



VILNIUS UNIVERSITY
BUSINESS SCHOOL

INTERNATIONAL PROJECT MANAGEMENT PROGRAMME

Agnė Žemaitytė

Student no. 2011013

MASTER'S THESIS

<i>Iššūkliai ir sėkmę lemiantys veiksniai efektyviai lyderystei projektuose COVID-19 atveju AdTech sektoriuje</i>	<i>Challenges and Success Determinants for effective Leadership in Projects during COVID-19 in AdTech sector</i>
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SUMMARY

VILNIUS UNIVERSITY BUSINESS SCHOOL
INTERNATIONAL PROJECT MANAGEMENT PROGRAMME

STUDENT AGNĖ ŽEMAITYTĖ

CHALLENGES AND SUCCESS DETERMINANTS FOR EFFECTIVE LEADERSHIP IN
PROJECTS DURING COVID-19 IN ADTECH SECTOR

MA thesis supervisor – Dr. Birutė Miškinienė

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Thesis Description. Over the last decade, the demand for AdTech, advertising technologies has grown significantly. More and more advertisers are deciding to choose AdTech platforms for spreading their advertisements, to be able to analyze the outcomes of the data: to target and to deliver according to individual consumers' needs. Even if before the extraordinary Covid-19 crisis, the demand for the product, AdTech is offering was growing gradually, the pandemic sped up the process, with more and more companies going online. The global situation and the necessity to onboard more and more clients to use the platform put much pressure on the sector itself and project managers, who were leading the projects meanwhile. Consequently, it led to different challenges, which influenced the sector's stability, and the necessity for different success determinants for effective leadership to overcome the crisis appeared. In line with this context, the research done within the MA thesis is addressed to identify the key features for effective leadership throughout pandemics, and the challenges and success determinants towards it, once leading projects in the AdTech sector during Covid-19.

Aim and Objectives. The thesis aims to analyze the main challenges and success factors for effective leadership in projects, treating the Covid-19 crisis as a critical trigger in the AdTech industry. The objectives are: to identify the main challenges in the project management during the pandemic and their effect on the normal management cycle; to point Covid-19 as phenomenal in the business world and disclose its uniqueness compared with the previous crises; to express the importance of effective leadership throughout the crisis and the main success factors towards that; to reveal the main challenges and success determinants for effective leadership in projects during Covid-19 in the AdTech sector.

Methodology and Results. For the empirical part of the thesis, a qualitative method was chosen. Using semi-structured interviews, the data collection was done with ten informants who currently work in the AdTech sector and lead projects accordingly. Once analyzing the information gathered, in line with the literature review, either the challenges and success determinants for effective leadership in projects were identified, or the key features for effective leadership in the AdTech sector during pandemics were disclosed.

Conclusions. After the literature analysis, it was concluded that various challenges, which appeared during Covid-19, had affected project managers directly. It eventually created pressure on project managers by requiring them to adjust to changes and impacted their primary duties accordingly. If previous crises showed that analytical point of view, decisiveness, and delegating are essential skills within crisis management, the Covid-19 pandemic increased the necessity for other skills, such as empathy or communication. In this case, an adaptive approach helped project managers become more agile and implement change management within their daily operations.

The empirical part of the thesis showed that most of the global challenges found in the literature were matching challenges for project managers in the AdTech sector. However, AdTech's project managers have not faced the lack of trust of their employees during the pandemic; meanwhile, miscommunication increased. In addition to this, the success determinants' part showed that virtuality and ownership mindset helped other sectors become more resilient within the extraordinary crisis but were not critical success factors in the AdTech industry. Despite this, some AdTech companies appeared to be behind competitors by not applying the latest innovative practices in the companies. Lastly, even though the AdTech sector was entitled as adaptive throughout the crisis by most informants, the project managers still lack the competencies of adaptive leadership in times of uncertainty.

At the end of the study, practical recommendations were given as well as the implications and limitations of the research.

SANTRAUKA

VILNIAUS UNIVERSITETO VERSLO MOKYKLA TARPTAUTINĖS PROJEKTŲ VADYBOS STUDIJŲ PROGRAMA

STUDENTĖ AGNĖ ŽEMAITYTĖ

IŠŠŪKIAI IR SĖKMĘ LEMIANTYS VEIKSNIAI EFEKTYVIAI LYDERYSTEI PROJEKTUOSE COVID-19 ATVEJU ADTECH SEKTORIUJE

Magistro darbo vadovas – Dr. Birutė Miškinienė

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Literatūros šaltinių skaičius – 91

Darbo aprašas. Per pastarąjį dešimtmetį AdTech, reklamos technologijų, paklausa stipriai išaugo. Vis daugiau reklamos skleidėjų nusprendžia rinktis AdTech platformas, kas vėliau suteikia galimybę analizuoti reklamos duomenų rezultatus: išsitinginti tikslingą auditoriją bei skleisti reklamą vartotojams, pagal jų individualius poreikius. AdTech sektoriui laipsniškai augant, ištikus Covid-19 nepaprastajai krizei, pandemija itin paspartino AdTech platformų poreikį, kuomet įmonių, perkėlusių savo darbus į virtualų pasaulį skaičius, ženkliai išaugo. Besikeičianti globali situacija ir padidėjęs naujų klientų, norinčių naudotis platformomis, poreikis ne tik darė spaudimą visam sektoriui, bet taip pat turėjo įtakos projektų vadovams, atsakingiems už projektus, AdTech sektoriuje. Galiausiai, atsiradę iššūkiai ne tik sutrikdė sektoriaus stabilumą, tačiau ir sudarė palankias sąlygas sėkmės faktorių įsitvirtinimui, nulėmusiems efektyvią lyderystę. Atsižvelgiant į šį kontekstą, magistrantūros baigiamajame darbe atliktas tyrimas yra skirtas identifikuoti pagrindinius iššūkius ir sėkmės veiksnius efektyviai lyderystei projektuose bei atskleisti efektyvios lyderystės savybes Covid-19 krizės akivaizdoje AdTech sektoriuje.

Tikslas ir uždaviniai. Baigiamojo darbo tikslas yra išanalizuoti pagrindinius iššūkius ir sėkmės veiksnius siekiant efektyvios lyderystės projektuose, traktuojant Covid-19 krizę kaip esminį veiksnių AdTech

industrijoje. Uždaviniai: nustatyti pagrindinius projektų valdymo iššūkius pandemijos metu ir jų poveikį įprastam valdymo ciklui; nurodyti Covid-19 kaip fenomenalų veiksnį verslo pasaulyje ir atskleisti jo išskirtinumą, lyginant su ankstesnėmis krizėmis; išreikšti efektyvios lyderystės svarbą krizės metu ir pagrindinius sėkmės veiksnius siekiant jos; atskleisti pagrindinius iššūkius ir sėkmę lemiančius veiksnius efektyviai lyderystei projektuose Covid-19 atveju AdTech sektoriuje.

Metodologija ir rezultatai. Empirinei darbo daliai buvo pasirinktas kokybinis tyrimo metodas. Atliekant pusiau struktūrizuotus interviu, duomenys buvo surinkti iš dešimties informantų, reprezentuojančių AdTech sektorių ir vadovujančių projektams. Išanalizavus surinktą informaciją bei remiantis literatūros apžvalga, buvo identifikuoti iššūkiai bei sėkmės veiksniai efektyviai lyderystei projektuose; taip pat atskleistos pagrindinės efektyvios lyderystės savybės Covid-19 atveju, AdTech sektoriuje.

Išvados. Atlikus literatūros analizę paaiškėjo, kad įvairūs iššūkiai, atsiradę Covid-19 pandemijos metu, palietė projektų vadovus tiesiogiai. Galiausiai, išaugęs poreikis prisitaikyti prie greitai besikeičiančios aplinkos ne tik paskatino įtampos atsiradimą, bet ir paveikė pagrindines projektų vadovų pareigas. Jei ankstesnių krizių metu analitinis mąstymas, sprendimų priėmimas, delegavimas, buvo laikoma kaip pagrindinės efektyvios lyderystės savybės krizės valdymo metu, Covid-19 pandemijos akivaizdoje, empatijos bei komunikacijos, kaip lyderio kompetencijų, poreikis išaugo. To pasekoje, adaptyviosios lyderystės praktikos padėjo projektų vadovams ne tik tapti labiau lankstiesiems, bet ir taikyti pokyčių valdymo praktikas kasdieniniame darbe.

Empirinė baigiamojo darbo dalis patvirtino, kad dauguma teorinėje dalyje aprašytų globalių iššūkių sutapo su AdTech projektų vadovų iššūkiais Covid-19 atveju. Tačiau, AdTech įmonių projektų vadovai pandemijos metu nesusidūrė su nepasitikėjimu savo darbuotojais; tuo pat metu, nesusikalbėjimas didėjo. Skaitmenizacija ir darbuotojai, prisiimančys atsakomybę, padėjo daugumai sektorių tapti atsparesniais nepaprastosios krizės metu, tačiau šie faktoriai neturėjo svarios įtakos AdTech sektoriuje, nes šios praktikos sektoriaus mastu jau buvo taikomos iš anksčiau. Nepaisant to, kai kurios AdTech įmonės atsiliko nuo konkurentų, netaikydamos inovatyviųjų praktikų savo kompanijose. Galiausiai paaiškėjo, kad nors ir AdTech industrija, daugumos tyrimo informantų buvo įvardinta kaip adaptyvi, kai kurie projektų vadovai susidūrė su adaptyvios lyderystės kompetencijų trūkumu nepaprastosios krizės akivaizdoje.

Tyrimo pabaigoje pateikiamos praktinės rekomendacijos, tyrimo išvados ir apribojimai.

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LIST OF ABBREVIATIONS

BPD: Business Process Department

I: Informant

IGO: Intergovernmental Organization

IPMA: International Project Management Association

KPI: Key Performance Indicators

PMI: Project Management Institute

PMO: Project Management Office

SaaS: Software as a service

SLA: Service-level agreement

WFH: Working from home

LIST OF DEFINITIONS

Effective leadership – the leadership, depending on the ability of the leader to change his or her behavior to suit the particular situation (Sethuraman & Suresh, 2014).

Success determinants – the various internal and external dominants, which can influence the potential business success (Kim B., Kim, H. & Jeon, 2018).

Covid-19 – the crisis, which reached pandemic status on 11 March 2020, was spreading globally, crossing international borders, and simultaneously affecting large numbers of people in different parts of the world (Lupton & Willis, 2021).

AdTech – advertisement technologies, which also can be found named “programmatic advertising”, created and designed for advertisers for better budget usage by delivering the right content at the right time for consumers (Hardy, Macryry & Powell, 2018).

INTRODUCTION

The tendency to run different types of businesses in projects' framework has become a new reality nowadays, in a rapidly changing world. Currently, companies are more and more increasing the forces of people who have knowledge of this field and can run projects, to maintain a smooth process towards successful workforce division (Schoper et al., 2018). According to the latest statistics of PMI (2017), the demand towards project managers over the next ten years will increase much faster than demand for other managerial occupations. As might be expected, one of the reasons why project managers are highly valued is flexibility and the ability to cope with uncertainty daily. Flexibility planning allows project managers to efficiently organize working forces and resources and relocate everything quickly if a crisis appears (Pales, 2018). The necessity of reacting on time became crucially important in these days' context when an unprecedented Covid-19 crisis hit.

The spread over the globe, the necessity towards the quick changes and innovative practices created radical uncertainty for the business world. It affected the majority of employees, despite their roles and job titles. The statistics of 2020 September reveal that almost a year after the start of the pandemic, 25% of Americans confirmed that someone from their household had been laid off (Parker, Minkin & Bennett, 2020). In addition to this, one of the four adults had difficulties paying bills, and one of the six also had to borrow from friends or food banks at least once. In comparison, some people started working remotely. To prove it with numbers, the data gathered in 2021 March shows that after the pandemic started, 40% of all the people employed in the European Union started teleworking and never came back to their usual office routines (Cohut, 2021).

Rapid digitalization encouraged more and more companies to switch businesses online. The increased digitality had a crucial impact on using digital advertising more often. Progressively digital ads required specific tools, which could place an advertisement online and help track the journey and fulfill the needs of advertisers. The demand to reach specific customers at a specific time and use budgets the most profitable eventually led to the rocketing AdTech market, which differs from digital advertising by offering advertisers programmatic solutions (Hardy, Macryry & Powell, 2018). The massive jump towards the necessity of advertising technologies (AdTech) platforms brought its advantages and disadvantages to the business and, most importantly, had affected the usual workflow of project managers.

If previously, as stated by IPMA (2006), the project manager was the person who was doing "right" things "right" and delivered "good" outcomes to benefit stakeholders, in front of the pandemic, the role of the project manager differed. The changes appearing led to a necessity for effective leadership to be applied. According to Sethuraman and Suresh (2014), effective leadership through uncertainty is the essential tool, reflecting the market's demand and adapting leadership accordingly. Different

researches provide a different review for effective leadership throughout the pandemic. However, taking into consideration Covid-19 unique features, Dean (2020) summarized the necessity for adaptive leadership and approach to be used, by pointing out the necessity for empathy, once prioritizing employee's health and safety, but at the same time not taking for granted long-term goals of the company itself.

Maintaining the company's stability during the Covid-19 equally led to different success determinants appearing both externally and internally, influencing the company's success (Kim B., Kim, H. & Jeon, 2018). Even though most industries needed agility and change management to be used more often during pandemics, some of the companies already had these techniques implemented. Eventually, it became clear that challenges and success determinants for effective leadership in projects during Covid-19 varied, depending on external and internal factors of the sector also.

The problem raised is mainly related to the challenges those employees, managing projects in the AdTech sector, have faced throughout an extraordinary Covid-19 crisis and what helped to overcome it. In Lithuania, many AdTech companies used to work in their daily regime. When the crisis appeared, it simply changed the working routine and influenced effective leadership to handle the whole situation for project managers. The necessity for leaders to tackle the gap between unexpected situations arising and the company's requirements or outside stakeholders appeared. Alternatively, an extraordinary crisis led to success determinants appearing. That created a suitable environment for the changed leadership to come into power and be used not just throughout the crisis, which has no predicted ending so far but to implement the best practices and later on if needed. Eventually, **the problem statement** addressed the whole Master's Thesis topic was introduced: *What are the key challenges and success determinants for effective leadership, leading projects throughout an extraordinary COVID-19 crisis in the AdTech sector?*

The thesis aims to analyze the main challenges and success factors for effective leadership in projects, treating the Covid-19 crisis as a key trigger in the AdTech industry.

Objectives:

- To identify the main challenges in the project management during the pandemic and their effect on the ordinary management cycle.
- To point Covid-19 as phenomenal in the business world and disclose its uniqueness compared with the previous crises.
- To express the importance of effective leadership throughout the crisis and the key success factors towards that.

- To reveal the main challenges and success determinants for effective leadership in projects during Covid-19 in the AdTech sector.

Research methodology. First of all, the data for the theoretical part of the topic was gathered using primary and secondary sources. In the first theory part, the analysis of the current information was executed and summarized to become aware of the main challenges and success determinants that appeared once leading the projects throughout Covid-19 and the concept of effective leadership was analyzed, by getting aware of its features. The empirical research of the Master's Thesis was performed, by interviewing the employees, project managers, who were leading at least one project throughout the Covid-19 pandemic and were working in the AdTech sector. That helped to identify the key challenges and success determinants for effective leadership in projects during Covid-19 crisis in AdTech sector and to disclosure the key features of effective leadership as well.

The structure of the thesis. The thesis framework is divided into the literature review, research methodology part, research results, conclusions, and recommendations, including the limitations of the study and implications for further studies. In the theoretical review, the key challenges for project management during the Covid-19 pandemic are discussed. In addition to this, the uniqueness of the Covid-19 pandemic is described, and the necessity for effective leadership is elaborated, including its main features. Later on, the main success determinants for leading projects effectively are revealed. Eventually, the last chapter focuses on AdTech industry and the main tendencies of it during pandemics. In the research part, either research methodology is described, or the research analysis is done to achieve the main goal of the empirical part.

Keywords. Success determinants, leadership, effective leadership, project management, Covid-19, extraordinary crisis, AdTech sector, advertising technologies.

1. CONTEXT OF COVID-19 PANDEMIC AND THE EFFECTIVE LEADERSHIP DEALING WITH IT

1.1. Challenges faced throughout Covid-19 pandemic, towards the project management

The majority of different factors and the idea that no one is aware of the right track to overcome the crisis, nor the predictable future after it, raised different challenges for the project management. It is inevitable that challenge itself, same as a crisis, not just affects human resources but can also be treated as an invitation to do something differently, participate in some game and argument, or test someone's ability of determination (Cambridge Dictionary, 2021). To see the main gaps, which appeared during Covid-19, for acting differently, in this part, the challenges for the project management cycle will be revealed.

To see a clear list of the challenges, which came into view throughout the pandemic, there is a need to group them. There is no right way to arrange challenges or categorize them correctly following the literature. Meanwhile, the most appropriate solution, offered by the theoretical approach of the analysis of the challenges, is to accept the uniqueness of the challenge, with its features, and to reflect on those accordingly (Prats, Sosna & Velamuri, 2012). The Covid-19 crisis affected many different project management angles, but mainly, according to the literature, extraordinary times influenced the human sphere and managerial part as well (Gritz, Daniels & Chodhari, 2020). Following this, in the upcoming part, the whole challenges for the project management will be summarized, which later on will be divided into personal and managerial ones.

