as a corporate resource.

Throughout this report, the benefits of using the digital freelance platform by its clients are discussed, such as the use of external capacity and the accessibility through the platform's online component. Furthermore, the platform can be used to gather information necessary to develop long-term business strategies.

- The final deliverable uses scientific methods and techniques as put forward in the Management of Technology curriculum

To assess the level of adoption decision, Rogers' Diffusion of Innovation is used for this research. On top of that, the extended TOE framework is used to categorise the identified drivers and barriers in the implementation phase of the platform.

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## A. Literature Review

Table 25: Factors of platform assimilation adapted from Najmul Islam et al. (2020)

Encouraging Factors	Discouraging Factors
<ul style="list-style-type: none"> <li>• External pressure</li> <li>• Internal Needs</li> <li>• Product Value</li> <li>• Cooperating in customer-supplier relationship</li> <li>• Business partner influence</li> <li>• Supplier Trust</li> <li>• Adoption among Competitors</li> <li>• Organisational Readiness</li> <li>• The degree of benefits</li> <li>• Top Management Support</li> </ul>	<ul style="list-style-type: none"> <li>• Customer Power</li> <li>• Legal Barriers</li> <li>• Perceived Costs</li> <li>• Product Specificity</li> <li>• Transaction Risk</li> <li>• Managerial Complexity</li> <li>• Assimilation costs</li> </ul>

Table 26: Inhibitors of B2B platform diffusion adapted from Wallbach et al. (2019)

Overarching Theme	Factor
<b>Technical and Regulatory Requirements</b>	<ul style="list-style-type: none"> <li>• IT infrastructure</li> <li>• Functionality</li> <li>• Legal requirements</li> <li>• Community-specific requirements</li> </ul>
<b>Mindset</b>	<ul style="list-style-type: none"> <li>• Perceived ease of use</li> <li>• Spirit of innovation</li> <li>• Implementation of workarounds</li> <li>• Recognized potential of the system</li> <li>• Blaming other factors</li> <li>• Qualified workforce</li> <li>• Management commitment</li> </ul>
<b>Characteristics of the system provider</b>	<ul style="list-style-type: none"> <li>• Neutrality of the system</li> <li>• Reliability of the system provider</li> <li>• Communication of functionalities</li> </ul>
<b>Competition</b>	<ul style="list-style-type: none"> <li>• Conflict of interest</li> </ul>

	<ul style="list-style-type: none"> <li>• Contractual relationships</li> <li>• Governance structure</li> <li>• Community idea</li> </ul>
<b>Process</b>	<ul style="list-style-type: none"> <li>• External processes</li> <li>• Process dynamics</li> <li>• Internal processes</li> </ul>

Table 27: Factors impacting user level e-marketplace adapted from Saprikis &amp; Vlachopoulou (2012)

Domain	Factors
<b>Internal factors</b>	<ul style="list-style-type: none"> <li>• Fund's availability</li> <li>• Organisational e-readiness</li> <li>• Top management strategic support</li> <li>• Products' characteristics and demand uncertainty</li> </ul>
<b>External factors</b>	<ul style="list-style-type: none"> <li>• Governmental pressure</li> <li>• Partners' pressure</li> <li>• Competitive pressure</li> </ul>
<b>Characteristics of the applied B2B e-marketplace</b>	<ul style="list-style-type: none"> <li>• B2B e-marketplace's mission and provided e-services</li> <li>• Operational rules</li> <li>• Ownership status</li> <li>• Profile and extent of participating firms</li> </ul>

Table 28: Adoption barriers of e-marketplaces by enterprises adapted from Loukis et al. (2011)

Barrier
Difficulties of integration with internal information systems
Lack of common technological standards for the communication and the exchange of information with all e-marketplaces
Lack of support for different prices for large multi-product orders and negotiations on them
Lack of common procedural standards for the communication and the exchange of information with all e-marketplaces
Hesitation and unwillingness of some employees
Lack of trust of unknown suppliers
Results provided in an unstructured and difficult to process form
Deficiencies of the internal regulations and the legal framework

Table 29: Adoption factors of e-marketplaces in SMEs adapted from Stockdale &amp; Standing (2004)

Barriers	Benefits
<p>Internal barriers:</p> <ul style="list-style-type: none"> <li>• Lack of understanding of the nature of Internet as a trading channel and its interactions with the other ‘traditional’ trading channels</li> <li>• Lack of participation in big value chains that would encourage (or even press) them to adopt B2B e-marketplaces</li> <li>• Limited incentives and absence of culture for being the ‘first mover’</li> <li>• Lack of the other capabilities required for trading in wider markets (e.g. concerning import/export procedures, currency exchange, shipping services)</li> <li>• Financial constraints</li> </ul> <p>External barriers:</p> <ul style="list-style-type: none"> <li>• Lack of widely accepted standards for the exchange of information with e-marketplaces (which results in each e-marketplace having different formats for information exchange with the participating enterprises)</li> <li>• Lack of understanding of and supporting the special needs and peculiarities of the SMEs by most B2B e-marketplace makers</li> <li>• External environment not favouring such innovations</li> </ul>	<ul style="list-style-type: none"> <li>• Access to a wide range of markets</li> <li>• Greater potential for partnerships</li> <li>• Flexibility in administration and communication</li> <li>• Convenience in interaction with customers and partners (24/7)</li> <li>• More and updated information</li> <li>• Improved customer service</li> <li>• Lower transaction costs</li> <li>• Differentiation and customisation of products and services</li> <li>• Capabilities for entering the supply chains of large enterprises</li> </ul>



## B. Data Management

For this research, interviews will be conducted with employees from different organisations. These interviews will be done following the interview structure, which can be seen in Appendix C. Interviewees will be asked questions about their experience using the freelance platform. This data will be used and analysed in this thesis. Before data is collected, a data steward from the University is consulted, and a data management plan is created.

