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Virtual Project Management Analysis

Case Company: Five More Minutes Games

Thesis

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Thesis abstract

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Dispersion and virtual working have become widely popular in the last few years. Technology-based projects enable companies to recruit the best talents globally, to work more flexibly, and to minimize costs. However, this kind of working brings new challenges to management and requires a different kind of attention. The aim of the thesis was to identify, based on the literature, the key challenges of virtual dispersed project management and to further reflect on them against the daily operations of the case company. The objective of the study was to identify the potential areas calling for improvement and the strengths of the team through an in-depth analysis of the company, conducted by interviewing each team member.

The foundation for the thesis was built on the literature by field professionals and researchers. It consists of insights into project management, risk and conflict management, virtual team management and communication, and cross-cultural issues. The study was a qualitative company-internal analysis conducted with in-depth interviews with all the four members of the team. The interview frame consisted of semi-structured questions and themes directly linked with the literature.

The theoretical framework provides a thorough view on virtual working, as to what it consists of and what the best practices for effective management are. The results of the interviews were compared to the literature. They point out that the case company has managed to create a strong set-up within its first six months of operation. It can be concluded that especially the company's technical solutions and processes are highly functional; yet, team spirit and personal relationships could be further developed. By acknowledging this, the company can improve its efficiency through increased creativity and employee involvement.

Keywords: virtual work, remote work, project management

SEINÄJOEN AMMATTIKORKEAKOULU

Opinnäytetyön tiivistelmä

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Liitteiden lukumäärä:

Hajautetun työn ja virtuaalityön suosio on kasvanut huomattavasti lähivuosina. Teknologiapohjaiset projektit mahdollistavat parhaiden lahjakkuuksien palkkaamisen kansainvälisellä tasolla, joustavammat työskentelytavat sekä kustannusten minimoinnin. Tällainen työskentely tuo kuitenkin uusia haasteita johtamiseen ja vaatii uudenlaista huomiota. Opinnäytetyön tavoitteena oli tunnistaa virtuaalityön ja hajauttamisen projektijohtamiseen tuomat haasteet kirjallisuuden pohjalta ja peilata niitä asiakasyrityksen päivittäisiin toimintoihin. Tutkimuksen tavoitteena oli löytää yrityksen kehityskohteet ja onnistuneet toimintatavat analysoimalla sitä perusteellisilla haastatteluilla.

Opinnäytetyö perustui alan ammattilaisten ja tutkijoiden tuottamaan kirjallisuuteen. Teoriaosuus koostuu projektijohtamisen, riskien- ja konfliktinhallinnan, etäjohtamisen ja kommunikaation sekä monikulttuurisuuden aihealueista. Tutkimus puolestaan toteutettiin kvalitatiivisena, yrityksen sisäisten syvähaastatteluiden avulla. Puolistrukturoidut haastattelukysymykset ja teemat liittyvät kiinteästi kirjallisuuteen.

Opinnäytetyön teoriaosuus luo kattavan pohjan sille, mitä virtuaalityöskentely sisältää, sekä hyväksi koetuille projektijohtamisen käytännöille. Verrattaessa haastattelumateriaalia teoriaan kävi ilmi, että toimeksiantaja on onnistunut luomaan hyvän perustan yrityksen ensimmäisen kuuden kuukauden aikana. Erityisesti yrityksen tekniset ratkaisut ja prosessit todettiin vahvoiksi. Tiimin yhteishenki ja henkilökohtaiset suhteet vaativat kuitenkin vielä kehittämistä. Tämän tiedostamalla yritys voi panostaa tiimin monipuolisempaan osallistamiseen ja luovuuteen ja täten parantaa suorituskykyään.

Asiasanat: virtuaalityöskentely, etätyöskentely, projektijohtaminen

TABLE OF CONTENTS

| | |
|---------------------------------------|-----------|
| Thesis abstract..... | 2 |
| Opinnäytetyön tiivistelmä..... | 3 |
| TABLE OF CONTENTS | 4 |
| Tables, Figures and Pictures..... | 6 |
| Terms and Abbreviations..... | 7 |
| 1 INTRODUCTION | 8 |
| 1.1 Research Problem | 8 |
| 1.2 Research Objective..... | 9 |
| 1.3 Research Scope..... | 9 |
| 2 LITERATURE REVIEW..... | 11 |
| 2.1 Project Planning..... | 11 |
| 2.1.1 Project Charter..... | 11 |
| 2.1.2 Work Breakdown Structure | 13 |
| 2.2 Project Evaluation | 15 |
| 2.2.1 KPIs & Metrics | 15 |
| 2.2.2 Progress Monitoring System..... | 16 |
| 2.3 Risk Management | 16 |
| 2.4 Conflict Management | 17 |
| 2.4.1 Communication Platform..... | 18 |
| 2.4.2 Rules & Regulations | 19 |
| 2.5 Team Building | 19 |
| 2.6 Virtual Communication | 21 |
| 2.7 Cross-cultural Issues..... | 22 |
| 3 RESEARCH..... | 25 |
| 3.1 Case Company Introduction..... | 25 |
| 3.2 Research Methodology | 25 |
| 3.2.1 Data Collection | 26 |
| 3.2.2 Data Analysis..... | 26 |
| 3.3 Findings | 27 |
| 3.3.1 Planning..... | 27 |