In the article "*Covid-19 Challenges to Project Management*", the authors not just only describe the importance of adaptiveness through times of uncertainty but also point out the main challenges for project management throughout the pandemic (Seals et al., 2020). The summary of the findings will be provided below within table 1:

Table 1: Covid-19 Challenges to Project Management

The Covid-19 challenges to project management	The description
Project management costs	Salary reductions, reduced hours, which eventually ended up having a capital project on – hold.

Project risk management	Un – trusted home networks. Not all the companies had had an opportunity to install systems under hackers, who had a proper condition to manipulate the data.
Project communication management	Since Zoom, Microsoft Teams, Webex, and platforms like Amazon Connect became WFH’s primary tools, companies also had a challenge towards the exchange in the communication of the daily coffee drinks. Eventually, it was turned into happy hours, virtual training workshops, and daily check-ins.
Project human resources management	If previously WFH in most companies was just an optional choice for the employees, Covid-19 created a demand for that, which eventually ended up in the necessity for alternative working schedules, hybrid schedules, rotations, once dividing working from home and working from offices. This also created a tenseness among companies, since talents started choosing job places not just because of the salaries and other benefits they are offering, but also according to the flexibility from working perspective, which created tense towards engagement and connectivity.
Project Procurement Management	Since Covid-19 had affected putting some projects on hold and renegotiating or canceling current contracts, increased workload appeared. Companies themselves had had to reduce the money throughout their already planned tasks, which led to human resources not just putting the extra mile on reinstalling old school systems but also not focusing on their daily tasks. That created an uncomfortable atmosphere, which in most cases ended up even with unexpected leaves and unloyalty to the company itself.

Source: Adapted from Seals et al. (2020)

As it might be seen from the previous table, the key outlined challenges had a crucial impact not only on project management in particular but also put much pressure on project managers. Following this, in the upcoming parts, project managers’ personal and managerial challenges will be discussed broaden.

1.1.1. Team member's challenges

It is inevitable, that project managers, leading the projects, are both employees and leaders. Leaders for those, who are in the team and employees for those, who hired the project manager to lead the project accordingly. In this part, there will be an analysis made on challenges, which the majority of employees, including and projects managers, faced throughout the Covid-19 pandemic personally.

The outbreak of Covid-19 had impacted many angles throughout the companies, such as the workforce in technical, physical, and socio-physical ways. However, the pandemic itself had especially created a challenging atmosphere for human resources firstly (Carnevale and Hatak, 2020). As shown in table 1, provided above, moving to home offices, living not knowing the future, having to adapt rapidly became a new reality throughout the pandemic. Even if those brought advantages, the constant phase of uncertainty eventually led to adverse outcomes. The main reason this happened was that the world has not seen such a crisis for the last 100 years and did not have time to adapt to it according to the guidelines. Having pointed this, employees had faced the challenge of the stability of their minds, which was triggered by deaths, future insecurities, and disinformation. To prove it with statistics, the research held in early 2020 by Kaiser Family Foundation showed that 45% of adults felt stress and worry related to the virus spreading, which hurt their mental health (Kirzinger et al., 2020).

Working from home is one of the main features, which was brought by the Covid-19. In most cases, even though it looked like a flexible opportunity, later on, it created more issues. Researchers found that staying at home throughout the pandemic increased employees' confusion between staying disconnected from people or staying connected and the balance between those (Chawla et al., 2020). According to the statistics, although work from home at the beginning was seen as a successful option of working fewer hours, eventually it ended up with many employees putting in extra time on their jobs. It was mainly caused because of different factors, such as ringing doorbells, pets surrounding, or children (Barrios and Pitt, 2021). In contrast, even some people were distracted by family noises and had to combine either personal or professional lives in one home surrounding, some groups were affected by Covid-19 in another, lonely way. The study reveals that lower-income people, young people, lonely mothers caring for both of their parents and children have faced more work-from-home pressure during the crisis (Parpalani, Holeva & Nikopoulou, 2020).

Another strong factor for an employee to stay productive during times of uncertainty was found as changed communication since it led employees to become digitally exhausted after some time. Once taking the numbers of digital technologies used during the beginning of the pandemic, the number of digital communication tools increased drastically. For example, Zoom's daily users grew by 67% in 2020 March, Microsoft Team's from 20 million in November 2019 to 44 in the upcoming year March, and Slack added 7,000 paid users during the interval from February to March 2020 (Leonardi, 2020).

According to the author, even though these numbers played a significant role in daily business life, it also increased employees being digitally drained after seeing the whole work time at the screen, meetings, and other stamps documented every day. Eventually, it ended up with time-stamped logs of their behavior, drop in motivation, and less interest in the communication itself or even depressive thoughts.

Digitally exhaustion was not the only challenge to be faced because of being online all the time and not having proper breaks. As previously mentioned in some articles, the Covid-19 pandemic can also be found described as a lonely pandemic, which led to social anxiety. As reported by literature, the people who have social anxiety are named as those who have well-established fears and are negatively evaluated and scared of showing off self-perceived flaws to others (Ho and Moscovitch, 2020). Studies reveal that once the Covid-19 is over, employees will be more likely to stay working from home to avoid increasing social anxiety. The main reasoning why employees are not likely to work from offices anymore is “reduced commuting time” and the following: “spend more time with family”; “to be productive”; “spend more time on other things” (Chung et al., 2020). This appearing tendency is leaving more and more questions to employers, not just about future management scenarios, but also about currently established workplaces / offices, creating even more pressure towards the human resources management.

To summarize, different challenges, which appeared in line with the Covid-19, influenced employees in one or another way. Anxiety towards the future, challenges working from home, imbalanced work and leisure time, and digital exhaustion triggered the daily life of employees and raised issues towards usual project management either.

1.1.2. Project manager’s perspective challenges

Even though in consonance with the latest statistics, almost every employee was affected by the pandemic from one or another perspective, project managers had faced those challenges from both perspectives – either as an employee or as a leading person. Conforming to the literature, the most significant amount of the stress was dedicated to human resources management and managers themselves, for them seeking to cope with “unknown unknowns” – to navigate through radical changes, to help establish a workplace, and to act quickly on remaining responsible and adaptive (Carnevale and Hatak, 2020). In this subchapter, the challenges for project managers throughout pandemics will be discussed broaden.

Notwithstanding that, all challenges listed per previous parts created inconveniences for project managers to run the projects successfully, studies repeatable claim that one of the main ones within the pandemic was an issue of trust. Since the crisis appeared, most managers were used to face-to-face management; teleworking showed that managing employees was a struggle in some cases, as trusting employees and theirs work covered (Parker, Knight & Keller, 2020). In the article cited above, research

was conducted during middle April – July of 2020, seeking to evaluate managers and how their trust towards the employees changed during a pandemic. Data was gathered from 1200 respondents (employees and managers) among 24 different countries, working in different sectors, such as education, finances, or real estate. From there, it became clear that 40% of 215 managers or other people in companies, who are related with management directly, were facing difficulty on themselves of being suitably competent for an extraordinary crisis, which was mainly related to the ability to influence their workers to do their job correctly and to maintain efficient. In addition to this, a slightly lower percentage, 38%, agreed that remote workers do not act the same working from home and their efficiency is decreasing. The main reason behind that was doubting that employees are not prepared to remain motivated all the time.

Another crucial challenge, faced through the pandemic is the change of the current human resources, knowledge-based people, and facing the difficulty towards the onboarding of new employees. To clarify expectations and priorities, to show how to access resources, to review the company's key culture, goals, mission, and vision are the key aspects of the proper onboarding, the literature says (Bhakta & Medina, 2020). Once the pandemic hit, employers and recruiters had the challenge to overcome the issue of trust and to start hiring and introducing new employees, valuing their different habits, and using gut feelings. In the article "*Not Seen and Not Heard: Onboarding Challenges in Newly Virtual Teams*", the research has been run, to reduce the gap of uncertainty, what are the key points to be aware, once recruiting online (Hemphill & Begel, 2020). From there it became clear that there is a need for the whole team to be involved once onboarding a new employee and frequent interactions with the newcomer play a key role once seeking for the onboarding process to be smoother. Moreover, the studies conducted showed, that managers, who were involved in onboarding activities once welcoming a new member had a crucial impact on the newcomer onboarding success.

Another challenge raised throughout the pandemic was the changed role of the project manager overall. Even is previously, according to IPMA (2006), a good leader had to make a good project at the right time, during Covid-19, project managers also had to find ways of supporting their staff, once everything went virtually. In the line with the literature, this was mainly done by scheduling frequent check-ins, helping to navigate through the new technologies once working from home and also, being flexible with working schedules, not just specific to the employees, but reflecting their family needs as well (Kch and Scermully, 2021). Even though that was an unexpected duty for lots of project managers, eventually it even ended in stronger relations among the team and created the roots for future management competencies.

To sum up, the challenges listed, such as lack of trust, newcomers onboarding, the changed way of communication, created a tense atmosphere towards the project management field in the companies. Eventually, it led to the changed duties of the project manager, trying to overcome challenges appearing

and deliver projects accordingly, and also encouraged to find new ways and implement a different management style for overcoming the crisis.

1.2. The concept and characteristic of the Covid-19, as an extraordinary crisis in the business world

With the various new challenges appearing, the necessity for companies to be aligned with the rapidly changing business world became visible. That raised a necessity to value Covid-19 not just through the crisis perspective but also with its unique features. In this part of the thesis, the Covid-19 crisis will be compared with the previous ones to disclose the key differences between the extraordinary crisis. Lately, this will be a crucial factor, once analyzing the different features of management needed, once the extraordinary crisis appears.

Before all else, the definition of the crisis overall has to be revealed. In line with the earlier literature, Paraškevas (2006) looked through crisis concept from the Greek word *crisis* perspective, which marks choice, decision, or judgment; meanwhile, Pauchant and Mitroff (1992) described the crisis as an event, which physically affects a system as a whole and threatens existential core. Before that, in 1978, Selbst described the crisis as any action or failure, which interferes with an organization's ongoing functions, its viability or survival, that affects the majority of employees, clients, or constituents (Faulkner, 2001).

In nowadays life, crisis definition is more likely to be analyzed not just like the concept, but looking deeper at its effect and consequences towards the casual business cycle. For instance, in 2010, a crisis was described as any problem or disruption that triggers adverse stakeholder reactions that could impact the organization's financial strength and ability to do what it does (KÁDÁRO-VÁ, 2010). Later on, other authors expressed that the crisis is unexpected, non-routine events, creating a high level of uncertainty and threat towards the organization's high priority goals, which costs millions of dollars and disrupts employees and communities (Seeger, Sellnow & Ulmer, 2016). The newest articles broaden the framework of the concept of the crisis, once showing off that the crisis is an inevitable phenomenon in a rapidly changing world once there is a demand for natural selection (Guilherme et al., 2021).

Although many doubts are happening worldwide, which can mislead the situation and name Covid-19 just as a pandemic, not meeting crisis description, the features show that Covid-19 is held as an economic crisis for the business world (Borio, 2020). After realizing that, researchers started discussing its similarities and differences to the previous crises. While comparing it all together, there was a conclusion drawn that this Covid-19 crisis required a different type of management and had different features; because of that, most of the literature calls it extraordinary/unique/unprecedented, creating a demand to look at it from a different angle.

In the first place, this pandemic could be examined through a casual crisis perspective; however, keeping in mind that it spread worldwide and affected different nations, it is already called extraordinary. At the same time, in the medicine world, words like “unique,” “unexpected,” “unprecedented” towards the Covid-19 started being used once the medical sector realized that shocking number and predictions about getting worse have become unnervingly reality among the professionals and do not have a predicted ending (Spalding et al. 2020). Different factors among different sectors led to other descriptive concepts towards this. For example, among intergovernmental organizations (IGOs), Covid-19 is already called a “problem without passports,” as this concept was first introduced once there was a need to describe challenges, which disregard national borders and threaten people in many different nations either (Johnson, 2020). Pointing out Covid-19 as an extraordinary crisis, there is also a need to consider that rapid innovations were needed. The research shows that economic and societal chaos caused by this crisis led not just to leaving humanity’s brains as precedence. However, it also boosted the need to implement different innovations (Woolliscroft, 2020).

The key features of the Covid-19 and its differences from the previous crisis are visually narrated within upcoming table 2:

Table 2: The differences between crisis and extraordinary crisis

	The key features
Crisis	<ul style="list-style-type: none"> • Mess, which affects the company’s well-planned structure • Trigger, impacting company’s financial stability • The phenomena, needed for natural selection • The chaos, when the decision is needed • Threat to the company’s main cores
Extraordinary crisis	<ul style="list-style-type: none"> • More than one sector (e.g. governmental, economical) is included • Crisis “without a passport”, neither choosing people nor specific countries • No reliable resource invented to predict the ending • Unique, unexpected, unprecedented • Rapid innovations needed

Source: created by the author

The information summarized within table 2 shows the differences between a crisis and an extraordinary one. Even though that Covid-19 has similar features to the previous crises, new tendencies appeared. The earliest researches for leadership, such as Bass (2008), Stogdill (1948), Vroom and Jago

(2007), already predicted that crises could be different and raised a conclusion that different crises require different competencies and tools to be dealt within. That caused a trigger for project managers to run projects in the same manner or implement previous crises lessons learned, mainly based on the specific features and uniqueness of the Covid-19.

1.3. The key features and importance of effective leadership throughout the extraordinary crisis

It is an inevitable consequence that the Covid-19 pandemic has raised many challenges to cope with; this created a necessity for solid leaders to overcome the situation most suitably. Even though there were already competent practices learned throughout previous crises, the necessity for different leadership appeared, with Covid-19 being an extraordinary crisis. This part of the thesis will discuss the necessity for effective leadership throughout extraordinary crises, highlighting the main competencies needed.

Without a doubt, critical situations cannot be overcome without a person who is leading a team and declares a path. Literature reveals that the earliest researchers of leadership, Bass and Stogdill (1990), already doubted the possibility of putting the concept into one frame and claimed that the leadership concept has as many descriptions as people are trying to define it. Later on, the following ideas of leadership appeared in 2002 by Badaracco. He assumed that the proper leader has to act in silence and be invisible; meanwhile, Bennis (2009) had described leadership as the ability to stay unique in a world of changes and similarities and comparisons. Later on, Northouse (2015) stated that the necessity for group works and the team to reach the target goals created the demand for leadership being valued through personal characteristics, which influence others' behavior.

Even though leadership has many descriptions, they might differ when the crisis appears. Depending on Wart & Kapucu (2011), crisis management requires even more definitions and features to be revealed, which are necessary for a prepared leader to overcome the crisis. According to the authors of "*Crisis Management Competencies, Public Management Review*" and their research, different crisis demands reflect different clusters of competencies needed for effective leadership to be followed throughout the crisis (Wart & Kapucu, 2011).

The key competencies for effective leadership throughout the crisis are disclosed within table 3:

Table 3: The perceived competencies needed based on crisis demands

CRISIS DEMANDS	PERCEIVED COMPETENCIES
Need for calm but strong leadership	<ul style="list-style-type: none"> • Self-confidence • Willingness to assume responsibility • Motivating • Articulation vision and mission • Resilience
Need for pragmatic decision making under severe time and resource constraints	<ul style="list-style-type: none"> • Decision making • Analytic skills • Decisiveness • Flexibility • Delegating

Source: Adapted from Wart & Kapucu (2011)

Despite all the features mentioned earlier are common for effective leadership throughout the crisis, with the Covid-19 crisis held as an extraordinary, the demand for new features appeared since effective leadership itself requires a leading person to adjust to changes happening (Sethuraman & Suresh, 2014). If the adaptive leadership concept had been earlier discussed and tried to be implemented, the Covid-19 crisis created decent conditions for this type of leadership to start being used immediately (Caroll, 2021). In spite of many different definitions and examples of adaptive leadership, in this part, the 4 A's principles of adaptive approach will be summarized, which are suitable to look through in front of the crisis (Ramalingam et al., 2020).

First of all, the Covid-19 crisis required anticipation, which helped to understand future needs, trends, and options. One of the examples of quick anticipation could be the necessity for rapid innovations. Adaptive leadership helped the companies reflect on this need immediately and created a suitable environment for project managers to step out of their conform zones and use innovative practices, which led to creating the bond with employees more based on loyalty and trust (Yeo, 2021). Another dominant, which was needed, for overcoming the crisis, by using adaptive leadership practices was articulation, which mainly reflects building collective understanding and support for action. Even though managers played a crucial role once trying to overcome the unexpected situation, writings show that no positive changes are possible without employees' engagement. According to the researchers, shared leadership is a crucial dominant within any organization, not just overall trying to involve the employees in decision making, but also engaging teams' creativity in front of the crisis (Ali, Wang & Johnson, 2020). With lots of information appearing, the necessity for adaptation was materialized. To avoid wasting time-

solving the same issues in project management, “adaptation by design” came into view since some crises situations and issues were repeatable. The concept mentioned above means collecting existing practices and comparing them to align with the market needs and expand the influence (Fieden, 2020). This adaptation process played a crucial role in project management for repeatable challenges - changing laws, restrictions, regulations. The adaptive approach helped to react on time to changes happening by using already tested practice and not wasting time on already solved issues. The last thing included in the adaptive leadership approach during the crisis is accountability, which helped to ensure maximum transparency between employer and employee and among employees themselves by sharing feedback and having constant communication. In the research done within the article *“Managing the Crisis: How COVID-19 Demands Interact with Agile Project Management in Predicting Employee Exhaustion,”* authors agreed that adaptive approach during the crisis not just only helped to ensure psychological empowerment but also to maintain and attract employees, which is extremely important in the times of uncertainty (Koch et al., 2021).