The interviews will be done through Microsoft Teams, and the meeting will be recorded to be transcribed afterwards. In order to protect the participants from potential identification in a data leak, the interviewees will be asked to keep their cameras turned off. The outline and the privacy precautions are explained to the interviewee, and their consent is asked before the start of the recording.

In the report, the transcriptions will be anonymously summarised, and only a general description of their function and company will be used to indicate their experience. Furthermore, all necessary contact information (name and company email) will be stored safely on the OneDrive of the University to minimise the risk of a data leak. This data will be kept in this Drive for review for the duration of this research project plus one month, after which it will be destroyed. The only information from these interviews that will be made publicly available is the anonymised interview summaries, as this thesis can be found in the educational repository of the TU Delft.

## C. Case Study Protocol

### I. Overview of the Case Study

#### **Background**

Online freelance platforms such as Fiverr and Upwork have lowered the threshold of hiring temporary workers to perform part of organisation's work by enabling companies to put short-term assignments or "gigs" on their platforms, which can then be picked up and carried out by freelancers from around the world. This new way of outsourcing work changes the status quo of the traditional workforce and brings more flexibility to both employers and employees. However, it also brings challenges as the platform needs to be adopted and used by employees throughout the organisation.

This research is focused on studying the drivers and barriers of the implementation process of a freelance platform in the B2B market. For this, interviews with employees at two organisations that have decided to start a trial of Platform X are used to collect data. For each organisation, interviews will be held with employees involved in the implementation of the platform in their company. These employees are recruited with the consent of Platform X, and they are expected to answer questions on how they experienced this process and whether they have experienced specific drivers or barriers found in the literature. Also, an AM from Platform X will be interviewed to gather information on their perspective of the process.

#### **Mission**

To gather expert insights into the implementation process of the freelance platform Platform X.

#### **Goals**

This case study aims to answer the sub-questions formulated in Section 1.3. After extracting the currently known drivers and barriers to adopting and implementing a B2B platform from the literature, these are studied in the context of a freelance platform. This provides insights into whether the currently known factors also play a role in this specific context and what potentially additional factors might be present. Insights from employees of both organisations will help to answer which drivers have played a role in the case of the successful client and which barriers have caused the failure of the other. Best practices from a client that has implemented Platform X into their business will help identify strategies with which other companies can implement freelance platforms more easily.

***Audience***

This case study is used in the Master thesis, which will be read by researchers on the topic of platforms. The audience is considered knowledgeable.

***Rationale for selecting Cases and Selection Criteria***

For this research, a holistic, multiple case study is used as this approach is best used in the case of ‘how’ and ‘why’ questions and when the researcher does not have much control over the events, which are both the case for this study (Yin, 2018). Furthermore, the case study is selected as the research approach because this study aims to understand the workings of the implementation process of digital freelance platforms in the real world.

The study has a single unit of analysis; the implementation process of the freelance platform Platform X. A multiple case design is chosen to research two organisations that have attempted to implement Platform X, of which one has succeeded, and the other has failed. The success of the implementation is determined by their decision to renew the subscription to Platform X after the Trial period of six months. The implementation is considered A) a success when a client buys a one-year subscription after the Trial period and B) a failure when a client decides not to buy a new subscription after the Trial period.

The selection of the two organisations had the following criteria: 1) Client A must be an organisation that did not buy a new subscription after the trial period of six months. 2) Client B must be an organisation that did buy a new subscription to the platform after the trial period of six months. 3) Client A and Client B must have started their Trial period within 12 months from each other to ensure that the features of Platform X and the work processes of Platform X were relatively similar. As Platform X is a relatively new company, these variables change quickly, which could affect the implementation process of the two clients when they are too different. 4) Client A and Client B should have started their Trial period more than a year before the start of this research to study the successful client's implementation process over a more extended period. 5) Employees who have played a role in the decision-making process and have used the platform should still work at Client A or Client B.

By going over the potential options, two organisations were selected that fit these criteria, and with the consent of the AM of Platform X, the interviewees were approached.

***Broader Theoretical Relevance***

Using Roger's Diffusion of Innovation (Rogers, 1995) and the extended TOE framework (Tornatzky & Fleischer, 1990), external validation is ensured (Yin, 2018). Using Rogers' five characteristics that determine the level of adoption of an innovation, factors that played a role during the decision-making process of adopting Platform X are categorised. Furthermore, using the four categories of the latter framework – Technology, Organisation, Collaboration, and Environment – identified drivers and barriers of the implementation process are categorised. This categorisation improves the external validity of this research as it can be generalised.

## II. Data Collection Procedures

### *Key Organisations*

There are three key organisations for this research. The first organisation is the Dutch freelance platform Platform X. Using its usage data, the needed information on the implementation process is gathered to perform the case study successfully. With the consent of Platform X, two clients (Client A and Client B) are selected and contacted to gather in-depth knowledge on their experience of the implementation process. Client A stopped its license after the Trial period and could not implement the platform in its organisation. Client B is a company that has renewed its license to the platform after the six-month trial period and is using the platform extensively.