| | |
|----------------------------------|----|
| 3.3.2 Evaluation | 27 |
| 3.3.3 Risk Management..... | 28 |
| 3.3.4 Conflict Management..... | 28 |
| 3.3.5 Team Management..... | 29 |
| 3.3.6 Virtual Communication..... | 30 |
| 3.3.7 Cross-Cultural Issues..... | 31 |
| 4 CONCLUSION | 33 |
| BIBLIOGRAPHY..... | 34 |

Tables, Figures and Pictures

| | |
|--|----|
| Figure 1 Project Charter..... | 13 |
| Figure 2 Graphic WBS | 14 |
| Figure 3 Intended WBS..... | 14 |
| Figure 4 Characteristics of High-performing Teams..... | 20 |
| Figure 5 Cultural Context Scale | 24 |

Terms and Abbreviations

| | |
|------------|---------------------------------------|
| WBS | <i>Work Breakdown Structure</i> |
| KPI | <i>Key Performance Indicator</i> |
| VoC | <i>Voice of Customer</i> |
| USD | <i>User Centered Design</i> |
| DF | <i>Deal-focused (culture)</i> |
| RF | <i>Relationship-focused (culture)</i> |

1 INTRODUCTION

1.1 Research Problem

Five More Minutes Games is a new mobile gaming company, established in October 2019. The employees are dispersed and the projects are executed virtually. The aim of the research was to scan the virtual project management processes to discover any possible development areas. The research focuses on the practical side of implementing the projects by the employees and the management, in a very early stage of the company's development.

Without effective project planning, evaluation, risk management, communication tools and team building the company can end up wasting resources. Project planning and continuous evaluation can minimize the risks from the start. Risk management helps the company recognizing the risks and preparing for them to be able to correspond better. Thorough two-sided communication helps the team visualize projects as a whole and to improve processes and cut handling times. Additionally, it can build relationships and improve the work environment which can lead to increased creativity.

Employee dispersion and technology-based projects bring flexibility and efficiency to the modern way of working, however neglected can also have a negative relation to the end results through poor planning and evaluation, risk mitigation and team spirit. As a rather new theme working virtually has far less research and literature compared to traditional project-natured work, which is why some practices may not be the best suitable for virtual working. Hopefully in the future researchers will come up with the most effective tools and processes for such kind of working.

I wish this thesis will give some valuable pointers to the case company in evaluating their processes and back up possible internal development ideas. This thesis can also give a good understanding of the most common pitfalls for unexperienced virtual teams everywhere. Additionally, and most importantly this thesis will show the

gaps in modern literature about this new topic and hopefully inspire new researchers to start expanding our knowledge on what virtual and dispersed working really brings.

1.2 Research Objective

The base of the research is backed up by literature, acknowledging the most common issues in virtual team and project management. The themes can be divided in three larger categories, planning and evaluation, risk and conflict management and team building and communication including the cross-cultural aspect. Thorough project planning in the initial stage creates the foundation for the project by which it can be measured and evaluated on later. Furthermore, risk management goes hand in hand with project evaluation as its aim is to detect lags and constraints based on the estimations and minimize them from an early point. In virtual teams most of the conflicts stem from poor quality or complete lack of data and technological tools. The absence of face to face communication combined with cultural dispersion can weaken the relationships and the quality of communication, which therefore require added attention. The biggest themes re-surfacing from the literature were project planning, risk management and communication. All the fore mentioned themes are widely known, however require different kind of approach when working virtually in a project-based team.

By recognizing the most common issues and mistakes made in virtual project management, through literature by known project managers and virtual professionals the purpose of the study was to identify the main problem areas manifesting in the case company, and to further understand them through the employee insights.

1.3 Research Scope

The aim of the research was to examine how the project management is executed in a small dispersed virtual team of four people within the first six months of establishing the company. The research builds around the themes of project planning and

management, risk and conflict mitigation and virtual cross-cultural team management. The interviews were gathered in an early stage of the company's development as in-depth interviews between the team members. As the size of the company is limited to four people each of them were interviewed to get a holistic view on the operation. The company consist of two managers, one artist and one developer. Due to the small size of population no further generalizations outside the case company can be drawn. Due to time constraints the interviews were held in a lengthy time period with the first one being held in February and the last one in April. The changes made within the company during the time were considered when comparing the results, yet did not have a heavy impact on the overall results.