The whole listed features of adaptive leadership and what it brings to management played a crucial role in handling lots of unknowns in the future and reducing the impact of different dimensions of extreme time. It was also crucial in project management since, according to Ansel (2020), the projects overall have a proper structure and requirements to be followed and have a big responsibility since it impacts a comprehensive set of stakeholders and interdependence among them. As there might be seen, effective leadership and reflecting on the changes needed played a crucial role in project management success and had become more adaptive in front of pandemics.

1.4. Success determinants for effective leadership, managing projects throughout Covid-19

As it was previously stated by the earliest researches of leadership, Bass (2008), Stogdill (1948), Vroom and Jago (2007), various crises appear not just even with the necessity for different leadership but arose different challenges, creating a demand for success determinants to overcome it. This chapter will summarize the main challenges of the Covid-19 crisis. Later on, having summarized that, key success determinants for overcoming challenges will be discussed accordingly.

Having already pointed out the main challenges within the earlier part of the thesis, in table 4, the summary of the challenges will be narrated, with the description of its affection to the normal business cycle and the benefits for companies who were able to overcome it most successfully. The table was conducted relying on the data provided in 1.1. part of the thesis (*1.1. Challenges faced throughout the Covid-19 pandemic, towards the project management*) and its subchapters.

Table 4: The key challenges for effective leadership, managing projects throughout the Covid-19 crisis

Challenges for effective leadership	The description
Ownership mindset	New hirings, changing teams, changing managements raised even more chaos in the time of uncertainty. The companies and the leaders, who had employees thinking on the same line and have trusted them, let resilient quicker not just on professional but also on personal issues.
Team	Virtual team buildings, sharing experiences about work from home tips and tricks, created an informal environment for existing teams and new ones, boosting the team spirit either in good situations or in crisis.
Leadership	Empathic, optimistic, long-term attitude, supportive, and up to date with news managers appeared to be also a success determinant managing the crisis, who was able not just to combine the teams, but also to be in line with the company's long-term goals.
Virtuality	The companies and projects, which were able to go digital from the beginning of the crisis, have not faced so many challenges, rather than industries, which stopped their jobs, waiting for the crisis to end. In addition, virtuality created more flexibility towards the relationship between employer and employee, building mutual trust and loyalty.
Innovations	In line with the literature analysis, the companies who were able to use new techniques, by inventing new ways of communication, rapid adaptations of the projects/products needed, made themselves more stable throughout the crises, by adapting to the market needs quicker.
Resilience	Even though if Covid-19 is held as an extraordinary crisis, those who realized it was a crisis and were preparing additional tools, human resources, and managerial tactics won an opportunity to make the best out of the crisis, rather than ignoring signs about it being unprecedented.

Source: created by the author

As it can be seen from the table provided above, the three first challenges, which appeared during Covid-19, were mainly related to habits of the management itself, how management can unite the team, how the team is involved overall, and what is the necessity for effective leadership throughout the pandemics. In management life, these skills are held as soft ones. In contrast, the rest three ones, such as virtuality, innovations, and resilience, are not necessarily based on human impact. The main moderator of them within the company's life is held the main structure of the company and how flexible they are. Following this framework, in the upcoming two subchapters, different success determinants will be disclosed from the managerial perspective or from the company itself.

1.4.1. The importance of agility

It is widely known that the agile concept is becoming more and more popular nowadays. The latest research shows that agile management was mainly used in IT companies and IT projects; however, throughout the extraordinary pandemic, more and more companies started to implement the main ideas of this way of management (Asare, Addo & Sarpong, 2020). One of the main reasons this concept's importance has overgrown was its ability to deal with complex societal issues involving many stakeholders, once diverging interests and uncertainty about the actions, which is extremely important within project management itself (Bronen & Chapin, 2013). In table 4, there was already revealed that ownership mindset, team importance, leadership were essential issues throughout the pandemic, requiring more attention. In this part, a few agile principles will be disclosed to see how the principles of agile thinking correlate with overcoming previous challenges mentioned.

Firstly, there is a need to point out that agile thinking is closely related to an ownership mindset itself, for which the demand overgrew throughout the pandemic. The researchers showed that its value increased drastically because, during a pandemic, success was in favor of management, who were able to ensure that people were working from home and covering their tasks efficiently (Olum et al., 2020). As of that, the project managers, who had team members having this feature of their daily life, were more confident and could spend more time on other issues arising. To strengthen the point about ownership thinking, ownership mindset is also a suitable tool to build bonds among employees, establish trust, and is a crucial factor towards companies' resilience in crisis (Obrenovic et al., 2020). According to Romoti and Talerico (2021), once there are people in the team, who have an ownership mindset, they are more likely to own the extra mile approach. It helps the company overall since, according to Michael (2020), it creates loyalty, which is closely related to project success throughout times of uncertainty.

Another fundamental principle of agile thinking is the team itself. Even though the importance of the team used to be taken for granted by some companies, the data gathered showed that the majority of new projects were established towards solving the issues, which arose from the inefficiencies of the

teamwork during Covid-19 (Rehberg, Danoesastro & Kaul, 2020). To correlate the team and agility, the flexibility of agile thinking lets the professionals think outside the box and make the most favorable decisions throughout times of uncertainty. Once working through sprints, the team has significant power, either sharing their thoughts or solving the issues together. According to some authors, this improves creativity, and the maximum result is easily achievable (Hoda & Murugesan, 2016). In line with the latest statistics, throughout the Covid-19 pandemic, working remotely and not seeing colleagues and managers face-to-face created a significant demand for constant follow-ups and catch-ups. The excellent practice, which was used by agile principles, was that throughout meetings, employees have “round robins,” where everyone can speak within the specific time dedicated for them (Mancl & Fraser, 2020). The project managers, who decided to switch their workflows to this way, won more from the teamwork by gathering more knowledge from employees and encouraging their participation in solving issues.

Another key feature of agile is that it can be used in an unpredictable situation, in other words, in situations or projects that have never been done before. In these situations, agile thinking is acceptable since it lets move forward with continuous testing and implementing innovative attitudes up to date (Svensson, 2017). In line with the literature, agile thinking created the best conditions for fast-changing, rapid product delivery, allowing changes at any stage (Butt et al., 2021). It was a good practice to use when daily work changed, and there were lots of uncertainty about changing work conditions. Moreover, since the news throughout the pandemic was changing rapidly, the necessity for frequent news following appeared. In this way, managers, who started being more agile throughout times of uncertainty, have managed to include regular agile rituals daily, once reflecting on the changes and making the best solutions out of them. It helped not just to be on the same line for everybody but also to solve the problems on time, in order not to have delays later (Weck et al., 2020).

To sum up, the whole list of competencies, based on agile thinking was a crucial determinant for management, once leading projects during Covid-19. In addition to this, it also helped boost the necessity for an ownership mindset, create a dynamic team, and lead efficiently by overcoming challenges appearing and trying to fit with the rapidly changing environment.

1.4.2. The role of change management

After discussing the importance of agile thinking throughout the pandemics, there is also a need to look at how the company can change the attitude and adapt quickly. Either daily life, or business environment, is not a constant state, and all the precautions cannot be thought ahead. As pandemics showed, not depending on their size or job field, almost every company has to be in line with changes. In this part, change management will be discussed in a row with digitalization and innovations to see how this type of management helped throughout the pandemic to resilient quicker.

Even though change management is an academic concept and can be counted as a matter of management, the literature says that it is extremely closely related to employees and their input toward adapting to situations and making the company work in the right direction (Lauer, 2020). In the previous book cited, the change management overall, as a concept, is described as a movement with which the company seeks to achieve the optimal path design from the starting point to the latest goal. This way of management is not focused on the goal itself, instead on the path of the goal; in other words, change management is closely related to internal adaptation of the best possible actions, to overcome external factors of the company in the most vulnerable way possible.

If previously, the main causalities of change management were pointed to as climate change or globalization within the previous crises, the Covid-19 pandemic enforced the necessity to adapt to another external factor – virtuality. One of the critical examples of the rapid project adaptation needed was making everything online - the demand for digital adaptation. Even though digital project management, as a sphere of work structure, has been growing gradually, the Covid-19 pandemic was a key trigger to speed up this process since the importance of digitalization overall grew up overnight (Wu, 2021). Literature shows that digitalization is held not just like a struggle for the companies to overcome, but also as a critical material for companies' development, which not just even let companies survive and adapt, but also proved the significance of keeping up with the changes (Almeida, Santos & Monteiro, 2020). The descriptive study was held in three businesses on marketing and sales, labor and social relations, and technology in the article above. The main goal of the research was to find out how companies were able to leverage and transform the challenges of the global pandemic into opportunities. A study showed that even though digitalization is held as an inevitable consequence for the future, the companies still lack inner resources to make the best out of this crisis. However, the ones, who were preparing techniques earlier, and have been testing remote working, managed to stabilize throughout the pandemic successfully.

To speed up the digitalization and adapt to current conditions, more and more companies started using innovations within their jobs and applying new practices during the Covid-19 pandemics. Keeping in mind that the technologies sector of every company was involved in the pandemic to resilient as quickly as possible, the change management here also let come back to businesses quicker. In the article "*A Report on the Impact of Information Technology and Social Media on Covid-19*", the authors revealed that the quick changes towards adopting the newest technologies were the key to success throughout the crisis, once trying to deal with more and more statistics appearing on Covid-19 disease overall (Sathish at al., 2020). According to the authors, the impact of technologies can be divided accordingly:

- IoT – Real-time update
- AI – Detection and Diagnosis
- Big Data – Modelling Study

- Thermal imaging facial recognition – Identification

These main spheres were identified to show how changes had had to be done towards sectors to align with the current changes happening in the business world. Starting with the importance of IoT in the context of the article, it was mainly used for updating figures of diseases in the mobile app (recovered, vision, or death). Meanwhile, identification or thermal imaging facial recognition was implemented in such applications as SenseTime or Sunell, which elevate the temperature of individuals. It was highly used for companies to reduce the possible Covid-19 disease having people in the company. There is also a need not take for granted the fact that lots of medical statistics and cases of Covid-19 appeared, which required artificial intelligence to be used to analyze the data and to create reasonable logarithms, which would be trustful. Even though this quick change of innovation and change in technologies was a challenge even for professionals or the company overall, modeling study helped reduce the discrepancies possible and have a data-based communication to society.

Having pointed out the necessity for digitalization and innovations, by adapting current tools for the demand of the market, there is also a need to say that the resilience of the companies was a crucial factor towards companies' success. According to Karman (2020), the company can be resilient quicker throughout the crisis if the employees working in the company can adapt quicker. It is mainly related to change management and how the company can change the processes, reinforcing desired outcomes throughout the crisis. According to the researcher, this way is much harder for companies that do not practice changes, trying to practice, implementing them, and measuring their effect on employees daily. The companies, who educate and prepare employees towards changes daily, have succeeded more within pandemics. The latest statistics show that international companies, which already had experience in ongoing change management, were better prepared for the crisis and adapted quicker, trying to deal with employees' issues and the whole company overall.

Digitalization, rapid innovations, and previous experience in change management helped companies go virtual, adapt the current technologies to the market needs, and immediately solve challenges. It has led to stability towards the company and quick reaction if something unexpectedly appears in a way.

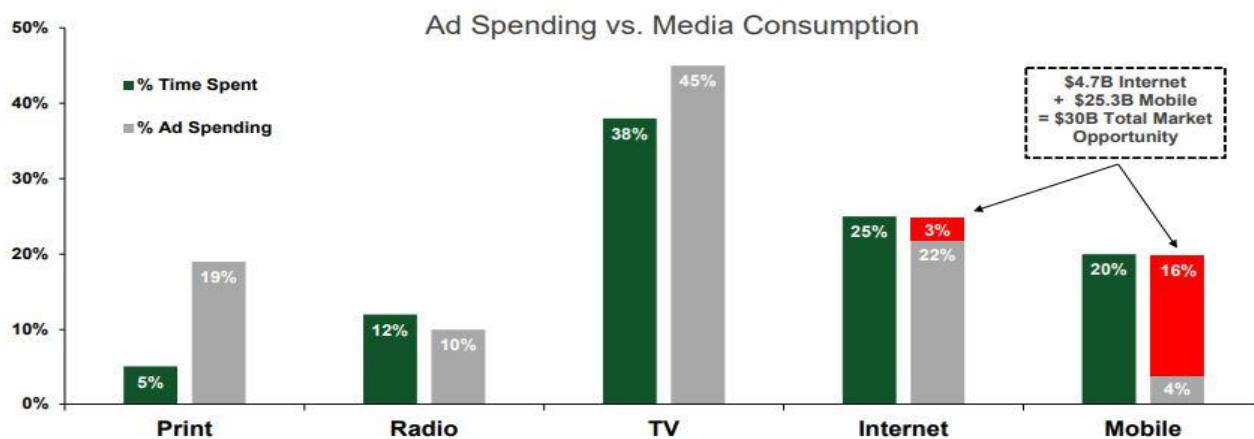
1.5. AdTech or advertising technology industry characteristics

It is widely acknowledged that the rapidly changing business world requires tools to attract clients and fulfill their needs most efficiently. With an era of digitalization, which started before pandemics, more and more companies started using digital advertisements to spread their prepared content virtually. Later on, after the successful implementation of digital advertising, the importance of tracking technologies appeared. It created a demand for advertisement technologies (AdTech), which

offer technical tools for advertisers to deliver their ads to the right customer at the right time, follow its path, and measure success. (Hardy, Macrury, Powell, 2018). This chapter will discuss a path towards advertising technology by pointing out the necessity for its appearance. Later on, the key features of the AdTech industry will be revealed.

Nonetheless, the first types of advertisements, such as flyers, radio, television, or newspapers, still exist and are in daily use worldwide; the information technologies created a gap for those being placed online. Meanwhile, online advertising offered companies the ability to reach their audiences not just only through outdoor ads or flyers, but also, once searching in their mobile phones, opening news feed, or just simply searching for the specific information in the social media. These days statistics show that online advertising proliferates without any predictable boundaries. However, the gap in such type of advertisement was predicted earlier. In figure 1 provided below, there can be seen the early prognosis of 2014, once the time spent of consuming advertising and the Ad Spending was compared:

Figure 1: The comparison between Ad Spending and Media Consumption



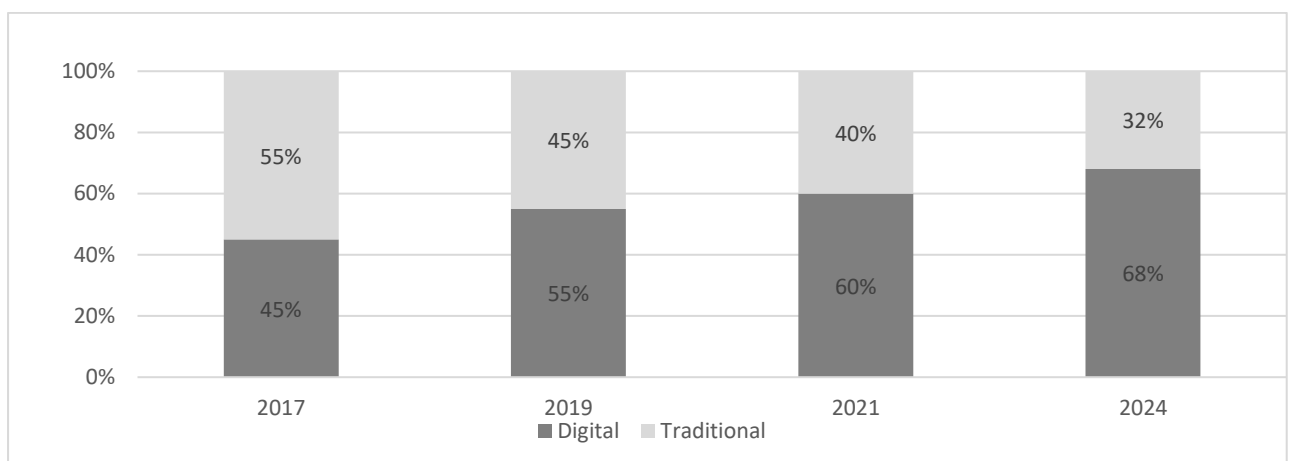
Source: Adapted by Bierdeman & Senk (2014)

From this figure, there can be seen that back in 2014, there was already a sign for the demand of putting more attention towards internet and mobile advertising. As an example, in the figure provided, there can be seen that TV advertising spends more ads when the consumers use them. In comparison, internet and mobile advertising used to be the channels where society consumed more media there than the media channels were offering, creating a gap for potential growth of these advertising channels, which could pay off in the future (Bierdeman & Senk, 2014).