### *Schedule of Data Collection Activities*

Table 30: Schedule data collection activities

Week	Activity
6 '23	<ul style="list-style-type: none"> <li>• Discuss with Platform X and select Client A and Client B</li> <li>• Identify stakeholders in the implementation process of Client A and Client B</li> <li>• Approach stakeholders through email</li> <li>• Collect public company data and platform usage data from Platform A of Client A and Client B</li> <li>• Prepare interviews following HREC procedures</li> </ul>
7 & 8 '23	<ul style="list-style-type: none"> <li>• Conduct interviews</li> <li>• Transcribe interviews</li> <li>• Ask for unclarities</li> <li>• Process gathered information</li> </ul>
9 '23	<ul style="list-style-type: none"> <li>• Analyse data</li> </ul>

### *Protection of Human Subjects*

The following procedures of The Human Resource Ethics Committee (HREC) of Delft University of Technology are used to ensure ethical conduct and the protection of interviewees of this research: The HREC checklist, an Informed Consent Form and a Data Management Plan. These procedures are followed to plan and execute the research so that no harm is done or disproportionate risks are taken on Human Research Subjects.

### *Field Procedures*

Data for this research is collected in two ways; through the qualitative method of interviews and the quantitative method of collecting usage data of the two organisations. First, quantitative data is collected on the platform usage of both Clients. This data is stored by Platform X and includes the number of

assignments posted, assignment ratings, and the number of employees authorised to post assignments. Subsequently, qualitative data is gathered through interviews with involved stakeholders of both Client companies and the assigned AM of Platform X.

### III. Protocol Questions

In order to keep the researcher on track, protocol questions are posed with their likely sources of evidence. The following questions represent this research's line of inquiry:

1. *Which of Platform X's clients have the required characteristics to fulfil the roles of Client A and Client B?*

**Source:** Documentation - Platform X's list of current and previous clients and their license types (private)

2. *How often did Client A and Client B post assignments on the platform and how did they rate the delivered work?*

**Source:** Documentation - Platform X's data (semi public)

3. *Who are the relevant stakeholders in the implementation process of Client A and Client B?*

**Source:** Interviews and documentation - Platform X's AM and contact data (private)

4. *Why did Client A fail to implement the Platform X platform?*

**Source:** Interviews and documentation – Stakeholders of Client A and Platform X's AM (private)

5. *How did Client B implement the Platform X platform?*

**Source:** Interviews and documentation – Stakeholders of Client B and Platform X's AM (private)

## D. Interviews

### D.1 Informed Consent

Before the interviews, the interviewees are asked to consent to this research by signing an informed consent document. This contains an explanation of the research but also explains what measures have been taken to ensure their privacy. The following letter is sent to the interviewees:

*You are being invited to participate in a research study in the implementation process of a freelance platform. This study is being done by Giliam Geelen from the TU Delft.*

*The purpose of this research study is to obtain insights into the drivers and barriers of implementing a freelance platform, and will take you approximately 60 minutes to complete. The data will be used in the Master thesis for the Master 'Management of Technology' at the TU Delft, which will be stored in the educational repository and made publicly available. We will be asking you to answer questions during an interview on drivers and obstacles that you have experienced during the usage or development of a freelance platform. After the interview, your input will be transcribed in a document. You will be asked to check the document and accordingly provide your feedback and/or consent.*

*To the best of our ability your answers in this study will remain confidential. We will minimise any risks by anonymizing your data by only stating generically your function title in the report and by anonymizing your company name. All personal data will be stored at TU Delft and will be deleted at the latest of one month after the completion of the project. Expected in May 2023.*

*Your participation in this study is key to the research project and is highly appreciated. Thank you for your consideration and contribution.*

*Giliam Geelen*

## D.2 Interviews

Insights from interviews are used to better understand what drivers and barriers play a role in the implementation of a freelance platform, and clear questions need to be asked to get to these insights. To structure information on the adoption decision and the actual usage of the platform, the questions for Client A and Client B are divided into two sections: 1) the adoption decision and 2) the usage. The interview starts with general background questions on the interviewee's work experience and relevant experience with B2B platforms.

### D.2.1 Adoption Decision

First, adopting a freelance platform is considered an innovation-decision as it involves changes in internal processes and work practices (Rogers, 1995). The focus, based on Rogers' Theory, is on the Continued Adoption or the Discontinuance, as illustrated in Figure 12. Both clients agreed to the Trial period and therefore decided to adopt the platform, so initial rejection is not included to this study.

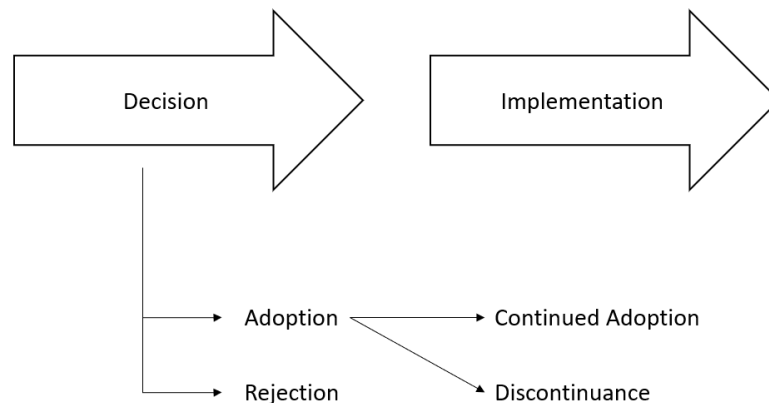


Figure 12: Continued Adoption or Discontinuance adapted from Rogers (1995)

This adoption decision is analysed using the Innovation Diffusion Theory by Rogers (1995) and its five characteristics: relative advantage, compatibility, complexity, trialability and observability. According to Rogers' Theory, these characteristics determine the level of adoption of an innovation. For each Client in the case study, the intensity of these characteristics is studied for two time points: At the start of the Trial period (expectation) and at the end of the Trial period (reality). For every characteristic, the level of applicability is indicated by the following scale:

1. Not applicable
2. Slightly inapplicable
3. Neutral
4. Slightly applicable
5. Applicable

The potential differences in the two time points and between the two Clients help indicate what attributes have played a crucial role in the continued adoption or discontinuance of the freelance platform. An overview of how results are noted is given in Table 31.