2 LITERATURE REVIEW

2.1 Project Planning

Abels et al. (2006, 1) link project natured work in to innovativity as it builds up from differing features compared to traditional work: limited time frame, designated team or organization and a new issue to address. Ergo, most of the projects conducted always deal with higher uncertainty and likelihood of risks.

"Although planning does not guarantee project success, lack of planning will probably guarantee failure." - Dov, Raz & Shenhar (2003, 1)

The key to success and avoidance of failure lies in proper planning in the initial state of the project. In this first step towards project execution the aim is to gather a list of project requirements, which can be collected by several methods, such as interviews, workshops or prototypes. Interviews and workshops are a great way to gain opinions and knowledge from all the stakeholders, whereas prototypes can be an efficient way to build up raw versions of products to understand all opportunities, such as design and functions. Whatever method is chosen, it is important to understand, weigh and ensure all the requirements properly before moving on to implementation, to avoid added costs, delays and confusion. (Phillips, 2013. 46-48)

Rad, Parviz and Ginger Levin (2003. 21-22) agree that the basis of a project should be built of clearly identified requirements and goals, as they will function as the key metrics of the project's success. However, it is fairly common for the requirements and goals to change as new issues manifest along the project. These changed interests will define the future of the project, whether it will be further developed or cancelled. The changes can often lead to increase in costs or time required. To minimize these issues, a project charter is recommended.

2.1.1 Project Charter

A study conducted by the Standish Group (1994), comparing the high rate of success of bridge building projects to the high rate of failure of software projects,

showed that projects with a close connection to the higher management and sponsors have a higher chance of succeeding, than of those without. A good way for the management to show their dedication and increase involvement on the employee side is by establishing a clear project charter.

There are several frameworks for a project charter, however they all revolve around the same themes. McKeever (2006, 1) explains it as a document created together with all the stakeholders, authorizing the project and ensuring required resources, which not only states deliverables and responsibilities but also creates common understanding. According to McKeever (2-3) project charter should address the following issues:

1. Project name
2. Project purpose (what, why & how?)
3. Project scope (boundaries)
4. Project objectives (S-M-A-R-T)
5. Roles & responsibilities
6. Project approach (strategy & methods)
7. Project deliverables (with milestones & deadlines)
8. Constraints & assumptions
9. References
10. Terminology
11. Risk management
12. Required facilities & resources
13. Performance measures
14. Approval (of all the stakeholders)

A more simplified project charter by Jennifer Whitt (2012) outlines the factors the project is built upon, the scope of the deliverables, the managers and their responsibilities, a schedule for the milestones and the budget for all resources. To conclude, a project charter not only tracks the evolution of the project, but also eases the management by creating a common understanding of the project goals and scope for the stakeholders.

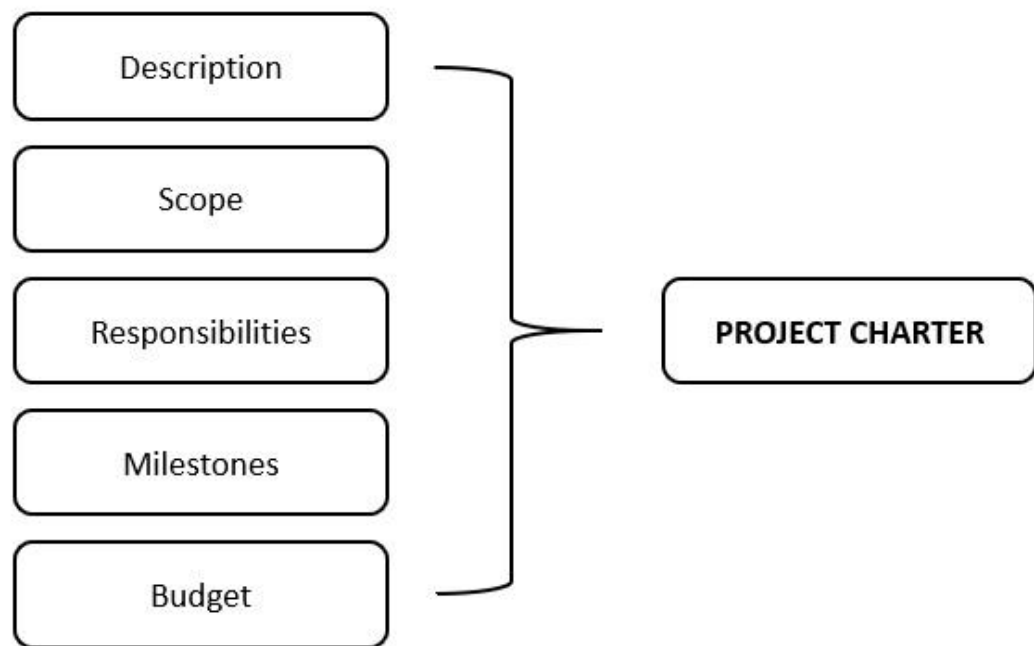


Figure 1 Illustration of project charter by Whitt, J. (2012)

2.1.2 Work Breakdown Structure

After the project has been established and the scope defined within the deliverables, responsibilities, goals, schedule and budget, a detailed work breakdown structure can be made. It is a description of the project work to be done in the initial stage of a project to create a steady foundation for an easily measurable project with realistic goals, Kendrick (2013, 251) states.