Following this, more and more companies decided to use digital advertising and the necessity of it increased even more drastically during Covid-19 pandemics. This was mainly related to the fact, that even at the very beginning of the Covid-19 pandemics, the most affected sectors, were medicine and science, later on, digital tools played a crucial role in companies' resilience. Even at the beginning of

the pandemic virtuality was held as a proper tool to start running companies online successfully, once used to that, companies started trying to find other benefits of digitality. Eventually, the necessity for data adaptation appeared, once after switching to online, companies started to follow their searches and success of the advertisements, to allocate the budgets successfully, and to reach the targeted audiences (Ting et al., 2020). With more companies switching online, researchers started escalating the outstanding prognosis for digital advertising. As there can be seen from figure 2, provided below, even if before the pandemics, in 2017, traditional advertising had a bigger part as an ad spend in the U.S., its necessity grew up during pandemics. In the upcoming prognosis for 2024, there is a guess, that digital advertising is going to increase even more, by owning two-thirds of the ad spend market in the U.S.

Figure 2: Digital and traditional formats as a share of ad spend in the U.S. (in %)



Source: Adapted from Statista Advertising & Media Outlook (2020)

As it was stated above, with the numbers for digital advertising increasing, the companies realized that to succeed in the advertisement field, the potential customer has to be reached at a specific time, specific times per day or month, with specific, targeted advertising. AdTech, advertising technologies, have created a solution for that, by offering the platforms for the advertisers, which help to fulfill the goal of targeted advertising. In literature, this type of advertising can be found described as “programmatic” and “behavioral advertising” as well (Hardy, Macury & Powell 2018). This means that users’ activity is being tracked and recorded, to see the relationship among technologies, users, and advertisers themselves. Following the latest data, the necessity of this technology being used grew up rapidly with an increasing number of consumers, spending more and more time on digital media, and the necessity for AdTech, advertising technologies, increased, having the ability to offer these services for agencies and advertisers accordingly.

Pointing out the main features of the AdTech industry and how it works, there is a need to point out the main benefits for the clients using those platforms (Hardy, Macrury & Powell, 2018):

- **The combination of print and digital advertising** – even though digital advertising offers better targeting options, that the specific ads reach specific audiences at a specific time, some companies also tend to stay with print advertising as well. AdTech technologies let those companies stay within a few different advertising approaches, once converting the print publication into rich media ads on the internet as well.
- **Better utilization of Ad Spends** – one of the benefits of the AdTech industry is that it helps to analyze the data and by using it, to achieve the audiences more efficient. In simpler words, AdTech companies help advertisers and agencies not just even to manage their content more efficiently, but also, to save their budgets. This is mainly reached by the unique data, which AdTech gathers for specific advertisers or agencies, and showing them the main tendencies and delivery methods, which help advertisements to be planned and delivered more purposively.
- **Tracking users from one device to another** – in the field of advertisement, the AdTech sector is highly valued, since it provides the opportunity to track the customers' data on different devices. The main benefit of such a service is that advertisers, who are preparing their budgets and strategies, do not have to worry about the client, are they using laptops or smartphones. The data gathered per AdTech databases help businesses across the world to identify the users by their unique IDs and to track the user behavior habits across devices, by providing the same content throughout different devices.

As there can be seen by figure 1 and figure 2, the gradually increasing number for digital advertising, equally created the necessity for AdTech, which, with the usage of different software, helps advertisers and brands not just even to publish the advertisements, but also to analyze, target and deliver data accordingly.

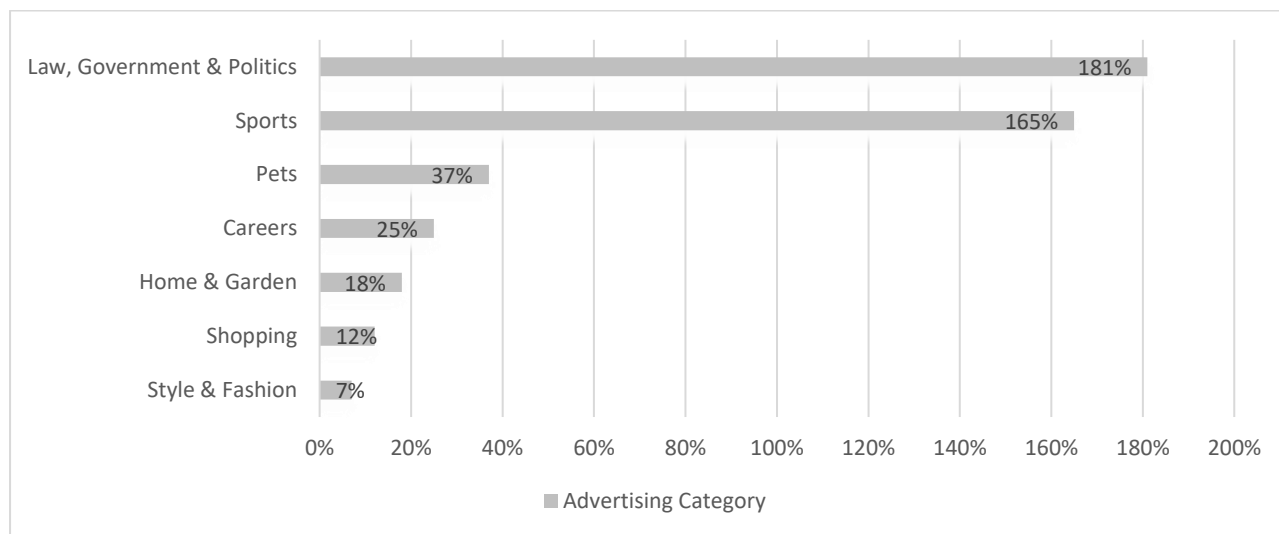
1.5.1. The key tendencies of the AdTech sector during Covid-19 pandemics

It is an inevitable consequence of the pandemics, that the spread of the Covid-19 pandemic has made a crucial impact on lots of sectors. There were some industries, which had been impacted drastically, as the product they were offering was not used in the market throughout the pandemic at all. In comparison, the increase of some products and services grew, due to the necessity of them being used, bringing to the sector its advantages and disadvantages. In this subchapter, the main features of the AdTech industry during the pandemic will be revealed, to see the main tendencies of the sector throughout the Covid-19.

Even though at the very early stage of the pandemic, the situation of the sector could not have been guessed, later on, the digitalization and companies, starting running business virtually, had created a necessity for AdTech platforms. The reason why the AdTech industry had a massive jump during pandemics overnight, was its uniqueness, offering the product, which is needed for the market. To prove that with data, once the pandemic hit, UK residents had a 54% increase in online visits to News / Information sites (comparing the data from January 2020 to March, once the pandemic reached the top), and the number of Italian residents searching for such information had a massive jump – 68%, what is related with them being the center of pandemics in 2020 March (Powell, 2020).

To begin with, even though, as it was discussed in previous parts, the Covid-19 pandemic raised lots of challenges, at the same time, it created a perfect niche for companies to go online and to try the benefits of online advertising. In figure 3, the increased number of digital consumptions across e-commerce and entertainment field, during March and April (2020) is visually narrated:

Figure 3: Ad spend change by advertiser category



Source: created by the author

According to the data provided within figure 3, advertisers from fields related to sports, pets, careers, or shopping were increasing their budgets within ads. The growing money, dedicated to advertising, let the AdTech industry stabilize and run projects successfully, implement innovations and find ways towards employees' motivation as well.

Meanwhile, there were some sectors, which, due to different reasons were forced to cut their budgets, because of the unstable markets (Goodfellow, 2020). This part of the clients, such as the food industry, personal finance, and especially travel agency, stopped running throughout the platform, to

save money for the unpredictable times ahead, creating pressure on the AdTech sector as well and its maintenance throughout the crisis.

The unclear start of the Covid-19 sector affected many clients, using different platforms to spread their advertisements and banners. According to Guinchard (2020), the author who analyzed how advertisement technologies (AdTech) changed within pandemic, Covid-19 has increased companies' need to look through their budgets and resources. From the article cited above, there can be seen that pandemics raised a necessity to reassess the priorities and resources, and lots of companies have chosen to pause or terminate their contracts within the AdTech companies, finding them not as a priority to maintain the business through the times of uncertainty. AdTech sector was influenced by this crucially since the necessity appeared for them with specific consequences: workplaces reduced, cut wages or even pause on some projects. It was a trigger for the project management. According to Hornstein (2015), projects help improve critical thinking and fill gaps in knowledge once unpredictable things are happening, and there is a need to work in uncertainty. That affected the majority of project managers in AdTech companies, once trying to hold human resources, to run projects successfully and to stable the company overall.

Another inevitable trigger, which appeared throughout Covid-19, was related to the product itself. The extraordinary crisis has impacted online brand safety, where more and more triggers appeared for the advertising appearing near inappropriate content. Programmatic advertising used to have blacklist for a long time, which helped them run ads and banners near safe content. With the appearance of Covid-19, more and more words were included in blacklists for advertisements and banners not to be published there (Hemmings, 2021). Even though backlists previously played a crucial role, trying to save companies' reputation, not guarantee advertisements in objectionable content, Covid-19 keywords blocked an opportunity for most ads to reach the targeted audience. Supporting customers was a key trigger for project managers, either for saving companies' reputations or fulfilling clients' needs.

Despite all the triggers, the increase of consumers' internet usage let most AdTech companies run their business successfully or even make a profit out of it. However, the instability in the clients' budgets allocation and the uncertainty towards some sectors' future demand had created pressure, raising challenges not just for the project managers and their leadership but also for the whole AdTech industry as well.

2. RESEARCH METHODOLOGY

In this chapter, the main focus will be on a practical angle of the challenges and success determinants for effective leadership, leading projects in the AdTech sector during the Covid-19 crisis. The following part will disclose the information about the research process. It includes the goal and objectives of the research, the sample size of the participants, and the reasoning for choosing them. In addition to this, the research method will be grounded, and the interviewing questions will be discussed and summarized shortly. Lastly, within the research analysis part, there will be an explanation of the structure, how the data was grouped and analyzed. Most importantly, in this part of the thesis, the theory will be compared with the practical research results held to align with the research objectives and reach the research goal.

Even though the theoretical part of the Master's Thesis helped to look deeper through the main challenges the Covid-19 pandemic raised for the project management field, in this part, the main challenges and success determinants for effective leadership leading projects in the AdTech sector will be revealed. As it has been seen per theoretical part, there is still a lack of information provided about the tendencies of the sector during the Covid-19. In contrast, the necessity for AdTech sector services grew rapidly during pandemics; equally, the necessity of successful leaders to run business increased significantly. The demand for it ended up in the purpose of the research, to see main tendencies and eventually, to conclude further recommendations.

2.1. Research design

For running the research and revealing the objectives, the qualitative research method has been chosen for the empirical part of the Master's Thesis. This research method has been selected since, according to Tidikis (2003), it lets detail the concrete case, understand experiences, the meanings, and processes under. Besides, following the academic literature, this technique is used once the research topic is not widely investigated. Once analyzing the theoretical angle of the topic, this has been proved due to the newest of the Covid-19 crisis as the trigger and the little information on the AdTech sector overall.

To strengthen the importance of the research method chosen, after conducting the theory part, the qualitative research has also been selected to widen the theories, align and compare them, and to find out something new (Žydžiūnaitė & Sabaliauskas, 2017). As it was stated previously, following the fact that projects within the AdTech industry during Covid-19 and the effective leadership towards them has not been analyzed deeply, this methodology of the research let analyze the thoughts of the respondents, who participated per interviews, to understand them deeper by raising sub-questions and also to

find the dominating tendencies. In addition to this, since the whole research was conducted within the AdTech sector, the choice of qualitative research here was crucial since, with the help of it, it is easier to understand the influence of the particular surrounding (Maxwell, 2013). In comparison, there is a need to mention that qualitative analysis has some research limitations. According to Kumar (2019), qualitative analysis cannot present the technical part since it focuses more on respondents' mind flow and is more subjective.

After comparing the key features of different interview types, the decision to run semi-structured interviews was made. Semi-structured interviews have an open-minded approach since they allow to add follow-up queries whenever is needed (Wholey, Hatry & Newcomer, 2015). In this case, sub-questions were crucial to gather as much information from the participants as possible for an analysis purpose since the sector analysis is new and requires additional input not to deviate from the main topic and relate the theory. More benefits of semi-structured interviews will be provided per table 5 below:

Table 5: The types of interviews

Structured interviews	Semi-structured interviews	Unstructured interviews
<ul style="list-style-type: none"> ➤ The interviewer has to follow scripted questions and no deviations are applicable. ➤ No additional questions may be added. ➤ The wording of each question is exactly as written. 	<ul style="list-style-type: none"> ➤ Questions may be reordered during the interview. ➤ The interviewer may answer questions and make clarifications. ➤ The interviewer may add or delete probes to interview between sections. 	<ul style="list-style-type: none"> ➤ Free following conversations. ➤ No guideline for the structure. ➤ The interviewer may add or delete questions between interviews.

Source: Adapted from Berg (2004)

To strengthen the point about the necessity to run the interviews and conduct qualitative research, some pros have to be provided. It needs to be mentioned that interviews as a tool to gather information is held as one of the most popular ways of it, once there is a seek to collect the information about the specific group of people and per organization, where they belong (Alvesson, 2011). Also, qualitative interviews help to create the theory, which is summarized from the collected data. Most importantly, it lets look at the situation from the interpretative position. This position helps understand the social world and how the primary research participants see it.

One more reason why there was a need to stick with the qualitative study was that it helps to identify the key concerns of the research in the specific context, as it is. In this case, the content was the AdTech sector during the Covid-19 crisis. Also, there was a necessity to align the different experiences in the working field and different situations among the work field, which, according to U. Flick (2014), helps to compare differences of the individual attitude. The main advantage of the semi-structured interviews was the ability to modify the questions, which helped a lot to navigate within the interview and to align with the Master's Thesis **research part objectives**, which are as follow:

- To empirically identify the key challenges and success determinants for effective leadership, leading projects during Covid-19 in the AdTech sector.
- To find out the key features for effective leadership and the reasoning behind its implementation, once leading projects during Covid-19 in the AdTech sector.
- Based on the comparison between theoretical and empirical parts of the thesis, outline the key implications and recommendations towards effective leadership, leading the projects throughout the unpredictable crisis in the future.

Also, semi-structured interviews and qualitative research helped fulfill the primary **goal of the research**: to identify the challenges and success determinants for effective leadership and to disclose the key features of it, once leading projects during Covid-19 in the AdTech sector.

2.2. Sample size and the participants of the research

After choosing the specific method to run the research, the necessity to clarify the framework for participants appeared. It is widely known that since more and more companies and sectors choose to run their businesses in projects, project managers are not the only people, who are implementing, leading, and creating projects. In this case, the decision to include employees from different roles leading projects throughout Covid-19 appeared. However, for participants to fit in the research informants' descriptions, the specific requirements were introduced:

- At least two years of working in the AdTech sector;
- the experience of project management before the Covid-19;
- the necessity of running the project throughout an extraordinary Covid-19 crisis; responsibility for the team members.

After meeting the requirements, employees with different roles were included in the research, such as Project Managers, Deal Desk Team Lead, Billing Manager, Senior Sales Operations Specialist. The more detailed information about informants and their experience in AdTech field and as a project manager is narrated within table 6:

Table 6: Research informants

Interviewees	Position in the company	Experience
Informant 1 (I1)	Senior Sales Operations Specialist	4 years in the AdTech industry and 2 years' experience as a project manager while working with optimizing and creating new sales processes. Currently working in the company as Senior Sales Operations Specialist, which belongs to BPD.
Informant 2 (I2)	Product Owner	4 years of experience working in AdTech and leading projects. The overall experience of project management is about 6 years including other fields - information technologies and services industry.
Informant 3 (I3)	Billing Manager	Approximately 8 years in the AdTech industry; 3 / 3.5 years of experience in project management, for internal projects within the billing team. Working as a Billing Manager and having 6 / 7 people reporting directly on daily basis.
Informant 4 (I4)	Deal Desk Team Lead	5 years in AdTech industry; 3 years of experience, once being involved in project management. Currently working in the company as a leader of Deal Desk Team, which belongs to BPD.
Informant 5 (I5)	Junior Project Manager	The whole experience as a project manager is about 5 years. 2 years of them in the AdTech industry, previously was leading projects in a technology company, based in Lithuania and Romania.
Informant 6 (I6)	Assistant Project Manager	4 years of experience being involved in different projects, related to art, marketing, creative solutions. Past more than 2 years working in AdTech, started as an intern, currently helping project managers with their daily responsibilities.

Informant 7 (I7)	Business Analyst	During the whole Covid-19 crisis had been leading an NPS project, which helps to measure customer experience and predict business growth. The whole experience in the AdTech industry is approximately 2 years overall. Currently working in the company as Business Analyst, which belongs to BPD.
Informant 8 (I8)	Team Lead, DSP Support	Almost 5 years in AdTech company; 3 years' experience as a project manager, leading internal Global Customer Operations projects. Currently working in the company as a Team Lead, DSP Support, which belongs to Global Customer Operations Department.
Informant 9 (I9)	Project Manager	4 years' experience as a project manager in the AdTech industry, implementing projects and supplying and enabling functions to the rest of the departments. Before that had had experience as a project manager in an NGO organization.
Informant 10 (I10)	Head of Programmatic	9 years of experience working in the AdTech field. Approximately 6+ years of experience being involved, leading, and implementing different projects within the sector.