Table 31: Interview Characteristics of Innovation Adoption

	Client A		Client B	
Characteristic	Expectation [1-5]	Reality [1-5]	Expectation [1-5]	Reality [1-5]
Relative Advantage				
Compatibility				
Complexity				
Trialability				
Observability				

### D.2.2 Implementation

Second, the actual usage of the platform is studied using the four categories of the extended TOE framework (Tornatzky & Fleischer, 1990): Technology, Organisation, Environment, and Collaboration. The propositions formulated based on the literature review guide the line of questioning of this section. For each category, a definition is given of the term to the research subject, after which a general open question follows to eliminate potential bias by the line of questioning (Yin, 2018). Subsequently, questions are asked that are aimed more towards the propositions formulated after the literature review.

### D.3 Account manager Platform X

The AM of Platform X, who has handled the accounts of Client A and Client B, is asked to answer these questions from their point of view. Furthermore, to understand the relevance and impact of the factors from the different categories, their view on each category's propositions is studied not only in the context of Client A and B but for all the companies inside the portfolio.



## D.3 Interview Structure

### Introduction

Thank you for agreeing to take part in this research. The purpose of this interview is to gather your insights and experiences on the adoption decision and usage of a freelance platform and compare these to findings from the literature. By participating in this study, you will help create a better understanding of why and how freelance platforms are used, which will potentially improve your current usage or help you to adopt the platform again in the future.

During the interview, some terms from the literature will be used, and their definition will be explained to you. In case you do not fully understand what is meant, please indicate this.

### Recording

This interview will be recorded with your consent. The recording will be done without the video camera to ensure your privacy, and your input will first be transcribed, and then anonymously summarised for the use of this master thesis. If preferred, the transcripts of the interview can be sent to you for review. A month after this research project has been completed, all documents will be destroyed.

### Outline

First, some general questions on your past experience with B2B platforms and your role in the implementation of this specific freelance platform will be asked. Following this, we will dive deeper in the adoption decision and, subsequently, your usage of the platform.

#### 1. General

*Q: For context, could you describe your function?*

*Q: What is your background and years of experience with working with B2B platforms?*

*Q: Could you describe your role in the adoption and implementation process of the freelance platform?*

*Q: What are unique characteristics of using a freelance platform compared to other B2B platforms?*

#### 2. Adoption

*Q: What influenced your decision to adopt the platform?*

From the literature, a common theory of diffusing a new innovation in an organisation is the Diffusion of Innovation by Rogers. He identified five characteristics that determine the level of adoption of a technology. For each of the following points, could you indicate what your expectations were and if these were realised at the end of the Trial period?

*The relative advantage of the platform compared to work practices prior to the adoption?*

*The compatibility of the platform with your daily work practices?*

*The complexity of using the platform?*

*The degree to which you could try out the platform?*

*The degree to which you would be able to see noticeable advantages compared to your old situation?*

	Client A		Client B	
Characteristic	Expectation	Reality	Expectation	Reality
Relative Advantage				
Compatibility				
Complexity				
Trialability				
Observability				

### 3. Implementation

*Q: What drove you to post assignments?*

*Q: What hindered you from posting more assignments?*

As in the case of the adoption decision, a framework from the literature is used to identify four categories that play a role in the usage of a platform. These four categories are: technology, organisation, collaboration, and environment. Technology refers to aspects that deal with the hardware and software of the technology – in this case the digital platform itself. Organisation refers to aspects that deal with your internal organisation structure. Collaboration concerns the way you work with all participants in the process of using the platform and, finally, environment refers to legal or financial regulation and external factors such as the current labour market or competitors.

*General Q: How has the technology of the platform played a role in your usage of the platform?*

*General Q: How has your organisation played a role in your usage of the platform?*

*General Q: How has the collaboration with other stakeholders played a role in your usage of the platform?*

*General Q: How has the environment played a role in your usage of the platform?*

### 4. Closing

*Q: What best practices have you observed in using the platform?*

*Q: Do you know anyone else within your network that you think I should talk to?*

I appreciate your participation in my research. Thank you very much.

## D.4 Interview Summaries

Summaries of the interview transcripts can be found in this section, which is divided into four parts: general questions, questions on the adoption decision, questions on the platform's usage, and closing questions.

### D.4.1 General questions

**Q:** *For context, could you describe your function?*

**Client A1:**

I am manager of the IT information management and data management department, and in this capacity, I am responsible for the digital ambitions with a focus on the internal organisation. In this I manage 5 to 10 people, both internal workers and freelancers.

**Client A2:**

I am association affairs coordinator, which means that I handle all kinds of matters of our members and have a responsibility for the planning and control of our department.

**Client B1:**

My current function is director of sales for the Netherlands and Belgium, and in the past, I was responsible for service and business development in several other countries.

**Client B2:**

My job currently is business development manager for services and that means that I look into the service market, what the trends are regarding services, which services we can develop and offer to consumers.

**Client B3:**

I am commercial director.