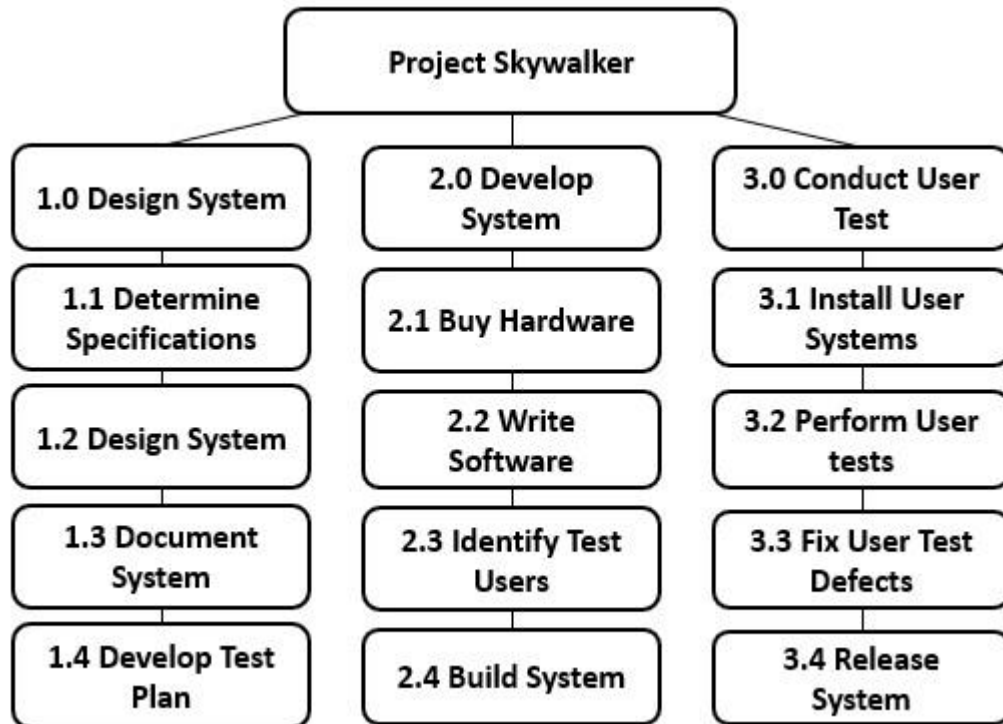


Figure 2, a graphic WBS by Kendrick (2013, 253)

James (2007, 40-45) highlights the importance of a WBS as it functions as a framework for the whole project by identifying each aspect from work tasks to schedule and budget. Before making any decisions or changes the managers should always look at the work breakdown structure to understand all the underlying dependencies of each part of the project. The two most used WBS's are the graphic WBS, which visualizes the project as whole (figure 2), and the intended WBS (figure 3) which suits better for complex and detailed projects.

| WBS number | WBS level |
|-------------------------------|-----------|
| 1.0 Project Name | 1 |
| 1.1 Major Project Subdivision | 2 |
| 1.1.1 Task | 3 |
| 1.1.1.1 Subtask | 4 |
| 1.1.1.1.1 Work Package | 5 |
| 1.1.1.1.1.1 Components | 6 |

Figure 3, an intended WBS by James (2007,45)

2.2 Project Evaluation

Thorough and continuous evaluation is crucial for a project, Thamhain (2014. 129-130) stresses. A failed project not only weakens the company's market position, but wastes resources and key competencies. Project evaluation is a process where the project's progress and financial health are reviewed on a regular basis, Taylor (2007. 162-163) explains. An effective way to view the state of the project, is to set specific key performance indicators (KPI's). "A KPI is a metric measuring how well the organization or an individual performs an operational, tactical or strategic activity that is critical for the current and future success of the organization." (Kerzner 2017. 22)

Evaluation does not only consist of testing, but should highly link to pre-determined goals and tasks to the target of evaluation. Frechtling (2002, 3) believes that the key to project development lies in thorough evaluation, by understanding which project aspects of tasks are not being met and why. Additionally, as projects often tackle new issues and/ or methods used there are often new insights to discover. Therefore project work can widen understanding and open new doors.

2.2.1 KPIs & Metrics

Once the key metrics to track the project's goals have been established, the KPI's can be confirmed through "S-M-A-R-T" framework, which spells five criteria's a KPI needs to fulfill: specific, measurable, attainable, relevant and time-bound, Kerzner (2017. 134) explains.