Source: created by the author

Since in the beginning of the research, the number of respondents was not precise; later on, once conducting interviews, when the main tendencies appeared, the research was stopped. According to the literature, choosing the right sample size in the research is extremely important since it helps to reach the data saturation (Flick, 1998), which lets cover all relevant aspects. There is also a need to mention that even though qualitative research allows choosing different ways to find respondents, snowball and judgmental samplings were chosen in this research. Initially, there was planned to run the interviews only based on snowball sampling. Starting with the project manager, who has the most experience in the field, s/he gives the contacts, suggests other people running projects in the AdTech sector during Covid-19. According to the literature, snowball sampling helps analyze vulnerable groups or individuals and research to access the susceptible part of the population (Ghaljaie, Naderifar & Goli, 2017). Later on, it was decided to include and judgmental sampling per choosing the participants, since the necessity to control the specific requirements appeared, such as duration working in the company or experience about being responsible for the team members. Even initially, the sample size of the respondents has not

been decided, the research was stopped after ten respondents when the new tendencies appeared, and the saturation point was reached.

2.3. Research method

The main instrument for the interviews conducted – a questionnaire, which is added in this research proposal as Annex 1, table 10 – *Interview guide*. As it can be seen from the questionnaire, it was divided accordingly:

- Introductory information about the respondent;
- main challenges running projects during Covid-19 in the AdTech sector;
- the key competencies needed for effective leadership throughout the extraordinary Covid-19 crisis in the AdTech sector;
- success factors, leading projects throughout Covid-19 in the AdTech sector;
- future recommendations for effective project leadership during extraordinary crises.

The main reasoning behind putting the questions into subcategories was to follow the structure, which eventually, after combining enough answers, helped to see the main tendencies and analyze the data, once coding them accordingly. Coding was used as a tool not just for data grouping but also for identifying the concepts and finding relations.

The interviews were conducted remotely, through video meetings, using “Teams” and “Zoom” platforms, where all the recordings were saved and transcript accordingly. Valuing that all of the questions in the interview guide were raised in a simple manner concept and the participants could ask additional questions or clarify them, it was decided that there is no need for the participants to see the questionnaire before the interviews.

There is a need to mention that throughout the interviews were taking place, the necessity to ensure validity and reliability appeared. According to Kumar (2017), these two aspects are fundamental in evaluating a suitable instrument for proper research. Validity in the research is essential because it helps to represent the truthfulness of the finding. It also concerns what an instrument measures and how well it does; meanwhile, reliability is referred to the stability of findings (Altheide & Johnson, 1994). According to Singh (2014), these are the two aspects per research, which help to increase transparency and at the same time decrease opportunities to insert personal researcher bias in the qualitative research.

Following this, the necessity to follow the ethical issues appeared once conducting the interviews. It was elaborated by coding the names of participants with the abbreviations (Informant, (I1), Informant 2, (I2)). Neither names of the participants nor specific companies were revealed to maintain

absolute anonymity and confidentiality. It was also ensured by avoiding reflections, reactivity, and encouragement towards respondents during the interview (Pitton, 2002). In addition to this, before conducting interviews, all the participants were informed about anonymity, personal data protection, and the importance that they participate in the research with free will. Also, the participants were familiarized with the topic with the help of the following interview intro guide, which is added together with the interview guide in Annex 1.

2.4. Research analysis

After the research was conducted, one of the main structures that helped analyze the information was codes. According to the literature, codes, overall, is held as a tool, which helps not just to make the enormous amount of information into most minor structured parts, but also helps once clearing out the information and the conduction of the analysis (Gaižauskaitė & Valavičienė, 2016). There is a need to mention, that according to Jassim and Whitford (2014), to code information and to run a research analysis successfully, there is a need to ensure that in the last interviews, no new topics were generated from the interviews. To ensure this point, the blocks for the research analysis were formed following the research objectives, same as interview blocks. Below, there can be seen the main investigating questions, which helped to run the whole research in the structure and later on to code the information accordingly:

- What were the main challenges throughout the Covid-19 crisis from personal, project manager's, and company's perspectives?
- Had the changing environment required any different styles of leadership? If yes, how has the leadership changed?
- Considering that there was a gap for some challenges to appear, what were the main success factors to overcome them?
- What is the enduring value of a long perspective, valuing the Covid-19 crisis as the extraordinary one? What are the main lessons learned which could help AdTech companies to overcome such situations most easily?

Having particular investigating questions in mind led to a structured analysis, where all the questions were related. For ensuring a smooth review of the data, the research will have the citations of the informants, and the subchapters will be named accordingly.

After the qualitative research analysis, the main insights will be pointed out and presented visually to obtain the trending and latest tendencies of the challenges and success determinants within the AdTech sector during Covid-19 pandemics and its effect for effective leadership.

3. RESEARCH RESULTS

After the research has been done, the results will be analyzed and presented in the upcoming chapter. The research has been done by running semi-structured interviews with ten informants to gather enough knowledge for fulfilling the main research part objectives, which have been pointed out above. For smooth data analysis, the interviews with the research informants have been transcript to see the main challenges, success determinants, and the key features for effective leadership in projects during Covid-19 in the AdTech sector.

Following the deeper explanation about the respondents, there is a need to mention that in the research participated ten employees working in the AdTech sector (at least two years of working in the AdTech field) and leading or implementing projects within the sector. Once choosing the participants, the main focus was held towards the experience employees have working in leading projects rather than the job's title, in order to meet a requirement for running projects at least two years. By saying that, interviews were run with representatives of the companies belonging to different departments, such as PMO or BPD, including Team Leads, Project Managers, Head of Programmatic. The respondents shared their experiences working as project managers from three different international AdTech companies, varying from medium-sized businesses (having more than 600 employees) to small businesses (less than 100 employees), based in Lithuania. The interviews were held throughout "Teams" and "Zoom" platforms, varying length from 25 to 47 minutes and they were conducted during November and December of 2021.

The experience of informants leading projects varied from two to nine years. Despite this, the time working in the AdTech industry also was a crucial guideline to choose participants to meet a requirement to have been working and leading projects in AdTech before the Covid-19 pandemic started. Even though gender was not considered a factor for choosing respondents, in the research conducted participated seven women and three men. It needs to be mentioned that factors such as gender or age of the participants were not significant; meanwhile, the data were analyzed relying only on the experience as a project manager, leading the projects during Covid-19 in the AdTech sector.

Once analyzing the interviews with the informants, the main focus was held towards the objectives of the empirical part of the thesis, and all the framework of the research part is also divided following the already pointed research part objectives:

- To empirically identify the key challenges and success determinants for effective leadership, leading projects during Covid-19 in the AdTech sector.
- To find out the key features for effective leadership and the reasoning behind its implementation, once leading projects during Covid-19 in the AdTech sector.

- Based on the comparison between theoretical and empirical parts of the thesis, outline the key implications and recommendations towards effective leadership, leading the projects throughout the unpredictable crisis in the future.

3.1 Challenges for effective leadership in projects during Covid-19 in AdTech sector

Having pointed out from the theoretical approach that different challenges appeared during Covid-19 pandemics either from personal or managerial perspectives, in this chapter, the challenges are also divided in this order accordingly to find out the main tendencies in the AdTech sector. After the research analysis, the challenges will be grouped within the table to see them visually for further comparison with the theoretical part.

3.1.1. Challenges from an employee's perspective

Once analyzing the empirical data results, the tendency appeared that at least half of the informants were challenged by uncertainty. For instance, I3 claimed that the main uncertainty came up because of the **unclear future of the company**: *“I think that the main challenge was uncertainty, uh, yeah, kind of you're working from home, but, uhm, you don't know what is the exact condition or the status of the company itself”*, and I5 also added that there were some unclear situations, happening in the company, which strengthened the uncertainty even more: *“I think that at the very very beginning it was something with layoffs and we even closed some offices within the company. Also, later on, there were some discussions with job hours reduces and I remember we even had to use our holidays”*. Another research participant, I4, claimed that uncertainty also appeared from **unclear responsibilities** arising, when project managers had to deal not just with projects directly, but answer a lot of questions, on which no one knows the answer yet: *“Uh-huh, so I feel there is that there is a lot of pressure on leaders or project managers when there's some kind of uncertainty, right? <...> The general understanding of the situation and an understanding that this is uncertain and this is not clear and people will have some questions.”*

Continuing the personal perspective challenges, most of the project managers also agreed that working from home raised lots of instability. According to I8, it was mainly related to a **loss of time** daily: *“...because you were sitting there, you know. And it's six o'clock already and you don't notice that. And then you notice that it's 7:00 PM and probably you should kind of close your computer.”*. According to the other respondent, the extended working hours were also related to **distractions at home offices**: *“...that I was at the time, living alone in my apartment, so there were no distractions. No nothing. That prevented me from doing my job well and kind of not changing that much. But it wasn't”*

the same case with some of my colleagues, so you know, they had to deal with their families being at home. You know, pets running around children, screaming, and so on.” (I9). The other challenge, which was mentioned by I4, was the **establishment of home offices** when it was new for everyone, and no one was prepared on that: *“An issue for everybody, how this work will be organized when you’re working from home, right? So, you have to have your equipment. You have to have space because usually there is not a dedicated space for you to work comfortably. So, you have to figure out these details. And then yeah, if all the systems are going to be working alright.”*

Another crucial challenge, which affected project managers from a personal perspective as well, was **remote communication**, which included **lots of meetings online**: *“<...> at the very very beginning I could not realize how to say my thoughts online when to mute on, mute off and so on. It was draining, since I was not saying lots of things since it was not comfortable, first of all...”* (I10). I8 also added that it was hard to get used to remote meetings, especially at some specific times, when the workload was increasing: *“<...> especially when I had to do like a lot of calibrations, meetings or yearly meetings and you’re sitting with what? 12 people like 2 hours each, so let’s imagine like 24 hours just during the video call. It’s a lot and it’s like emotionally draining and you’re feeling more, I would say tired then pre Covid times in the way.”* The same research participant, I8, mentioned another challenge, which arose during Covid-19 - **lack of face - to face communication**: *“I’ve lacked is the kind of socializing part that people like face to face, not doing like the calls.”* This issue was also fulfilled by I3 thoughts: *“The reason it was so difficult during Covid because our communication was very limited... Because when you are in the office even when we are going to drink coffee, you can tell so many things which are actually very important for others to understand and sometimes they are not even related with the work but completely with the other stuff.”* Another research participant also spotted that the level of **miscommunication** increased throughout the pandemic as well: *“When you meet each other, you can fully understand. <...> On the emails it’s happening in another way. You always are just getting some... yeah, well, your work, let’s say is being criticized, right? You receive some critics and you cannot get the emotion of that email. <...> And this could bring some issues in managing the project, because you will still need to collaborate with a person, but you received let’s say negative feedback and you treated it as a negative. Then your response will be maybe not. Uh, provided not in the best way and here and I would say miscommunication is happening usually.”* (I1).

3.1.2. Challenges from the project manager’s perspective

After summarizing the most common challenges for project managers, as from an employee perspective, there is also a need to look through the project managers’ challenges from the leaders’ perspective, once they were responsible not just for themselves but also for direct team members.

In the first place, one of the most frequent challenges, which was repeated by the majority of project managers, was how to implement **new rules for online meetings**. According to I8, from the very beginning it was tough not just only to introduce new workflows, but also, to follow them within the team: *“Then how we should kind of switch from simple rules. Let’s say like having, I don’t know, our cameras on during meetings because it’s not nice having someone with the camera off, because if that person is like overall in the meeting, maybe he is cooking something like on the side so that is that was the challenge.”*. The uncertainty happening all around also raised a necessity for **changing the concept of the meetings** from just covering job stuff, to being interested in direct employees’ feelings: *“<...> So how are we feeling? How’s the team? Are they overworked? Are they feeling you know, incredibly pressured at home and yeah? <...> Yeah, there were situations where I felt like you know, we’re having a group meeting and I see somebody rather quiet. I would really try to reach out to that person and ask whether everything is OK via chat.” (I9). I4 also added that during the Covid-19, there was a demand for **more frequent follow-ups**, because of the changed way of communication: *“And overall, monitoring of the project or the team. You know, when sometimes you might have a question on the spot and you might dig a little bit deeper into the case into the project or some specific area of the project. Uh, online I feel that sometimes it’s not the case and... <...> so yeah, so I feel that I’ve initiated those catch-ups more frequently during this Covid period.”**

Eventually, the challenges mentioned above led to the necessity of a changed attitude towards the employees from the project manager’s perspective and even encouraged them to change some leading competencies. First of all, there was a need **to understand the emotions of the employees** and in some cases, to become more like therapists, rather than think about the outcomes of the projects which are happening on daily basis: *“... other people required for more details to be explained and more outcomes of the situation happening. I think I even was like a psychologist and some points.” (I5). Some of the project managers also said, that the necessity to understand employees’ emotions was a new thing for them and it even required new skills, such as **being more empathic**: *“... from the analytical point of view, I had to change a little bit my thinking into these softer skills and to show more empathy, <...>, for me it was the huge challenge and when they had this personal, emotional situation I was really struggling with it.” (I3). According to the same research participant, the issue also raised towards **team engagement** and maintaining workforces overall: *“ <...> why we don’t have so many leavers in the team, actually, these social activities and then you just understand that, oh God, I have lost it and what I should do that actually we would be able to, uh, to keep it so again. I had to change myself, and if previously someone in the team was just planning some trips or ordering the dinners or booking the tickets to the cinema. So now, actually, I was responsible.”***

Talking from the project’s perspective, I9 also spotted that the changed way of communication and more time spent for understanding employees’ emotions raised a necessity to **amend the deadlines**

of some projects: “UM, I guess since some of the deadlines needed to amend, to be amended, so execution part got affected.”. It also added that the necessity for some amendments throughout time perspective could have been because of the changing way of how to **document the meetings information**: “But right now, once you have Covid and once we have a reading in text mostly, and even if you have an e-meeting, usually you have that meeting notes email after the meeting where you are summarizing all the things you have spoken about.”. One more thing, which affected the planned time, which should be dedicated for projects directly, was **onboarding of newcomers**: “So also it was a challenge because those people that were kind of hired during the Covid time they had more difficulties probably while being onboarded, <...>, but you know it brings some challenges, let’s say after a year or so, you’re coming back to the office, and only then you’re meeting your colleagues. So, this is something that is challenging. And also, I think, like you’re spending more time when you were having calls instead of live sessions with them.” (I8).

After pointing out the challenges for project managers, whether from the employee, or the project manager perspective, in table 7, the summary of findings towards employee and management perspective is done and provided visually:

Table 7: Summary of findings (1)

Challenges for effective leadership leading projects during Covid-19 in AdTech sector	
Challenges from an employee’s perspective	Challenges from the project manager’s perspective
<ul style="list-style-type: none"> • unclear future of the company • unclear responsibilities • loss of time • distractions at home offices • establishment of home offices • lots of meetings online • lack of face to - face communication • miscommunication 	<ul style="list-style-type: none"> • new rules for online meetings • changed the concept of the meetings • more frequent follow-up sessions • understanding the emotions of employees • empathy • lost team engagement • amended deadlines of projects • newcomers onboarding

Source: created by the author

3.2. Success determinants for effective leadership in projects during Covid-19 in AdTech sector

After summarizing the main challenges for effective leadership from personal or managers’ perspectives, the success determinants will be provided in the following part. In line with the literature

review, one part will refer to success determinants as per management perspective; meanwhile, another part will be related to the success determinants from the AdTech's sector overall.

3.2.1. Success determinants from a management perspective

According to I4, the uncertainty and different questions arising from the colleagues created a demand for **more frequent communication with a team**: *“Have weekly meetings of (mentions the team's title). We have catch-ups. We've tried to implement, you know, this kind of virtual coffee breaks or something like that, just to discuss some of the work topics and to keep the pulse of the team.”*. I9 also added, that what reduced the uncertainty, was the **constant updates about the situation from the company itself**: *“And in terms of the company so. Uhm, when the pandemic started, we, we started conducting these monthly pulse surveys, which are essentially surveys which check the pulse in the organization. How is everyone feeling up? Whether you know we don't feel overwhelmed, overworked, and would we actually, given all the circumstances, whether we would suggest (mentions the company's title) as a good place to work.”*. By saying that, some respondents also added that **empathy** was one of the key features when there was a need to understand team members, to stay in touch with them and to solve issues arising: *“I've never been so many empathic before. I mean, if previously when stuff is arising, you just talk with a college face to face and you can see how they feel, now everything was so different... <...> It was not an easy task as I said, since in offices problems used to be solved much quicker, now things appeared to be frustrating since it became so hard to overcome them. But I think that empathy and reacting to people's emotions and stuff arising in a softer way was my key to success.”* (I7).

Also, talking about the necessity not just for formal communication, but also for informal one, Covid-19 pandemic was an adequate start, once organizing **mutual non-job-related activities online**: *“<...> that we had like some like cooking classes that were established during Covid time. You know, like. We were having one person that is showing us for the kind like, you know, online call like how to cook step-by-step, some kind of meal like risotto, and something and the others are having a glass of wine and enjoying that time together.”* (I8). The same respondent also claimed, that activities were organized not just on a team level, but also from the company's perspective, what was valued by the whole team accordingly: *“And also how we organize our Christmas party. Still, you know, it wasn't cancelled so we had it. So, we mixed some cocktails, which is nice.”*. In addition to this, research informants also mentioned that the necessity for **honest feedback sessions** was really important, where not just only from the company's layer, but also within the team, the whole team could have shared ideas and even find ways how to overcome issues arising: *“I really remember that I was thinking how else should I engage the team and, you know, to make everyone feel comfortable. When I just took the example of*

sharing opinions from my colleagues. About what is happening and started gathering the feedback from my employees.” (I6).