**Platform X AM:**

I'm a customer success team lead at Platform X. I'm responsible for the adoption and onboarding of new clients. And next to that I'm leading two customer success managers in my team.

**Q:** *What is your background and years of experience with working with B2B platforms?*

**Client A1:**

When it really comes to the kind of platforms I've worked with myself, it's only Platform X.

**Client A2:**

I don't have experience with B2B platforms in the context of Platform X.

**Client B1:**

We sell products on certain platforms, which are basically a bricks and clicks environment in a lot of cases where there is a physical store, but there is also online selling to end users.

**Client B2:**

I did not have any experience with that before I used the freelance platform - it was new for me.

**Platform X AM:**

I worked for a job marketplace in the past, for two and half years.

**Q:** *Could you describe your role in the adoption and implementation process of the freelance platform?*

**Client A1:**

Together with a colleague, I went into reconnaissance with Platform X and Platform X introduced itself, indicated what their way of working is and a contract was agreed upon and I followed the platform's process of running the first projects. Together with my colleague, I then posted three assignments.

**Client A2:**

I was asked to review the platform and talk with Platform X. When I looked up Platform X and saw the business model, I thought this could be something for us. And then I contacted my colleague to see what we could do.

**Client B1:**

The role I had was one of the early adopters within our company. My role was to try to understand the way of working. And then secondly inform other colleagues to say what could be the benefit of the platform. I have been doing so for the last few years.

**Client B2:**

I was told by my colleague the existence of this platform and when I had an assignment, we decided to see if we could do it through this platform.

**Client B3:**

When I joined the board, Platform X was already used in the organisation but was not used very actively. The question arose whether we would continue its usage and we decided, as many researches had to be done, it would be useful to continue the subscription. So I played a role in reactivating the usage of the platform, but not in its adoption decision.

**Platform X AM:**

I am responsible for the onboarding of clients and explaining to them what our way of working is.

**Q:** *What are unique characteristics of using a freelance platform compared to other B2B platforms?*

**Client A1:**

It is mainly betting on a cost-interesting service that they want to put away in a short lead time. And it often concerns jobs, which Platform X also bets on, that are not show blocking for the internal organisation, so it can wait. A strength of Platform X is that it is more integrated into the organisation and helps us formulate the assignments and put them online. So the unburdening, that is really a strength as Platform X deploys it.

**Client A2:**

Their business model, so the rating-based payout, is something I hadn't seen before.

**Client B1:**

Well, the main difference for me is the flexibility and the width of topics you can outsource or use it for. The second unique characteristic is the scoring and the payment setup. It's depending on the quality of the service and also our own perceived quality of the service what the height of the payment is, and that's not always the case in other B2B platforms.

**Client B2:**

I think it is relatively easy to enter them. It's a quite structured process, which they are using and they also inform you well which steps you have to make in the process. And what's nice that different types of assignments you can bring in into the platform. Also, pricewise it's very competitive. So the ease to use is big.

**Client B3:**

I would describe Platform X as an external tool of resources, which you can use for specialised, scoped tasks. Tasks which are not picked up in the daily operational organisation, or of lesser priority. The platform provides a flexible periphery of external capacity around our core business, which is used to perform important, but low-urgent work.

**Platform X AM:**

The service we deliver, the attention we give to the clients and it's not only a platform, it's also the service we are offering, which is more hands on.

### D.4.2 Adoption decision

First, the answers of Client A and Client B1 are illustrated, after which a summary of the perspective of Platform X's AM follows on both clients.

**Q: What influenced your decision to adopt the platform?**
**Client A1:**

The measure of relief and cost. It is actually a very small investment you have to make to get started. We just wanted as an organisation to get a bit more speed in the things we do. So it was easier to switch gears and just try things out, and that was when a platform like this happened to come your way.

**Client A2:**

For us, it seemed like an interesting model to put away small assignments. What struck us was that the commission is very affordable, but the base fee of the license was something we had to think about.

**Client B1:**

It's mainly the width of type of challenges we could put in, that's one, but it's also the speed of implementing it and then getting the result. Which is often short. Doing some quick things where you normally don't have your time or it will take a lot longer if you would hire somebody to do this externally. So this is a fast and easy way of doing stuff what you normally would leave aside.

**Q:** *How did you perceive the relative advantage of the platform compared to work practices prior to the adoption?*

**Client A1:**

What Platform X cleverly does in this case is that it gives me as an organisation and you as a freelancer a stage. So if I get poor employer ratings from a freelancer, that will start to pull the score down a bit from the freelancer's point of view. So there is everything for me to make sure that I am interesting for the freelancer. And precisely because that transparency came in and we, as an organisation, got a face and the freelancer got a face and you can give each other feedback, more feedback opportunities arise than what we were used to before with current freelancers from the direct network.

**Client A2:**

Normally you have to go within your regular network and call and ask if they have time or if it suits them and if they want to do it. Platform X's platform actually works the other way round. You publish it and anyone interested in that type of assignment can respond.

**Client B1:**

The expectation was that it was very applicable. Because there is a lot of work in the organization, which is not core or urgent, but needed for the long term strategy development, which is often left aside where you don't have capacity for. This would now be picked up by the freelance platform.

**Q:** *How did you perceive the compatibility of the platform?*

**Client A1:**

We expected it to be less time intensive than it really was. It takes time, and adds work to what you already have to do, because it doesn't replace your regular work on projects with higher priority. You have to guide the freelancer, because you can't let them alone with the assignment and send them blindly into the organisation.

**Client B1:**

The expectation was that it would be very applicable, because the time spent would be not as much because they were relatively independent. In practice, it was a little bit neutral. It took a bit more time than expected to really keep some of the freelancers aligned with the end result and the expectation of the end result.