KPI's can be approached through quantitative, qualitative or combined measures, Thamhain (2014. 131-139) explains. Quantitative approach often aims to determine the cost-benefit through economic or financial measures. Quantitative measures provide reliable and effective information, such as net present value or return on investment, as long as precise estimations can be drawn. However, quantitative

methods are not solely the most suitable option for complex evaluations. Qualitative methods are a good method used solely or as a supplement of quantitative data, as it offers a broader view on meaningful metrics and understanding of market and organizational aspects. Some of the most common methods for qualitative evaluation process are surveys and benchmarking.

2.2.2 Progress Monitoring System

A progress monitoring system is an important tool for project management and should be well integrated in the management culture to get the full use out of it. It should track the progress of the individuals as well as teams in the form of reports, enabling the management to analyze the development of the project piece by piece. At it's best, a progress monitoring system can have a great positive impact on the collective progress, as it clarifies individual expectations and helps the team to see the common goals (Rad et al. 2003. 29-30).

There are many different ways of measuring the success of a project. Barber and Miley (2002, 1-3) criticize the traditional way of measuring project success by schedule, budget and quality as independent metrics. Instead, they recommend the Earned Value Approach which evaluates the project performance as a whole by simultaneously relating the schedule and budget to the output. I.e. even though the real cost of the project surpasses the estimated budget a higher quality of the product or earlier finishing date can still make the project a success depending on the project goals.

2.3 Risk Management

Risks are somewhat inevitable in project management and often lead to changes in scope, cost or schedule. Thorough risk management is of high priority to prevent the expand of small unsolved issues. The aim of risk management is to identify the biggest risks, their probability of occurrence, estimated impact, as well as the required responses, Rad et al. (2003. 27-29) explain.

The contemporary business environment includes an increased number of potential risks in social, cultural and organizational areas. Reed & Knight (Martinelli et al 2017. 42, as cited in Reed & Knight, 2010) call these additional virtual risks “silent killers”, as more traditionally customized project managers used to the traditional business environment may err to ignore these. Some of the biggest risks for virtual teams are defective knowledge exchange, lack of cohesion and poor technical solutions.

The advanced technologies enable us to identify and manage issues that are analytically visible, such as schedule, budget and technical risks. However, there is another spectrum of risks stemming from unconnected issues which can end up harming the project. The awareness of the complexity of these risks has led to project managers understanding the importance of both internal and external collaboration to cover as much ground as possible.

According to Rad et al. (2003. 27-29) the key to successful risk management is a continuous, collaborative communication between all the stakeholders, which lowers the risk for undetected issues and broadens the knowledge base.

To conclude, it is most effective to combine tools, such as internal review meetings and brainstorming sessions with external tools like voice of the customer (VoC) and user-centered design (USD) and supplement the risk mitigation with analytical analysis. (Thamhain 2014. 308-313)

2.4 Conflict Management

Ferrazzi (2012) divides conflicts in two types; interpersonal conflicts and task related conflicts. The interpersonal conflicts are less likely in a virtual team, as the members are more focused on their assigned tasks within the team. Task related issues tend to be more approachable and easy to fix, however, unresolved can lead to personal conflicts due to the lack of emotional communication.

Zofi (2011. 103-106) suggests that most of the conflicts of virtual setups stem from the lack of structure, which creates space for issues such as misunderstandings and

false perceptions. Furthermore, she detected four types of conflicts in a virtual workplace: performance conflict, identity conflict, data conflict and social conflict, which all require different type of attention.

According to Zofi, performance conflict lags the progress with ambiguity caused by the lack of task allocation and/or instructions. Clear overall objectives need to be defined in order to measure performance and hold members accountable. In addition, an elaborate structure helps creating coherence and awareness within different teams and individuals leading to improved productivity.

A person suffering from an identity conflict often has multiple ongoing projects and is accountable for several teams, and therefore suffers from overlapping priorities and schedules. It is the management's responsibility to establish clear expectations and deadlines to ease the prioritizing process of the employee.

An employee working on several projects might be also facing a data conflict receiving a great deal of information from several sources. This data might be controversial when reported in different formats and updated anomaly, which should be avoided by a clear reporting system and consistency in data processing. Harold Kerzner (2015. 18) says that an information overload can also occur when stakeholders crave excessive amounts of information which may not be relevant for their decision making. This can decrease efficiency as detecting the core metrics get harder. It is the project managers task to provide each stakeholder with the necessary data specifically for them.

Finally, the social conflict which manifests from indistinct team distribution and the lack of face to face communication. To avoid a project conflict stemming from social point, it is important to have a clear set up of teams from the start and by allowing team members to connect with each other.

2.4.1 Communication Platform

According to a study conducted with 60 teams of three to four members the results on team cohesion are highly similar between teams working face to face as to teams that communicate with a high level of media richness (Hambley, O'Neil & Kline.

2006, 15). A rich communication medium enables verbal and nonverbal cues, natural language, immediate feedback and presence of personal emotions (2006, 3).