Despite all the communication-related success determinants, project managers also separated the necessity for **mutual understanding among team members** and I8 even gave an example about the tense situation within the team and how they managed to overcome it: *“In a way, but we had one employee that was feeling a bit stressed, let’s say in a way, and, uh, he wanted to dedicate some more time to his personal hobbies like making music. Uh, so we have decided as a team to allow him, you know, to work from 8:00 till five. Let’s say, in a way. Yeah, just switch a bit his working hours. So, I think it was the team’s decision.”*. However, once talking about **ownership mindset**, even though the majority of project managers agreed that it is really important to have the team members with ownership mindset on the pandemic, it is not less important on daily basis as well: *“I think that the ownership mindset it is a common, common stuff. We should work on it not only in the work but also in our personal life.” (I3).* Continuing the topic about ownership mindset, I9 claimed even though it is important to the company with people having ownership mindset throughout all the times, during Covid-19 it encouraged **extra mile approach**: *“So, uhm, so yeah, ownership mindset means owning up to what you are responsible for. Also, I feel like people with strong ownership mentality can even go and extra mile and take up on things that are not necessarily kind of. Uhm, their responsibility. But for example, you know, the team has an issue and you stand up to solve it because you have this, let’s get things done kind of attitude.”*

Having asked project managers about the necessity of **agile thinking**, which includes modifications if needed or improvements within the development process, the majority of managers said that it is important during the Covid-19 crisis, however, it is not something new to the AdTech sector, since, according to I2, the company was mainly based on such approach before as well: *“I would not say that agile was a key to success for us. You know, our company is really closely related with technologies, information technologies, platforms, so working in scrums and having this kind of, really flexible, “agility” is the key on which technology companies are based.”*

3.2.2. Success determinants from the AdTech sector’s perspective

To begin with, talking about change management for the company, even digitalization was the part of the success, same as a challenge for the part of the companies throughout the Covid-19 pandemic, the majority of AdTech project managers confirmed, that it was not the case in this sector, since working remotely was the part of their daily work overall before the pandemic also: *“We were working digitally for majority of the years of the company, since this necessity was raised due to families having kids or longer holidays, so working remotely... I don’t know could I name it as a factor which affected us.” (I2).* In addition to this, I5 also claimed that **the time for full digitalization for the company was really**

quick: *“I do not have to add here a lot, since our company really went smoothly on working remotely and we could even do that, before the pandemic. I think even if first days were more panic, but overall, there was no need for that, since, after those governmental requirements, I don’t remember when it was, immediately on Monday we had meetings as usual.”*. Continuing the topic about everything going remotely and digitally, some of the respondents also added, that there were not so many issues working remotely, since they are **working within international teams**, and remote meetings are usual practice for them: *“You know, there’s no issue in working remotely in general. I mean, we have a policy that allows us to do that even before the pandemic. So, in terms of getting all the equipment and so on, and there were no issues there. Yeah, in general, I personally work with remote teams, so most of my teammates are actually, you know, in Germany, in the USA and the UK. So even when I’m in the office I usually have calls.”* (I9).

Another crucial success determinant, mentioned by participant I1, was **the specification of the product**, AdTech is offering: *“Uhm? I would say everything what is in SaaS model, they only win from the Covid, because when you have service as a product to sell, well, everything is moved to the online, as I told you before. And if you are providing not real product hardware but you are providing software as a service. <...> If we’re talking about the AdTech, I would say, majority of people are not going to shopping to the malls already after the Covid, but they’re doing that online if they’re doing that online, that means that the AdTech technologies should have received the better, huh...supply.”*. In addition to the specification of the product, as one of the success factors, I4 also mentioned there was **increased demand of the product overall**, which was not so tremendous before pandemics: *“I believe it’s natural that everything went online, even those shops that usually are not providing delivery services. They were introduced specifically during this Covid period. In general, the delivery services were skyrocketing because everybody wanted to either order takeout or get groceries delivered to their home. So, this was a quite quick and the major shift for those specific companies, and as for (mentions the company), since we are, you know, digital company.”*

Another crucial factor towards the successful adaption of the business throughout some companies during the pandemic was also the necessity of quick innovations, which let companies quickly reorganize their thinking and decisions, whenever is needed. However, I6 said that **rapid innovations and change management** is closely related to the whole company structure overall: *“But overall, the reason why I like the company overall and our industry, since it offers flexibility and we react on changes on daily basis. You know, since it is mainly international, we are used towards changing of human resources, changing of the whole procedures, changing of laws.”*. Even though, according to some informants, changes were common in AdTech before the Covid-19 pandemic as well, I7 added, that **Covid-19 raised a necessity for the company to stand in a line with competitors towards innovations** even more: *“I think that the pandemic was a little bit shaking at the beginning, and even though*

we ended up nicely, firstly, we were not aware how it all is going to be. I think that was the reason why the company was really into the market, navigating through it, not losing the speed, and looking through other companies, competitors, decision making. Since, I think, that if they would have been ignored that, it is easy to be, how to say, to be destroyed by competitors, such as Google?”.

Another success determinant, which, according to I8, helped to maintain employees’ engagement and successful work towards the projects was **mutual leisure activities initiatives from the company**, where people were involved in activities all together: *“We kind of established also walking challenge so that people could go out like more outside. So also have this competition so, you know, like there is a push to go out after your working hours and kind of get those steps that you are still missing. You know like 10,000 or 20,000 and it was really a good challenge because people said, once I had like catch-up with them, that it helped them to improve their mental health.”*. The last thing, which was mentioned from the project managers overall, was **the changed company’s attitude towards employees**, which helped to maintain the pulse of employees and for them to be valued: *“Also if an example is needed, there is a need to mention that our company overall, what our company did, is that they seriously reflected on everyone’s needs. Seriously, once there was a need for health plans to be changed. Covid numbers were increasing, so what they did is to let people choose do they need that extra plan, which includes I don’t know, when you do Covid tests, or you want to invest more your health budget to other things. I think it was important, since they showed more such, that they are people-focused, rather than just business, business. It was also the same when they introduced new learnings and allocated budgets...”* (I5).

The summary of the key success determinants for effective leadership is provided within Table 8:

Table 8: Summary of findings (2)

Success determinants for effective leadership leading project during Covid-19 in AdTech sector	
Manager’s perspective	Company’s perspective
<ul style="list-style-type: none"> • constant follow-ups • international teams • empathy • mutual leisure activities online • mutual understanding among team members • extra mile approach 	<ul style="list-style-type: none"> • quick digitalization • the specification of the product (SaaS) • increased demand for AdTech platforms • the pressure from competitors • mutual leisure initiatives • changed company’s attitude towards employees needs

Source: created by the author

3.3. The key features for effective leadership in projects throughout Covid-19 and its implementation in the AdTech sector

As it can be seen from the previous parts, the Covid-19 crisis had raised either its own unique challenges for project managers leading projects in the AdTech sector or success determinants, which helped to overcome the crisis most successfully. This raised a necessity for the leaders, dealing with a crisis to react with specific competencies, in order to overcome it. Coming back to the theoretical part of the Master's Thesis, there can be seen, that the Covid-19 pandemic raised a necessity for the implementation of adaptive management, for the majority of companies, in order to run business and projects successfully. In contrast, as it was discussed previously, some companies had to adapt more and there were companies, which already had been prepared for such a crisis, and their adaptation lasted shorter. In this part, there will be an analysis held about the key features for effective leadership and what were the reasons for its implementation within the AdTech sector.

First of all, there is a need to look through, how the leadership of project managers, changed throughout the pandemic. During the research, the majority of employees were not able to spot any major differences, how the management changed, however, I10 mentioned that **it has not affected the company so much, rather as people themselves, who had to deal with uncertainty**, already showing that in the eyes of employees, the company was prepared for it: *"I would not say that our company or our products have changed drastically. Maybe it was us, employees and leaders, who had to make sure that everything works, but overall, the company was adaptive, flexible and agile before as well. I think that is the main feature of AdTech overall, which cannot ignore the fact towards adaptiveness all the time."*.

Meanwhile, to broaden and understand better what skills are necessary for effective leadership throughout the crisis, the questions: *"Could you name competencies of yours, which helped you, as a project manager, dealing with such situations?"* and *"What do you think are the key features of a good project manager throughout an extraordinary crisis?"* were raised. The answers from there appeared to be wider, from different points of view. To begin with, I7 claimed said that the most important was **to step back and see the bigger picture**: *"being able to understand the "big picture" and being on the same "page". This is achievable only through transparency and clear and smooth communication."*. Once referring to the questions above, I3 also added that even though it was hard at the beginning, but **not to be afraid to ask for help** helped a lot to lead the projects as well during Covid-19: *"I have started more communicating and sharing the feedback with my manager and asking, asking not for help but maybe sometimes for advice."*. I9 pointed out, that it was necessary to learn how **to accept changes** and changing environment: *"That uncertainty is the only certain thing in life, I think. And change is the only constant thing in my life. So, I have learned to accept that fully and to be adaptive as we've spoken."*.

This was also strengthened by I5 by saying that uncertainty and people, asking questions forced to **be more stubborn and patient**: *“You know, people just come and ask and ask and you are online, like trying to understand what is happening, trying to stay calm and patience. But I think once you are starting to raise those questions to your managers as well, you become more stubborn as a professional and also, you learn how to wait, I mean, that sometimes it is the only thing you can do at that moment.”*. As it was already seen from the previous research analysis done, project managers also had to **become more proactive**, because there was a need to keep the team united, once people were working remotely: *“And you know, if previously I was like doing my job, trying to be on line with all the deadlines, and all the preparations for the meetings, during Covid I felt that I am required to be organizer, motivator and to gather all the people together with different activities, to initiate talking and so on you know.”* (I6). I9, once trying to describe the most important things for the effective leadership, also said that it was very important to **stay positive**: *“...personally felt, like as a project manager, I need to bring always more positive energy into the meeting, so I put it on myself and that responsibility to really make sure that that we keep some lightness in what we're doing because everything else in life is not as easy at the moment so”* and also added that there as important **not to forget the value of the team**: *“Uh. You don't feel scared, you feel like we can do this. We have each other. We have some incredible brains here. We have a lot of hands and that can take this problem and solve it.”*

To get aware of the final thoughts towards the features for effective leadership throughout the pandemic, the upcoming question was raised: *“Would you be able to point out the most valuable lessons learned throughout the Covid-19, once leading the projects”* either as the majority of participants, or the Informant I1 repeated the importance towards the **communication**: *“OK, yeah. Did I tell you something about communication today? (laughing).”* and I2 said that even though the analytical point of view was the stronger side before the pandemic, now all had to switch to **being more empathic**: *“...from the analytical point of view I, I had to change a little bit my thinking into this softer skills and to show more empathy.”*. Lastly, I6 said that to be a good and effective leader, there is a need to **adapt to employees' needs firstly**: *“... you know, in projects it is very easy to feel that pressure towards KPI's and SLA's all the time since that has to be achieved and that has to be done and maybe even yesterday. But pandemic showed that it is not just about the business, it is about your employees and how they feel.”*

To get aware of how the company was able to adapt throughout the Covid-19 extraordinary crisis, the question: *“Would you describe your company being adaptive during the crisis? If yes, what methods were chosen?”* was raised. The answers gathered showed that even though there were triggering angles, the AdTech industry was able to adapt smoothly, because of the different reasoning. To begin with, I2 claimed that the company was able to adapt, **since of the increased demand for digital advertising**: *“I would say yes, because even though where were some kinds of miscommunications and stuff at the beginning, same as layoffs, and working hours reduces, the company is offering a good product,*

which helped lots of companies to survive overall, as everyone was going online.”. I1 also added that Covid-19 even was a huge benefit for the industry itself, since for the **increased number of new clients**: *“Uh, because the digital advertising moved to the next level and we have got really great big clients during Covid times and that means that companies really understand that everything went to online shopping and they need to improve the advertisement from their side.”*. According to I7, the company also was well prepared, since **it was offering the individual conditions for the clients, to maintain them**: *“Also, on my end, I realized that the company was very flexible once making the solutions for the customers, to attract them or to make them stay and we even offered the very possible conditions of payments, which could be delayed, and also billing splits, for the clients.”*. Talking about **virtuality**, and as per theory explanation, lots of companies had to go online, this was not the case with AdTech, since as it was mentioned, the whole industry is based on the SaaS products, and **online communication** internally or externally with customers **was a key feature of the AdTech** before the pandemic also: *“Uh. IT guys were really prepared for this and offered their help because of course they knew there will be struggles. Of course, something will not turn on or turn, switch off, something will not log in and etc. But I believe that it took no longer than a couple of days to go back to your normal regime, let’s say, to log into every possible system that you are required or so. So, I feel that this process was kind of smooth, at least not only in my team, but I feel in (mentions the company) in general.”* (I4). In contrast, even though that the majority of managers agreed that the company was adaptive throughout the crisis, I8 said that no matter that company was flexible, the fact that they have **not offered to work all over the world opportunity**, was a trigger for the team overall: *“I would say yes, but what I would say no is that we could be more flexible too. Uh, giving the opportunity to the people to work from anywhere they would like to, because this was the biggest concern and I think from the people and also in terms of our competitors and competitiveness in the industry and the market itself. <...> But yeah, when it comes to me, working from anywhere in the world, especially when you, let's say you trust the person, you know that he’s a best performer. Or you know that. He could do the task anywhere in the world. Let’s say maybe being in Barcelona or maybe in Lisbon or whatever. Uh, unless the task is done, that’s the biggest concern from properly for the company or for the team. <...> So I think this is something that our company is bit behind in a way.”*.

After pointing out the key features for effective leadership for project managers leading projects and what helped or did not help to implement these in the AdTech sector, the summary of findings will be narrated within table 9 below:

Table 9: Summary of findings (3)

The key features for effective leadership and the reasoning of its implementation in the AdTech sector	
The key features for the effective leader during the pandemic	AdTech perspective
<ul style="list-style-type: none"> • To see the bigger picture • Not being afraid to ask for a help • To accept changes • To be more stubborn and patience • Proactiveness • Positiveness • Empathy • Not to forget the value of the team • To adapt to employees' needs 	<ul style="list-style-type: none"> • Increased demand for digital advertising • Increased number of new clients • Individual terms for the clients, to keep them • Online communication is a key feature of AdTech daily work • Strong competitors

Source: created by the author

3.4 Alignment of research with the literature analysis

The research conducted helped to look deeper into the challenges and success determinants for effective leadership in projects throughout Covid-19 in the AdTech sector. Even though the theoretical part helped to look at the current situation from a global perspective, the research run within the AdTech industry let to dig deeper into the specification of one, AdTech, industry and find out its main tendencies in particular. The analysis, for seeing the key touchpoint and differences was achieved by aligning the literature review with the summaries of findings provided in table 7, table 8, and table 9.

The research done showed that the challenges from an employee perspective or a project manager found out within research done, consider the literature review in most parts. The familiar places will be provided below:

- Uncertainty towards the future
- Working from home issues
- Emotionally draining remote communication
- Newcomers' onboarding
- The lack of interactions

Despite this coincidence with the literature, the research revealed that some challenges in the AdTech sector differ from theory. According to Parker et al. (2020), trust towards employees was an issue for some project managers during Covid-19. However, project managers leading projects during Covid-19 in AdTech had not faced this challenge toward their direct employees. In contrast, they became more engaged themselves, as leaders, once filling the gap in communication with employees, which eventually had a positive effect on the efficiency once working from home. Besides, the miscommunication challenge appeared as new within the research done. Although the theoretical part covered many angles of communication issues that arose during Covid-19, apparently, in the AdTech sector, miscommunication was a new trigger, which project managers have not faced before. It raised a necessity for establishing more frequent follow-ups and encouraged finding new ways of storing and representing meetings material.

Continuing the research analysis with the success determinants for effective leadership, it became clear that some success determinants, which helped other sectors to overcome the crisis more efficiently, were not the case in AdTech itself. To broaden the explanation, even though the literature review revealed that virtuality (Wu, 2021) and ownership mindset (Obrenovic et al., 2020) as a part of agile thinking and change management were extremely important during Covid-19, this has not affected the AdTech sector deeply, since these determinants were applicable for the sector before the pandemics as well.

Meanwhile, the most common success factors, which coincide with the literature are as follow:

- Strong and united team
- Constant follow-ups
- Quick changes towards adapting current workflow to the necessity of the market

The changed way of communication was a key challenge for most companies and sectors. In comparison with the literature, most research participants from AdTech sector claimed that this part was smoothly covered throughout their companies, not just from the manager's perspective but from the joint initiatives of the companies as well. Also, even some project managers claimed that the company they represent is innovative during pandemics (unique health plans related to the pandemic, allocated learning budgets), others argued that some AdTech companies still lack an innovative approach. The example showed that some companies from the AdTech industry are behind the competitors by not offering flexible opportunities for working worldwide, in this way risking to lose employees, by them being attracted from other tech companies.