**Q:** *How did you perceive the complexity of using the service?*

**Client A1:**

If you can tweet, then you can also use that platform. That is not complex. I did have the expectation that it would be simple and in reality it was.

**Client B1:**

I did not expect it to be complex and it wasn't. Furthermore, the complexity is not the platform of using the service. It's more to do with the content and how do you describe a challenge that it can be executed. It needs to be really, really smart.

**Q:** *How did you perceive the degree to which you could try out the platform?*

**Client A1:**

Ideally, I don't want to be stuck with a contract at all. I have work today, so I need someone today. And that doesn't fit Platform X's line of thinking. In principle, we thought of, let's just try it and then do it a bit as favourably as possible, but then in reality it turns out to be disappointing.

**Client B1:**

The trialability appeared very good, since it's really fast and easy and low invest. It also turned out to be the case, because we could put in really small challenges, hardly any time, and low investment. So the trial phase for these kind of things was really, really good.

**Q:** *How did you perceive the degree to which you would be able to see noticeable advantages compared to your old situation?*

**Client A1:**

You as a freelancer review us and have an opinion on the collaboration and we can read that and can state our opinion as well. I found this very nice. However, the expectations of the quality were relatively low and they stayed low.

**Client A2:**

We did not know what kind of freelancers were on the platform, as they provided little information. So we were uncertain of the quality on the platform.

**Client B1:**

In the beginning it was limited, so neutral, which is also fine because we wanted to trial the way of working and we also saw that these challenges had some impact, but since we're not rolling it out on large scale, the total impact of the total business is still neutral.

Next, the perspective of Platform X's AM is illustrated.

**Q:** *What influenced their decision to adopt the platform?*

**Client A:**

I think they were really looking to get into contact with young, ambitious people who had a different view on what they were doing. I would say it's a conservative company and everything is going slowly and they're very specialized in what they are doing and sometimes they want to do just some quick stuff. And I think that's why they chose to work with us.

**Client B:**

They wanted to have a tool or platform where they could easily receive outside information inside. I think that's how it started and now we're doing much more, but that was their main motivation.

**Q:** *How did they perceive the relative advantage of the platform compared to work practices prior to the adoption?*

**Client A:**

Client A really saw us as a nice-to-have. We couldn't get to the point that they could not do anything without us, because I think that they didn't allow us to do that. They wanted to really do it themselves. With other partners, we do brainstorm sessions and other sessions to really help them understand what else we can do, so they don't have to think about it themselves and we really do it together. Client A really wanted to do it from their way of working. So that's why we couldn't deliver above expectation

**Client B:**

Client B also still sees us more as a nice-to-have instead of a strategic partner. And I think it also makes sense because they're still very focused on the market research and not on all the other parts that we can also do for them.

**Q:** *How did they perceive the compatibility of the platform?*

**Client A:**

Client A did not really know what to expect from the beginning, and their need was not high. They just wanted to experiment with a new way of working.

**Client B:**

With Client B, there was a higher need for quick information. They were enthusiastic about the platform and thought that we could help.

**Q:** *How did they perceive the complexity of using the service?*

**Client A:**

Our platform is easy to use and they did not think this would be a problem.

**Client B:**

Client B also did not think the platform would be difficult to use.



**Q:** *How did they perceive the degree to which you could try out the platform?*

**Client A:**

They did not like to have a contract, but we discussed it and we said that they should try it and see if it could be helpful.

**Client B:**

Client B saw our platform as an easy and low-cost solution and they thought they could try it out easily.

**Q:** *How did they perceive the degree to which they would be able to see noticeable advantages compared to their old situation?*

**Client A:**

With Client A, the impact that their projects made was low and they did not really know what to expect, but they wanted to try a few assignments to form an opinion on the quality compared to what they were used to.

**Client B:**

Assignments we do with Client B have more impact, because they focus more on the commercial side of their business, so it was expected to see a return on their investment more easily. But we can still make more impact with Client B.

### D.4.3 Usage

**Q:** *What drove you to post assignments?*

**Client A1:**

We really had to search within the organisation what kind of projects we had in a drawer somewhere that we can take out of the drawer and post them on Platform X. We really saw it as an exercise and to look at a new way of working and so we started looking for jobs with that.

**Client B1:**

A need for information and a lack of capacity internally. We needed information fast. Nobody was available to do it. This was an easy and quick way to get the information needed.

**Client B2:**

There was a need for information, but the need was not that big that we decided to go to our regular companies where we pay very much for a very detailed market investigation. The need was not a very big and detailed, professional market investigation, but the need was to keep it simple, and to do it fast.

**Client B3:**

I noticed that certain issues were not picked up, for which we could use the platform. On top of that, I wanted to see for myself what the process was like and whether I could promote it in our organisation.

**Q:** *What hindered you from posting more assignments?*

**Client A1:**

Despite the fact that there is always work in abundance, it still secretly takes time, because you have to get a job done within a certain time frame, because that is the term of the contract you have. And I can't just release a freelancers blindly into our organisation, I have to support them. And that is work that comes on top of the regular workload and it doesn't reduce the regular workload. Furthermore, it takes a lot of energy from the internal organisation to make Platform X known. My colleague and I invested in Platform X, we saw it as a fun exercise and were different in the game than a regular employee.

**Client A2:**

The amount of effort and time you have to put in. We were also thinking for other colleagues and guessed whether they would put in the amount of time, and we didn't think they would.