According to Majchrzak (2012) an effective way to reciprocate on virtual conflicts, is by creating an online space for the virtual team to discuss about issues. This forum creates transparency and brings the opportunity for team members to bring up issues whenever they occur, along with the possibility to look into the matter and respond with more knowledge and versatility when the time suits.

2.4.2 Rules & Regulations

In order to minimize conflicts of virtual teams Sembdner (2011, 63-65. as cited in Konradt and Hertel 2002. 110, 79) suggests establishing clear internal procedures for communication and behavior, such as how to forward feedback, get support, schedule meetings or praise success. By asking the right questions and establishing common rules, the confusion leading to conflicts can be further reduced.

In their empirical research on team performance, Hoch and Kozlowski (2014. 9) found that the higher the virtuality of a team the bigger the impact of structural support systems on the team performance. They agree that the modern virtual work environment can cause ambiguity, which could be minimized by establishing clear routines and structures. Furthermore, dispersion, often hand in hand with virtuality, can lead to lack of motivation and therefore poor performance. They believe that the key to increasing motivation within a remote team lies in sharing responsibility and rewarding for success. (2014, 3-4)

2.5 Team Building

According to Thamhain (2014. 422-428) effective team leadership has proven to be a crucial factor for project success in the contemporary business environment. Thus, it's multidisciplinary characters set several challenges for the management. Before the technology changed the way we work today, managers could guarantee success by strong control and establishing work, timeline and resources. In addition to that

there are now several other areas to focus on to ensure effective and creative results listed below.

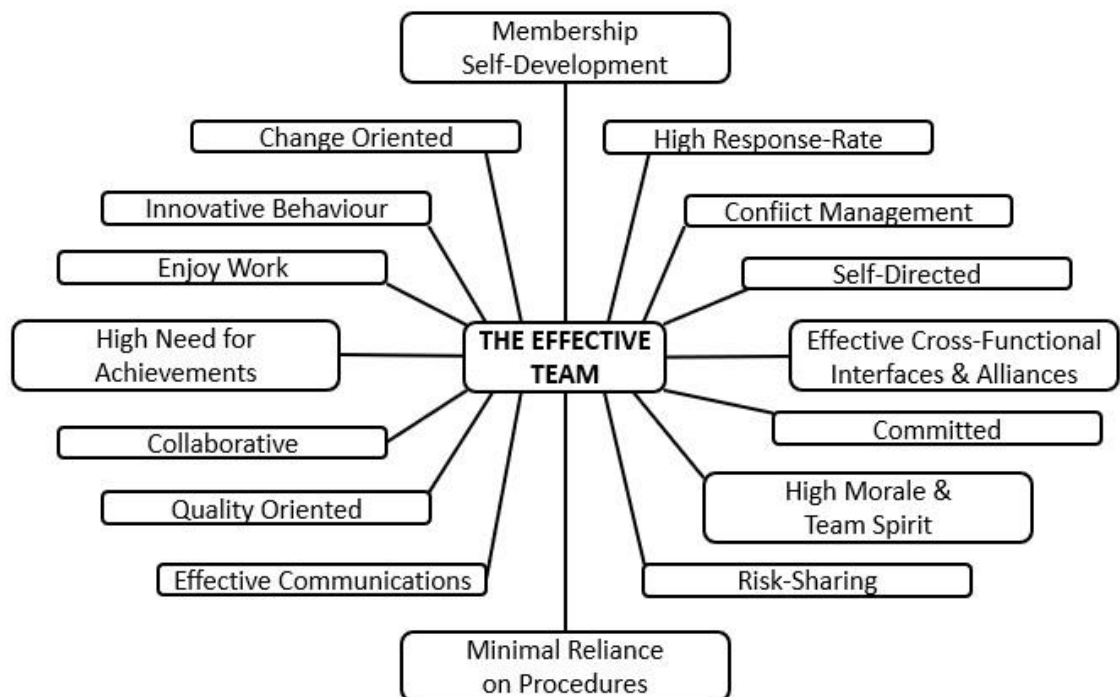


Figure 4 Characteristics of high-performing teams by Thamhain (2014. 425)

Rory Burke and Steve Barron (2014. 173) add that the right kind of team environment is important for effective teams. A strong leader can foster creativity in a team by creating an environment of trust, consensus, recognition and flexibility. In addition, common objectives and a sense of belonging combined with collective decision making lead to a cohesive atmosphere and better internal problem solving within the team.