Thirdly, talking about the effective leadership features and the reasoning of its implementation in the AdTech sector, the research showed that even though the industry itself was well prepared and flexible within the crisis, some project managers still lack suitable features, to lead projects during the extraordinary crisis.

As it was provided by Wart and Kapucu (2011), the key features for effective leadership during the crises provided by previous researches were delegating, decision making, analytic skills. However, according to the project managers, who were leading projects during Covid-19 in the AdTech sector, these skills were not highly applicable, due to the uncertainty and the remote working conditions. This encouraged project managers to become more empathic, better communicators, include the team in decision making, and not try to control the situation in detail, which can be mostly related to the adaptive leadership approach (Ramalingam et al. 2020). The common field from the research done, what collated with the literature, on the adaptive approach throughout the pandemic will be provided below:

- Seeing the bigger picture
- To accept changes and to be proactive
- Not forgetting the value of the team / adapting to employees' needs

However, after conducting the research, it became clear that even though project managers were not in favor of using analytical and controlling skills, they still lack experience using other management competencies, such as empathy or communicational ones.

Looking at the effective leadership and its implementation in the AdTech sector throughout the pandemic, there can be summed up that there were some specific features of the AdTech sector overall. Increased demand for digital advertising, the growth of new clients, individual terms for big clients, to keep them, strong competitors - were critical success factors from AdTech's perspective. Eventually, it helped to fill the leadership gaps from the project manager's competencies perspective; maintaining business stability throughout the crisis and running projects successfully.

CONCLUSIONS AND RECOMMENDATIONS

After the literature analysis, it can be concluded that various challenges have triggered the project management and directly affected its costs, communication, risk, and procurement management. Eventually, the challenges that appeared created pressure on project managers by requiring them to adjust to changes. Even though managers themselves had faced difficulties, such as working from home, living in constant uncertainty, trying to maintain work and life balance, the necessity to be responsible for the team impacted the project manager's primary duties. If previously project managers had to do the right things at the right time, during the Covid-19 pandemic, they had to cope with the changed content of the meetings, get used to digitality, and find ways to direct employees' motivation and maintenance.

The variety of challenges appearing raised a necessity to look through the key features of the pandemic and to compare it with previous crises. It was mainly because of the pandemic's unique tendencies and the lack of successful practices implemented yet to overcome it. Currently, in the business world, the Covid-19 crisis is mostly found named as unprecedented, unique, and extraordinary, not just because of its uniqueness. The new objectives towards the pandemic are also related to the changed features of the crisis itself and the necessity for different crisis management accordingly.

As stated by the literature, the importance of effective leadership during the extraordinary Covid-19 crisis was mainly related to the ability of project managers to change their management and adapt to changes accordingly. If previous crises showed that analytical points of view, decisiveness, and delegating are essential within crisis management, the Covid-19 pandemic increased the necessity for an adaptive approach. If this leadership has not been used widely among some sectors previously, the Covid-19 pandemic necessitated it. In line with the literature, the project managers who used an adaptive approach managed not only to adapt to changes happening but also to build collective understanding and ensure maximum transparency among the team.

After the literature review, the challenges enclosed helped find the key factors for success determinants during Covid-19, such as ownership mindset, supportive team, quick digitalization, effective leadership, innovative approach, which eventually led to quick resilience of the companies. Since a few of them were related to the project managers, in particular, agility helped to cope with them by helping them to think and understand quickly. Also, implementing change management helped companies start working digitally immediately and adapt current technologies to the market needs accordingly.

After conducting the research analysis, most challenges from the theoretical part correlated with the practical angle of the research done. However, contrary to the literature, project managers leading projects during Covid-19 in AdTech have not faced trust issues with remote employees. In comparison,

lots of miscommunication was happening, which raised a necessity for finding ways of proper documentation storage. In addition, even though virtuality and ownership mindset were important success determinants throughout the pandemic for most sectors, this cannot be applied to the AdTech industry, as remote working and ownership approach are the key features of the AdTech sector in particular. However, research showed that some AdTech companies still lack an innovative approach and are behind the competitors by not offering the employees working from abroad possibilities, creating a competitive advantage over other tech companies. Lastly, the concept of effective leadership and its implementation in the AdTech sector showed that some project managers leading projects during Covid-19 still lack adaptive leadership features. In contrast - the increased number of new clients for the sector, the necessity to stand in line with competitors, demand for digital advertisement played a crucial role in the sector's stability in front of the pandemics.

Recommendations.

Although the research organized does not let generalize all the challenges and success determinants for effective leadership, leading projects in the AdTech sector during Covid-19, relying on the data gathered, a few recommendations can be made.

Keeping in mind that managers still lack soft skills, such as communication and empathy within their management throughout the crises, more attitude should be given towards implementing such skills throughout leading projects within crises, focusing on adaptive leadership approach. In addition, despite the AdTech sector offering innovative products and paying attention towards their employees' needs, the competitors' analysis with other tech sectors could be run not to lose working forces throughout the crises and keep talents within the company.

Limitations of the study.

As the theoretical part showed, the analysis of the AdTech sector and the challenges for effective leadership through the Covid-19 within is not broadly analyzed yet within this sector in particular. Relating it with the newest topic, it is still unclear have challenges and success determinants for the effective leadership leading projects during Covid-19 on a practical angle vary from the currently made research of this sector in theory. However, the majority of approaches covered within theoretical part relates with other tech companies, what let compare the results accordingly.

Another part of studies limitation is related to informants from the AdTech sector. With a changing market demand, project managers are not the only employees who have this title by the job position but also all others from the company, implementing and running projects. Although the research done

with participants with different job titles helped to look through the project management challenges different angles; since participants within their current job positions are also focusing on other job duties, it made it complicated to look at the impacts of the project management cycle in particular.

Considering that the Covid-19 pandemic is still lasting, most of the research participants claimed that they are already used to this workflow. That created a limitation towards dividing the challenges before the pandemic and now. However, since the Covid-19 pandemic is proposed to be endemic, not having an end, the identified factors should become a daily routine, and a new framework of working, to project managers for the future.

Implications for further studies.

As pointed out, some AdTech companies are still behind competitors in the technologies sector by not entirely using innovative practices. It creates tenseness to lose the position in the market and risk the employees, who could be headhunted, by companies offering better working conditions, for example, working from abroad opportunity. In this case, further research could be dedicated to one AdTech company, in particular, to find out internal factors affecting the normal business cycle during pandemics and look broaden externally.

Even though project managers running projects throughout the Covid-19 pandemic tried to adapt to the changes and used common sense, some lacked the competencies to use proper communicational skills or empathy. The lack of knowledge of the adaptive leadership approach shows a knowledge gap, leading to the company's instability during the crises. Further studies could help analyze the topic to understand what features project managers lack and what tools could help them feel more confident if another extraordinary crisis appears.

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ANNEXES

Annex 1

Interview guide:

“Hello,

thank you for accepting the invitation to give the time and to participate in the interview, which will help me to gather the information for the research accordingly.

Just before we start, I wanted to ask your permission for our interview to be recorded for academic purposes. After the information will be transcript, all the recordings will be deleted to align with the privacy principles: not to disclose personal data, such as names of individuals or your organization.

To familiarize you with the topic of my thesis, I am gathering information what were the main challenges for project managers during the Covid-19 crisis and trying to get aware of the success factors for effective leadership and the key features of it in the AdTech sector in particular. Because of this, I was contacting people who have experience in project management in this sector and could help me to collect the data.

Also, keeping in mind that I have not shared the questionnaire before our interview with you, do not hesitate to ask and clarify questions, if that necessity appears.”

Table 10: Interview guide

Part I: Introductory information about the respondent
<ul style="list-style-type: none"> • What is your occupation in the company / what is your department? • How long have you been working as a project manager / leading project? • How would you describe your experience as a project manager?
Part II: Main challenges running projects during Covid-19 in the AdTech sector
<ul style="list-style-type: none"> • What were the main challenges for you as an employee during Covid-19? • What were the main challenges for you as a project manager, leading team during Covid-19? • How would you say the project management cycle was affected by pandemics? • Have you spotted any triggers within the AdTech industry itself? (Related with products, company structure, etc.)
Part III: The key competencies needed for effective leadership throughout the extraordinary Covid-19 crisis in the AdTech sector

- Have you spotted how your leadership changed throughout the pandemic? If yes, how?
- What do you think are the key features of a good project manager throughout an extraordinary crisis?
- As a project manager, have you spotted that there was a demand to manage your teams differently during the pandemic? If yes, how has the management changed?
- Could you name your competencies, which helped you, as a project manager, deal with such situations?

Part IV: Critical success factors, leading projects throughout Covid-19 in the AdTech sector

- How would you describe what is the importance of a strong / united team throughout a pandemic? Please explain from your experience.
- In your opinion, what is the importance of the ownership mindset of team members throughout the crises? Do you have any examples to share?
- How long has it taken for your team and your company to start running business digitally throughout the pandemic? What helped or did not help in this process?
- In your opinion, what is the value of being agile, using quick decision-making and innovations throughout pandemic?

Part V: Future recommendations for effective project leadership during extraordinary crises

- Would you describe your company as being adaptive during the crisis? If yes, what methods were chosen?
- If a similar crisis would appear and you would be responsible for the team, what different techniques / skills would you use for your management?
- And the last question, would you be able to point out the most valuable lessons learned throughout the Covid-19, once leading the projects?

Source: created by the author

Annex 2

Example of Interview Transcript (II)

00:00:00.000-->00:00:45.550

Interviewer

<...> Okay, so let's start. What is your occupation in the company and to what department do you belong?

00:00:46.930-->00:01:11.500

I1

I belong to the Business Process Department. Currently, my position in the company is Senior Sales Operations Specialist. I'm mostly, I'm working with some optimizing and creating new sales processes. On the other hand, managing the implementation of the processes.

00:01:11.700-->00:01:14.810

Interviewer

Okay, thank you, and for how long? How long have you been working in this? I mean, implementing and leading the projects within your career?

00:01:26.420-->00:01:36.550

I1

OK, got it. I think it's about two years. Because, initially, I have started in another position but directly working with the projects I think began two years ago.

00:01:37.270-->00:01:42.740

Interviewer

And could you share what is your experience about that? How do you find that?

00:01:44.070-->00:02:32.150

I1

I enjoy it (*smiling*). I actually really like to manage the projects because I'm... I think I'm a creative person and sometimes I need to... I need to have additional maybe activity, where I could do with my creativity, but now I don't need to. I don't need anything in addition because I have already got my position. Uh, I can use technical knowledge, um... Together with my creativity, but not only... By

actually creating processes and creating, umm, let's say project description and project planning. So, all my strong size is working together while I'm managing the projects, and I like that.

00:02:32.160-->00:03:05.340

Interviewer

OK, good to hear. And moving forward, now I want you to remember that time when we were working normally and then, the Covid-19 started and everything changed. Maybe not everything... But let's come back to that moment, and from that moment, what challenges you, as an employee, have faced in your work field?

00:03:05.440-->00:03:41.570

I1

The challenges, maybe the first one, maybe the main one, is the lack of life meetings. Because it's always easy to understand each other, it's always easier to brainstorm when you're sitting on the one table, in the one room, and discussing that alive. You can put some charts on the table on a wall and discuss the processes and... The biggest challenge was that everything, I think, moved the online. When somebody is working from home and there are kids running animals, a lot of distractions. On the other hand, you cannot provide visualization of what you are talking about during online session. Or maybe you can open a paint, but it does not look like professional, so this was the second challenge in regards to having online meetings and a lack of visualization of what you're speaking. And of course, e-meetings, uhm... Are not providing full understanding of what... person maybe is talking about on the emotional part. Sometimes you cannot... If you are using meetings without the video, you cannot see even the person and face, right? And you can only hear the words and, um... It's hard to explain, actually, but you don't feel that person anymore. You don't feel your colleague and you are not fully sometimes getting the idea of what he's bringing to you just because you don't see it and feel him. And you cannot understand the emotions. Yes. What is also about the Covid, a lot of emails, I think everybody had that issue. Once again it is about, um... relationship at work. When you meet each other, you can fully understand? Uhm, with which vibe your colleague is coming to you to speak, and even if you are getting some negative feedback, you are managing the project right? And you have an idea how to deal with some issues and somebody is coming to you saying hey, you did a great job, but this is not how it could work. We need to think sometimes something else. On the emails it's happening in another way. You always are just getting some... yeah, well, your work, let's say is being criticized, right? You receive some critics and you cannot get the emotion of that email. Maybe the person was writing with a smile, but once while you're reading it, you will accept it maybe in a negative way. And this could bring some issues in managing the project, because you will still need to collaborate with a

person, but you received let's say negative feedback and you treated it as a negative. Then your response will be maybe not... Uh, provided not in the best way and here, and I would say, miscommunication is happening usually. Uhm... Also, about the challenges. I can see some good points as well here (*smiling*).

00:06:39.900-->00:07:09.000

Interviewer

Thanks. <...> if you could continue talking about challenges, I would like to ask you not just about personal challenges here, let's turn to the project management cycle itself. Has it changed somehow?

00:07:09.100-->00:08:30.580

I1

Yes. Let me think a little bit. I would say it has changed, but into a better way. I didn't see that somebody would start to delay with deadlines. Yeah, maybe once again, running the project you should manage all the communication between different teams. And, maybe miscommunications? Happened a little bit more often than before Covid. Because once again it was easier to organize a meeting to just bring all people together to the same room, explain what is happening, what is the plan for the project. Uh, how it should be delivered? To do just the original planning was easier before the Covid. As I told you before, when you have meeting personally, uhm things are happening in another way. Now, while everything is happening online, the planning became more difficult. If the projects are being delayed, now, you still need to deliver, until you have no other choice, but the process became more difficult.

00:08:30.680-->00:09:00.000

Interviewer

Following this topic about the challenges, not just for project management cycle, but about the whole structure of the company overall. I mean, challenges throughout the company perspective. Let's say it could be even layoffs, it could be related to products, it could be related to structure itself. Have your company faced with such challenges throughout Covid-19?

00:09:00.510-->00:10:17.950

I1

It's a good question (*smiling*). Uhm? I would say everything what is in SaaS model, they only win from the Covid, because when you have service as a product to sell, well, everything is moved to the online, as I told you before. And if you are providing not real product hardware but you are providing a software as a service. Then, you should win from the Covid. Of course, it depends. It depends on the services which you are providing. If we're talking about the AdTech. I would say. Majority of people are not

going shopping to the malls already after the Covid, but they're doing that online. If they're doing that online, that means that AdTech technologies should have received the better, huh...supply. I mean, they will be needed more often and the brands will need more advertisers... Advertiser's banners in the internet and this is why I'm thinking that Covid affected positively AdTech technology.

00:10:18.050-->00:10:46.460

Interviewer

OK, thanks a lot for sharing this. Uh, moving forward. Let's talk about leadership and maybe it changed in some ways during Covid. So, have you spotted that you've changed, I mean, as a person who was leading the team? And if yes, how? Maybe your leadership style changed in some ways?

00:10:46.700-->00:12:29.530

I1

OK, got it. Uhm? Let me think... Actually, the main difference... Let's say previously a good leader should be thinking, should be having mindset as a team coach and motivate team members? Let's say, if you have your team you need to get them motivated. You need to think about how to grow for your team, how to... How to support them with their personal professional growth. But during the Covid times, I think... Initially, what you need to think about, just how to collaborate with each other because the distance appeared between teammates during Covid times. Once again, because we moved to our homes, we moved to online meetings, etc. Yeah, and on the first place you need to think how to bring all people together instead of thinking about the motivation and other parts. And it actually became hard to, let's say control. It's hard to communicate. It's hard to collaborate, because the distance appeared. For me it's hard to say about leadership. I don't have my direct to employees under my role. But this is what I see from, from other teams. I would say. Maybe you could bring me some hints what you would like to hear more about that?

00:12:29.630-->00:12:55.550

Interviewer

Yeah, I mean you are definitely talking on point and maybe from that what you said... So what do you think – what are the main competences of a good leader, once he or she is leading project throughout Covid-19 or any other extraordinary crisis?

00:12:55.650-->00:12:56.300

I1

Umm? Competences. Uh-huh...

00:13:00.680-->00:13:20.770

Interviewer

Or maybe key features. What should have the leader running the projects during Covid time? I mean, what features, what competences, what behaviors should they have? What would you describe as the best, in order to succeed throughout those times?

00:13:21.400-->00:13:21.900

I1

OK, in order to succeed, OK. Uhm? It is actually a good question, because the answer is always complicated, you just need like to do the right things at the right time in the right way. But what is not right? Sometimes it's complicated to explain. First of all, I would say maybe 50% of success is the communication skills at these times. Because you can be a really great specialist, you can. You could be a great manager and have like really great ideas, but if you don't communicate in the right way on the right time, at least on time, to your teammates, to your project participants... If you are running the project, of course there will be involved different teams and if you have a great plan, have good ideas and have thoughts about the processes... If you didn't communicate it in a proper way, that will not work. You don't deliver on time. You don't deliver efficiently and some parts would be missing. Uh, in Covid times, it became more, I think important because previously you could go to your colleague and just speak to them right to him or her. Right now, it does not happen as majority of employees are working out of the office and you always need to send emails, and somebody can miss the email. You don't have a notification if it is really wise, right? Or not. You need to organize e-meetings. You need to organize calls. You need to send updates. You need to send follow ups etc. Lots of communication tasks. Uh, were added in additional? In addition, during Covid times. Just because you don't have a possibility to come to a person and just have one on one talk or to talk with one team or another team. So, I would say communication, communicational skills, should be there as well, and this is I would say half of the success. In running the projects.