**Client B1:**

Internal capacity still. On the one hand, it's really quick and easy, but on the other hand, what we noticed during the implementation phase of some of the assignments, that you still need several contact moments during the period of the assignment, being it within the three or four weeks that it was, to keep alignment and these alignment meetings sometimes were 1/2 an hour, but it appeared that if you don't make it a real smart assignment, you need alignment, calibration meetings, and if you don't have the time in your daily work to do those calibration meetings, the result is not as expected. And so as a company, we've got an influence on the quality of the result. And that hindered us in doing more assignments. Because we also see that we still didn't even have the time to really guide the freelancers.

**Client B2:**

When our organisation started with Platform X, I was not involved, but I heard at the time that my colleague liked to try such a platform, so I knew that he gave the first assignment to them. I only recently started using it, because I had a project that was suitable for the platform.

**Client B3:**

I had some doubts about the amount of effort of using the platform, and how efficient it was. It takes a lot of time and effort to clearly convey the message of what we want and that makes me wonder whether it is beneficial. Also, the quality of the deliverables is not satisfactorily when the scoping isn't done right and when you are not on top of the alignment.

**Q:** *How has the technology of the platform played a role in your usage of the platform?*

**Client A1:**

It was not complicated to use and I do like the design of the platform. It stimulated my usage, as that was also where the deliverables of the documents were posted, so I was also tempted to go there, as it were, if I wanted to see a piece of documentation or deliverables.

**Client B1:**

Well, it was a positive. Since it's an online completely digital tool and we started implementing this more during the COVID period where everybody was working at home and it wouldn't have been possible at the moment it wasn't online in the way it's structured, so it really had a positive impact on the implementation of this platform. There was also no need to integrate it in internal systems, as you can access it through the web.

**Client B2:**

Because the platform is so easy to use, the threshold to also post an assignment was low.

**Q:** *How has your organisation played a role in your usage of the platform?*

**Client A1:**

The base fee is relatively low, so in terms of money it's not about it. And in that respect, the organisational structure at our organisation is such that senior management says that if we need something and it provides value, we should just do it.

**Client A2:**

I look positively to the collaboration with Platform X and how they helped us with identifying assignments. Together, we made a list of already existing and non-existing issues, and we selected a few assignments to practice with. The challenge was more with the freelancers and the weight of some assignments; what we could or could not do. We also only saw students, who can do a lot, but have limited experience and need help.

**Client B1:**

The adoption was basically kickstarted by leading by example. So showing that examples could work, kickstarted a wider adoption in the organisation. Those who are learning of what you should do and what you shouldn't do. And that was basically the influence, because I think we've done 4 assignments that the question came, how does it work explaining it and that lowered the barrier for the remainder of the organization to also start using it. Also, higher management promoted it.

**Client B2:**

I saw colleagues of mine using it and promoting it, so I had support from others within the organisation to also start using it.

**Client B3:**

I make employees aware of the fact that they can use Platform X if they have issues for which they could use external help. Whether they actually follow up on that is their decision. We don't push on that.

**Q:** *How has the collaboration with other stakeholders played a role in your usage of the platform?*

**Client A1:**

We did have a small doubt on the quality of the freelancers. The sheer number of freelancers makes you wonder if those freelancers are all skilled, and how many are doing one-offs. Because if you have thousands of freelancers, you think there is only a very small pond of those thousands who have done more than two assignments. If we could say, we have 5,000 freelancers and they have all done 10-plus jobs in this corner in the last year, that would give me a lot more confidence than the answer that there are 5,000 people doing jobs.

**Client B1:**

My usage is basically not depending on other stakeholders because I was one of the first using it and most extensively using it. The others started using also, because what I showed them, what could be done and what the possibility is at the moment; there is capacity and the need for the information. It's also not about trust in Platform X - that's basically a given that information is treated properly, but it's the relationship between solver and the one that's giving the challenge. And that differs if you have different freelancers in the area, so getting yourself acquainted and getting several times the same solver helps in doing more, because then the trust builds.

**Client B2:**

There are risks for the collaboration. We completed the assignment but we had a very bad result. That was not created by Platform X – although they maybe could have influenced it up front- but we used some freelancers who were at the platform for the first time, and up front it looked that they were capable to do the job. But we received only partly the deliverables, and decided, together with Platform X to not pay the freelancers. So it was a bad experience unfortunately.

**Client B3:**

The platform facilitates and moderates the collaboration between internal workers and freelancers and, in my opinion, that is a critical aspect that is difficult to replace by automation. Furthermore, I think it should be clear what the qualities of the different freelancers are, as we had some bad experiences.

**Q:** *How has the environment played a role in your usage of the platform?*

**Client A1:**

I don't want to be stuck with a contract at all. I have work today, so I need someone today. And that doesn't fit Platform X's line of thinking.

**Client A2:**

We did look at what other parties were doing. But we as a trade association have different needs and goals than commercial organisations, so it is different.

**Client B1:**

To a degree, we had the legal department involved in some of the assignments saying what can we gather on information legally or not? But that's not a hurdle, that's just information. On the financial part; the adoption was faster because the structure of the monthly recurring fee and the price for the assignment keep the cost really low and it's increasing with the number of assignments you do, but the assignment itself is also not really costly.

**Client B2:**

The costs of the contract were really low, so it was not an obstacle to post an assignment.

Similar to the previous section, the perspective of Platform X's AM is also illustrated separately.