There are many factors with a positive effect on team performance, heaviest ones stemming from employees professional satisfaction which can be achieved through challenge, recognition, trust and respect in the workplace. Work and task related factors have shown to have less impact on team performance, however pairing the right people with the right tasks has shown to have high value. In addition, effective cooperation and communication combined with structured project planning and effective technical processes guarantee a functional organizational setup. Finally, it all comes down to the leadership as it defines the fore mentioned conditions. The

tools and techniques used by the management are set to enable effective operation. Thamhain (2014. 430-433)

Rad et al. (2003. 48-50) state that trust is a vital element of a productive team, especially when working virtually. For the employees to be able to connect, common understanding and respect is required, which is a challenge with a distributed team without the option for face to face communication. Virtual communication eliminates the cues of traditional communication, which affect on the general comprehension. When communicating effectively, knowing the counterpart's identity helps the receiver to understand the comprehensive interaction. The manager can improve the working environment by creating consistency by encouraging regular communication and data exchange between parties throughout the project.

2.6 Virtual Communication

When choosing the right technological solutions for communication, it is important to consider the needs of the team. Synchronous communication is necessary for on-time decision making, problem solving and brainstorming, whereas non-urgent issues such as information and data exchange can be carried out asynchronously. Additionally, it is important to consider what kind of interaction is required by the team: conversational relationship building, collaborative communication, transactional exchange of material or all of the above. Location wise, globally distributed projects are the most challenging form due to the distribution of time, distance and culture. These factors leave little to no room for synchronous communication and therefore centralization of communication is suggested. (Martinelli, Russ J., et al. 2017. 177-178)

Projects that are not too related with other projects of the organization and not highly dependent on other team members can be executed through asynchronous communication. Highly complex tasks, however, require combination of both synchronous and asynchronous communication as they require collaboration, knowledge sharing and can be interdependent with other projects. Project workflow defines how the tasks must be completed. Sequential tasks are interdependent and cannot be

completed without each other. Parallel tasks, however, can be carried out independently prior to final integration. Ergo, both types of workflow require collaboration and therefore an electronic workspace. (Martinelli, Russ J., et al. 2017. 179-180)

2.7 Cross-cultural Issues

Zofi (2011. 153) explains that culture is a concept shaped by values, behaviors, morals and the way one sees the world. Merging these aspects creates a cultural pattern which can be viewed in two ways, through stereotypes or generalization. Stereotyping is a negatively seen way of creating opinions based on perceptions. Generalization on the other hand, puts together claims based on thorough analysis and can be very useful when working cross-culturally. However, in business cultural aspects are often neglected even though they affect the workplace in both good and bad.

Gesteland (2007. 25, 39) has acknowledged several cross-cultural variances in business behavior. To start off, he divides the globe in relationship-focused (RF) and deal-focused (DF) cultures. RF cultures consist of Asians, Arabs, Africans and Latins who tend to place high emphasis on knowing the client or partner before committing in business. RF cultures aim to build interpersonal relations and communicate indirectly, whereas DF cultures, Northern Europeans, Northern Americans, New Zealanders and Australians, strive to be clearly understood and communicate directly. In contrast to RF cultures, DF cultures live in high-trust societies and focus on the sole content of the deals.

Furthermore, DF cultures are considered as low context cultures, meaning the communication is highly based on the exact words spoken, unlike in the RF cultures where the context can re-define the spoken word, Gesteland (2007. 45) explains. RF cultures perceive negative emotions as rude and therefore display such feelings with gestures and other nonverbal negatives, Gesteland (42) continues. These differences in culture create space for friction and misunderstandings. According to Gesteland (51) best way to avoid such issues is by increasing the awareness of cultures differences. By doing this colleagues and partners understand that differing

behavior is not necessarily related to one's personality, but on behavioral culture instead.

Gesteland (2007. 51-53, 63) also divides Nordics, Australians, New Zealanders, Americans, Canadians and Dutch to informal, egalitarian cultures and the rest of Europe, Asia, Mediterranean, Arab and Latin cultures into formal, hierarchical ones. Differences in power and status are clearly distinguished in formal cultures, unlike in the egalitarian cultures where equality is highly appreciated.

According to Zofi (2003. 154-155) the four biggest conflicts in a cross-cultural virtual workplace arise from the lack of informality, perceptions, status differences and interpretation of context. Dispersed teams have a poor possibility for face to face communication, which weakens the quality of connection and decimates personal influence. When the communication is affected by these factors it creates space for psychological noise, which occurs when the receiver creates a false perception of the sender's message. Varying perspectives on status can also create friction in the communication, when people perceive hierarchy in different ways. Another factor that needs to be recognized when communicating with other cultures is the weight on context interpretation. Countries with high-context culture have put a higher emphasis on the nonverbal cues when communicating, where people from low-context cultures surpass the words over other cues.