00:15:37.160-->00:16:11.990

Interviewer

OK, thank you for sharing this. Uh, since you were a project manager, even though, you've mentioned that you don't have a direct team, but you were managing products, having struggles, difficulties and all those changes. Could you try to name competences of yours, which helped you to deal with such situations?

00:16:14.760-->00:16:16.830

I1

Yes, I have started... But not sure if this is related to Covid. Let me think about the Covid...

00:16:25.060-->00:16:37.910

Interviewer

I would say Covid was a process and it lasts for two years. Maybe, you know, you already used to what you are doing, but before Covid you never thought about it.

00:16:40.220-->00:18:33.750

I1

Uhm? Yes, this is why I need to think a little bit about that. Am, I just want to repeat myself. You know, it's not interesting (*smiling*). I want to think about something you to discuss. OK, let's firstly repeat. I would say my main feature was that I have tried more my communication skills because I had lack of them previously and sometimes, I wasn't sending updates on time. I wasn't pinging some team members or people from another team while managing projects on time. Now, I really structured my work and I really structured my work time. I have started to use planning board. Just not to forget to send email. Not to forget to update because as I said previously, I was able to just come and discuss and that's it. Now you don't have that possibility to do so, I need to track each and every communication I'm doing. Uhm? I would say my work became more structured during Covid times. Just because you are logging every action, every communicational part, what is happening with the project. Umm? Moreover. Umm. My features. Of course, I needed to work with self-discipline, but it's not related to project management, so let's keep it, I think.

00:18:34.990-->00:19:05.110

Interviewer

OK, thank you for sharing. Now, let's talk about team and the importance of the team throughout Covid-19 in projects. So, how would you describe what is the importance of united and strong team throughout the pandemic and when something extraordinary is happening?

00:19:15.780-->00:20:10.290

I1

I would say this is top level important thing for the team and for each team member to feel as a part of a team and a part of our organization. Uhm, and this is directly related to each employee motivation in the organization, because who's doing the work in the best way - only motivated employee, right? If

you are missing that feeling of... united team. If you are feeling that you are doing your work on your own, you are not related to anything. You are not doing any impact. You cannot feel it. You cannot feel the impact if you're working alone because you are not, maybe receiving the feedback in the right way. This is why and here we are getting demotivated employee and here we have the bad consequences. I would say yeah.

00:20:16.830-->00:20:17.190

Interviewer

Maybe you have any experiences of yours of the strong and united team per Covid or in contrast, the team, who was not united and you have to deal with them and how it all ended up?

00:20:36.270-->00:20:43.230

I1

Yes, actually my experience was to have really united team during Covid times and I would say yeah, our relation was... it was getting better and better during Covid times, than it was before, because we didn't appreciate coming to office together. Let's say sitting together in the same meetings. Before the Covid, but when it happened, we started to appreciate the time spent together and we saw the difference. Uhm, what is happening when we're working together as a part of one team and what is happening when we are working alone. First of all, I'm getting back to communication as well because this is really important thing (*smiling*). If you're working as one team, uh, as a united team, miscommunications are almost not happening, because, yeah, having these alignments every time it is, it doesn't matter if you are a leader or you are just a part of a team - alignment should be happening between all the team members, just not to double warn, not to repeat the maybe another person's mistakes and other employee's mistakes. Uhm yeah, so what they have seen? We have some teams in (mentions the company), right, my colleagues. Uh, who are not feeling as a united team? And I saw that several times, I needed to repeat the same thing, but to the different person. But these persons were from the same team. So, if the communicational part would be in their team, and if they would have this alignment, maybe meetings, maybe some more time together, let's say. In this situation what happened, and my time would be saved and their time would be saved because they would not ask me for the same thing five times, but they would ask one time, align between themselves and that's it.

00:22:50.550-->00:22:51.170

Interviewer

OK, thank you. And following the topic about the team. Let's talk not about the team, but about

ownership mindset of employees. So, what do you think what is the importance of managing people with ownership mindset? And what is the importance of such people throughout the crisis?

00:23:00.990-->00:25:06.520

I1

OK. To be honest. It's hard to compare. Before Covid and after Covid. What is the difference? For me it's always important to have that ownership mindset, you know, and so. If you don't have it... Then there is a question, what are you doing in the company? What is your goal here? Or if you don't own anything. Then, that means that you're not really doing impact to the product, to the, I don't know, processes, it doesn't matter in which sphere you are working. If you're working with the processes, but you don't own any. So, what you're doing here actually, what is your purpose of being here? Uhm, even if we have some support teams, maybe they're not working directly with the product, but they could own some processes inside, they could own some tools they could own, maybe, uh. Uhm, projects as well, right? They would like to implement and help and this brings a lot of motivation to the employees when they have some ownership mindset. On the other hand, of course, everybody is different and sometimes people like enjoying. Doing something. And they don't need to feel that impact to the whole organization, and they're pretty much okay with that, they have another life goals. Sometimes personal goals. What is exactly about me, I cannot leave, I cannot work, I cannot manage anything without ownership feeling, because in another case I don't understand what I'm doing here and if I don't understand, I'm trying to find another solution, where I could understand what I can do.

00:25:16.940-->00:25:37.580

Interviewer

OK, that makes sense. And thanks for sharing this. And since throughout Covid-19 we moved digitally, so how long it took for your team and the company itself to go digitally? What helped on this or what distracted this process? How do you remember that?

00:25:45.900-->00:27:28.400

I1

To be honest, it was better than expected. Everybody before the Covid, everybody was afraid of moving digitally, right? And everybody was expecting delays and delays in responding sponsors delays in, uhm, in performance. But nothing of that happened. Actually. Initially, it was maybe one month or two months of onboarding when somebody maybe could expect delayed responses. Everybody needed to use to the new, so, oh, let's say work structure. But in general, I would say in our company, it went really well and at least we didn't start to deliver, deliver less. From some teams, I have heard that they have started to

deliver really better. Yes, maybe the feeling of the responsibility. Everybody was afraid to start working digitally, right? And everybody was afraid and that responsibility feeling not to do any mistakes, not to delay, speed up people. And maybe this is why they have started to perform better. They understood all the processes of working digitally. They are saving their time and maybe, I would say, the work in (mentions the company) became more efficient. When we have moved to digital. What is about the services, so previously we worked only, as I told you before, we are SaaS company, which is providing services. Still, I would say. It didn't impact product a lot because we stayed in the same scope. It only affected the internal employees.

00:27:38.020-->00:27:53.020

Interviewer

OK, so would you agree with the opinion that companies which were able to adapt to the digitality throughout the Covid-19 as soon as possible won more than the companies who were struggling? What is your opinion of this?

00:27:53.120 --> 00:27:53.630

I1

Yes. Sure.

00:27:54.180-->00:28:12.550

Interviewer

So, in your opinion, what is the value of agile thinking or quick decision making and innovations once something unexpected is happening? What is the value of it towards people, employees, company structure?

00:28:17.280-->00:28:26.090

I1

Uh, you mentioned and agile thinking and you want to see the strong size of it when something is happening, could you please clarify?

00:28:26.190-->00:28:27.910

Interviewer

Uh. Yeah, I would like to ask, what is the value of it throughout something extraordinary? Or maybe it doesn't have a value?

00:28:36.600 --> 00:28:37.130

I1

It has. Yeah, sure. Uhm? But before answering, could you maybe bring me an example, because I'm not sure if I get it 100% correctly.

00:28:53.310-->00:29:24.560

Interviewer

OK, so let's say, agile is the type of management, which has quick decision making, which has something like you, for example, have a deadline, but you can still come back to something, still improve something. It's not like the things cannot be changed throughout the process, so agile is about flexibility, about changing, about improving, about new projects, maybe innovations and everything is in process. And you don't see what is the last result we are going to get.

00:29:42.990-->00:33:08.100

I1

What I would say, in our world, you would not survive without agile methods. I think this is happening in all the companies, so you need to. You need to start doing that or you will get fired (*laughing*). Or you won't have success, I would say, because everything is changing really fast in our world. I would say, it is related to all these spheres and all these scopes and all the companies. It doesn't matter if you're working with AdTech, especially, with the AdTech, where the new functionalities were developed and previously here, one year, two years ago, there was one stock of services, let's say. Now, we have doubled it, or maybe tripled right during the time. And you always, you always need to adapt, actually. Something is changing and you always need to adapt. If you could have the strict structure and you have two weeks or two months before you have planned something, but then. But UM, on some level, something was changed. Maybe some legal? I don't know, agreements, where by the government some legal restrictions in regards to Covid were applied, and now, you cannot proceed in the old agreed way, you cannot stick to the structure, you have explained two months ago. You need to think about the new structure, new process, and your goal and your deadline, etc. So, of course. It would be an ideal world where you have all structures, old planned without any amendments. Uhm, you can avoid... You can avoid being too flexible in the managing the projects if you use your communication skills (*laughing*). If you're. Collect the correct and full criteria from dedicated teams. If you don't skip anything from the team, while you're managing the project, and on the initial step, if you will collect the full criteria and will be able to analyze it, you can skip these flexibilities during the project lifecycle. Because if you have collected everything, there is really little risk that something can change from other team's side. It could be changed, due to priorities inside the organization, or if you are working in the global company.

There are a lot of hierarchy levels and something can happen on really high level. Then if the result is going to be dropped down into you and you need actually to change your clients. You cannot stick to the old plan during project management. This is one thing, but another thing from your side what you can do, you can avoid to be too much flexible on our working efficiently during the planning of the project. Correct, yes, communication between different teams between these stakeholders, I would say, in a proper way. Uh, if I find flexibility or agile, as a good thing, in most cases, yes, because, as I told you before, in our world, you don't have any other choice. You need to adapt and you need to be agile and you need to be flexible in other way you will you... You won't be successful.

00:33:28.200-->00:33:30.630

Interviewer

OK. And you talk a lot about adaptiveness about that it helps the agile, decision making, that everything is changing. So OK, next question... Would you describe your company being adaptable during the crisis and do you have any examples on this?

00:33:52.650-->00:35:15.400

I1

Oh yes (*laughing*). Ah yes, sure, we were really agile, adaptive, flexible all the synonyms you can find. We are like this (*laughing*). Actually, directly, it is related to the product itself. Uhm, during Covid times a really war began between agencies and between different tech providers, AdTech providers. Uh, because the digital advertising moved to the next level and we have got really great big clients during Covid times and that means that companies really understand that everything went to online shopping and they need to improve the advertisement from their side. And we even began to suggest individual, let's say billing setups. We could have standard way for most of the clients and we could have one unique billing process which will be done absolutely manually, just because we wanted to win this client during Covid times because it was really important. Then yes, my answer is for sure yes, I have given you an example. I think that would be enough (*smiling*).

00:35:25.140-->00:36:00.040

Interviewer

Yeah, thank you for these examples. Now, let's come back again to you and let's imagine that similar crisis happens. What would you, as a project manager, or what skills competences of yours, uh, would you use differently in order maybe to avoid previous problems, which happened? I mean, once everything was unaware. In order for you, as a project manager, to lead projects successfully and to succeed with the best result?

00:36:04.450-->00:36:05.740

I1

Ah, OK. Let me think again. But I think we have discussed these strong sizes and features right, which helped me to manage projects successfully. And what is the difference of this question to the previous one?

00:36:26.280-->00:36:40.880

Interviewer

Uh, maybe the difference that you have some future recommendation for future managers. What they could do differently? Because previously you shared your experience, what helped you but you know, maybe there are some...

00:36:38.510-->00:36:41.150

I1

OK, OK, now we're talking... Wait, we need to discuss this agile, flexibility part, but from my perspective, what I could recommend, correct?

00:36:51.130 --> 00:36:51.530

Interviewer

Yes.

00:36:52.420 --> 00:36:53.050

I1

OK, yeah. Did I tell you something about communication today? (*laughing*)

00:36:59.410 --> 00:37:00.010

Interviewer

Yeah (*laughing*).

00:37:02.340-->00:39:00.070

I1

I want to get back to it. I really think that these times this is really the most important, one of the most important parts. I told you it's always important to do the right things on the right way, on the right time. But the communication part is really important one. And while we do have this, we could be agile

company, right? And as I told you before, you cannot be like, let's say, static company with really predefined structure in predefined processes. Everything is changing. So, you need to adapt. But it would be really easy to adapt if that communicational part is high quality and efficient. If some decisions are coming from the top managers. The faster they will lay down to the bottom level of employees, the faster they will adapt. And in case the decision was made months ago and only after one month bottom level employees getting aware of the decision. The adoption levels. The adoption speed is being decreased. Right? If it would happen before one month, then the adaption speed would be increased and then we could expect worse, let's say, better performance and maybe, shorter deadlines. Something like that. So, I would say the first and only advise. It's not to forget about the communication between the teams and between employees, because if you're working, especially remotely, if you're working in the real big company with more than 100 employees, it's really important to get them aware of what you are thinking of and what you are deciding of.

00:39:08.140-->00:39:11.030

Interviewer

OK, thank you. And then, the very last question. So, again, coming back to the situation before the crisis and during the crisis. What are your most valuable lessons learned, which you could use throughout another crisis? Or maybe not throughout the crisis, but you could implement in your daily work as a project manager? Let's summarize that.

00:39:42.070-->00:39:44.460

I1

Yes, let me think again. This is lasting for like 2 years and sometimes it's hard to remember what was done. The great think, I have started to register each step, even the small one. What wasn't done before, and I actually don't know the reasons why it wasn't done before. Maybe, I think, it's really a good practice to register all the emails, all the messages into the one place, but I have started to do that during Covid times.

00:40:16.400 --> 00:40:19.550

Interviewer

What do you mean register messages and...

00:40:19.440-->00:43:03.250

I1

I will say to you. Previously, I was managing the project right and I have all my colleagues in office at

one place and I need some clarification. I'm going to that colleague, getting that clarification. That's it. I have that in my mind. Maybe, I will amend some criteria according to that, but I didn't. I didn't register that communication anywhere. It stays only in my head and sometimes it is leaving only here and getting nowhere after that. But right now, once you have Covid and once we have readings in text mostly, and even if you have an e-meeting, usually, you have that meeting notes email after the meeting, where you are summarizing all the things you have spoken about. And just because a lot of emails are coming and not only to me, I think a lot of people started to, let's say register everything. What is happening at each end every communication? I haven't done that before Covid, but I have started to do that during Covid times. Uhm? Once again, maybe to highlight. Actually, my response and my colleagues' response time became better because again, it's hard to speak about the reasons while you're managing the projects. Uhm? Your delivery time depends on other people, usually, on how they deliver. And during Covid times, they have started to deliver faster and I have started, as a project manager, to deliver faster. And once again, I was thinking, maybe this is the feeling of responsibility. Maybe people were afraid of not to deliver or delay in delivering. Maybe people started to save more time. Let's say they're not... If you're working at home, I don't think you will go for a coffee for one hour. You will take your 10 minutes and that's it. You will get back to work. And everybody became really more responsible. I became more responsible during Covid times because I want to deliver better actually than I have delivered before. And the response time to my colleagues internally increased. I would say, during Covid times, this also could be counted to the communication part as well. Uhm, what's more was increased, let me think, don't you have any examples?

00:43:13.020-->00:43:13.650

Interviewer

No, I don't.

00:43:14.860-->00:43:15.520

I1

You don't (*smiling*).

00:43:15.620-->00:43:16.410

Interviewer

I only take yours (*smiling*).

00:43:18.630-->00:43:19.230

I1

OK. Uhm? Maybe we could mention meeting deadlines, I have started to meet deadlines. More efficient, actually, haven't missed any deadlines during Covid. I can be proud of myself (*laughing*).

00:43:37.690-->00:44:48.750

Interviewer

OK, that's nice (*smiling*). But with what was it related? You learned to do this thing throughout Covid, so how it is related with Covid itself? You were afraid of something or you just realized that you cannot see those people, you cannot control emotions all together, and you just want control additional things coming, if you want to meet deadlines? What was the reason behind this?

00:43:49.400-->00:45:39.520

I1

It's a good question. I'm not sure if I have the fully correct and clear answer. First of all, Covid has consequences, right? Working from home, if we build that relation, Covid is equal to working from home, and working from home is equal to a higher responsibility level. You don't want your manager to think that you're not working. You are sleeping too much. You are eating for a long time. You are leaving earlier. You are finishing the job earlier, not at 6:00 PM, but maybe on five or something like that. You don't want that to happen. You want to prove that you can to work from home efficiently, smoothly and you can deliver. You want to prove it to yourself. You want to prove it to your manager. You want to prove it to the whole organization. And maybe this brings some. This brings some pressure to you, as for a project manager, because you, you want to prove that you can deliver on time, still, if you're working from home. But you're working from home because Covid and I would build that relation, but still, it's directly related to working from home. When pressure appeared. The higher level of responsibility. Uhm? Like for your managers appeared, but this happened because of Covid because in another way, we didn't start to work from home. Yeah.

00:45:49.680 --> 00:45:50.190

Interviewer

OK. Thanks.

So, thank you very much for answering all my questions and I am stopping the recording, one second.