<p><b>Q:</b> <i>What drove them to post assignments?</i></p> <p><b>Client A:</b></p> <p>What mainly drove them was their trial contract, so that they had to try it. It was again a nice-to-have and nothing would happen when they wouldn't post assignments. I think that's also maybe the reason why it didn't work out, because it was not something that optimised their daily business.</p> <p><b>Client B:</b></p> <p>What you see with Client B is that they really like to be inspired. So sometimes you have a call and then we say, we do this and this for other companies, and that's when they think; we really need information, so we do an assignment. It's really to be more focussed on innovation and be better for their clients.</p>
<p><b>Q:</b> <i>What hindered them from posting more assignments?</i></p> <p><b>Client A:</b></p> <p>I think trust somehow. I don't think that they trusted the process enough to do more assignments. Client A on the one hand, they were too busy to do their own assignments. And on the other hand, their adoption really needed to spread like an oil spill. And that makes it very hard to do more assignments, because we couldn't get more assignment owners. They were too busy at that point, and they didn't want to have all the responsibility for the license and on the other hand, we also couldn't get any others.</p> <p><b>Client B:</b></p> <p>I think they still don't know all the possibilities of our platform. Also, they are really busy with their regular work.</p>
<p><b>Q:</b> <i>How has the technology of the platform played a role in their usage of the platform?</i></p> <p><b>Client A:</b></p> <p>I think our platform is quite easy to use. They don't have real features at the moment besides looking at the assignment if it is written well.</p> <p><b>Client B:</b></p> <p>I think for Client B, because they do much more assignments, it's also getting an overview, see what every department is doing, get a bit more inspired within the account that they're having. I think that's something what is missing and is very limited. And also if you want to look what the HR department did, for example, you cannot find that easily - you have to open all the assignments. But you also don't see a dashboard with the average rating, average rating per department or the budget that is spend, or freelancers that they worked with in the past with that they liked. It's all quite difficult and making it easier would help increase their usage.</p>
<p><b>Q:</b> <i>How has their organisation played a role in their usage of the platform?</i></p> <p><b>Client A:</b></p> <p>He said if you were on the strategic year planning of the board, it would make a huge difference. But now it was more the method of an oil spill and it was hard to spread it through their organisation.</p>

**Client B:**

With Client B the buyer was quite high level, he was really a director. So it was very easy for us to adopt it from top to bottom in the organisation.

**Q:** *How has the collaboration with other stakeholders played a role in their usage of the platform?*

**Client A:**

Client A did three assignments and one was really bad. So the freelancers were really unprofessional and that played a role, because if we had three assignments where they were totally blown away, it of course has effect. So that's also a risk of the platform, it's always based on the quality of our freelancers.

**Client B:**

For Client B, the impact is less because we do so many assignments, that if one is a bit lower in quality than the others, it's OK.

**Q:** *How has the environment played a role in their usage of the platform?*

**Client A:**

They were sort of forced to post assignments by the contract they had. They had to experiment within the time of the trial period.

**Client B:**

If they see that competitors also make use of us and they want to know something about a Robotic Process Automation (RPA) or some benchmarking, then they think that they also would like to do it. Or they see that we did something with a certain technology and they also want to do it. So it really helps for a lot of companies - not only for Client B - to get inspired from their competitors.

#### D.4.4 Closing questions

**Q:** *What best practices have you observed in using the platform?*

**Client A1:**

You have to realise that when you confirm an assignment, you immediately enter the rollercoaster. One or two people come your way, they start working immediately and they just want to have the documents within a week in order to do their work and then those agreements have to be made and we also have to make room to discuss the interim solutions. That was really quite a shock, so we did get a realisation there in the internal organisation during the process surrounding the execution of a job, that the moment we say yes, within now and two weeks we have to set up the agenda accordingly and prepare people a bit on the front.

**Client B1:**

The best practice is (what we've learned after the first few challenges) that we needed to increase the touch points with the freelancers to calibrate on where we think we would end up. Because if those are, in the short period, only at the beginning and the end, you see that there is a disappointment because there is a deviation from what the challenge owner had in mind and the solution. If you do some calibration, if it's in half an hour or so in between, then that helps.

**Client B2:**

I will not accept new freelancers so easily anymore. I would use freelancers which are already known to Platform X and who have already delivered some results.

**Client B3:**

To scope the assignment really well and keep it limited, and stay on top of the process to ensure the quality of the deliverables.

**Platform X's AM:**

The best way is if the platform is bought in by a C-level manager, and that person realises the benefits of the platform and spreads it through the organisation. Then we can reach out to different departments and help them start their usage.

**Q for Client A:** *What was the final straw with you that made you choose not to renew?*

**Client A1:**

Well, maybe we are a bit stubborn, but I won't enter into a contract if I don't know yet what jobs I have. The moment I have a job today, which is the principle of a freelance platform, I want to hire someone today and if I don't have anything tomorrow, then not tomorrow. It feels a bit like a strangulation contract.

**Client A2:**

We were also thinking for other colleagues and guessed whether they would put in the amount of time, and we didn't think they would. It is also the type of work we have and the type of freelancers that are on the platform. We don't have a marketing department, for example, and a lot of freelancers on the platform are specialised in this. We also don't have enough small, general assignments.



**Q for Client B1:** *Why do you think that some companies were unable to and your organisation was able to implement the platform successfully*

**Client B1:**

The critical thing is early adoption of people that see the benefit. You need the wide adoption and also that the person working with it sees the organisational benefit of this.

**Q for Client B2:** You are free in deciding if you want to post the assignment on Platform X or hire a different party?

**Client B2:**

No I discussed the usage of Platform X and its risk with the sponsor of the project. But at the end we decided, OK, let's try this first before we decide for a very expensive professional agency to do market research.