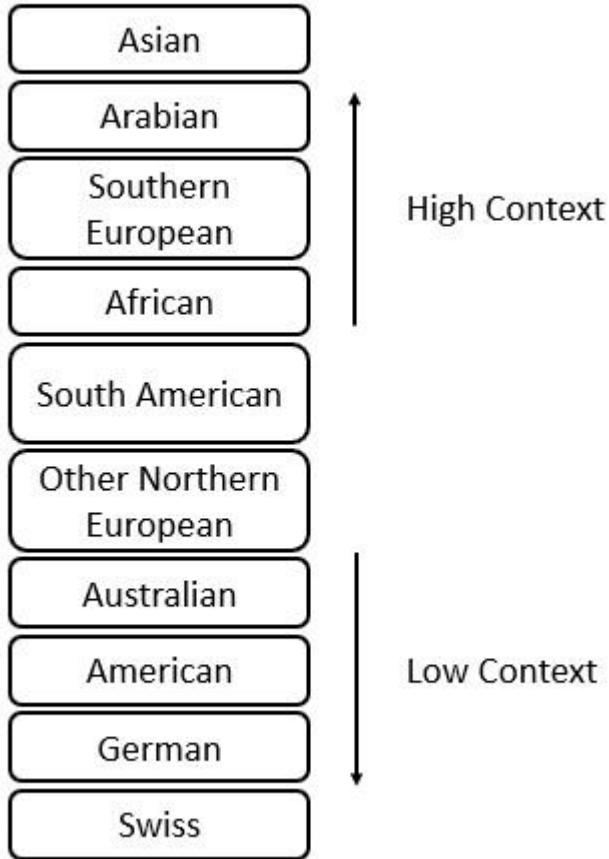


Figure 5 Context scale of different cultures (Zofi, 2003. 156)

3 RESEARCH

3.1 Case Company Introduction

Five More Minutes games is a small independent studio aiming to make successful hyper casual games, with simple mechanics and design, for the mobile industry. The ideology of the company is to quickly ideate, prototype, test, iterate and publish games to test the potential in this highly competitive industry. Transparency, open communication, data driven, creativity and innovation along with power to people in small teams is what drives the company to create creative and interesting games for large masses.

The goals and ambitions for the company is to not just create a one off hit but to look at long term success with multiple hit games which gives the founding members enough resources and experience to expand and conquer this market. It's a relatively small team of 4 with no intention to grow it to 100 even with a streak of successful games, instead keeping it lean and in small groups of highly talented, motivated and performing individuals to grow together with the company, with a very clear and strong screening and recruitment process.

3.2 Research Methodology

The execution of the research based on applying and comparing knowledge gathered from literature and gained insights from the case company interviews. The aim of the research was to identify the main virtual management issues in the company, along with employees perceptions of them. The study was conducted as a qualitative research. According to Williams (2008. 67-68) qualitative research bases on observation of real experiences and interpretation of data. Such method gives an open and holistic approach on the subject and can be viewed through several types of techniques which all have their own affect on the results. Qualitative research can give out plenty of information and detect smaller phenomena on specific groups, but the downside is that due to the small sample size no deeper generalizations of population can be drawn.

To gain as much information as possible the data was gathered via interviews. The questions were open-ended and formed in a semi-structured manner, with specific themes and topics, but with a possibility for follow-up questions. Semi-structured interview consists of a set of pre-determined topics or questions which give the interviewee and the interviewer the opportunity to open up topics and themes considered important for the research (Longhurst. 2003, 1). The open nature of semi-structured interview creates a natural flow of conversation and can lead to in-depth information. However, the data can also turn out biased as the questions and topics covered may vary and the interviewee might feel social pressure without anonymity.

3.2.1 Data Collection

The interviews were held with each member of the company, the managers, the artist and the developer, who all have a different function within the company. The interview lengths were between 45min to 1h 15min depending on the flow of the conversation. The questions were categorized in advance clearly referring to the topic sections in the literature review. The questions consisted of both, open-ended and closed questions with follow-up questions.

3.2.2 Data Analysis

Each interview was recorded to be able to analyze the data later on as equally as possible regardless of the open nature of the conversation. After all the interviews were held, the data was litterated based on the main questions and themes for each interview and then compared with each other, to discover similarities and differences in attitudes and perceptions. After which the results were further compared with the literature analysis.

3.3 Findings

3.3.1 Planning

The management organizes a kick-off meeting upon the start of each new project. Before the general meeting is held, the management gets together and discusses and plans what type of game is going to be established. After which they communicate the ideas to the developer and artist, who then get to express what can be done and how. When the plan has been made the team plans the schedule together depending on the tasks, resources and dependencies. From the interviews I got an idea that the employees aren't too included in the brainstorming phase of the games, but that so far they are happy with that as they feel the management has a deeper knowledge of the market and trends. However, I did also get the sense that the management would be open for ideas and suggestions from the team's side.

In the literature review we went through the concepts of a project charter, which identifies the description, scope, responsibilities, milestones and budget of the project, as well as a work breakdown structure, functioning as a type of a project checklist. I can say that all these factors are identified in the kick-off meeting, however not in a very systematic way. I do know that there are a lot of things that change alongside game development as new issues manifest continuously, and that therefore it is not even that effective to plan too far ahead. However, I would like to see what kind of effect a more systematic progress planning and tracking combined with iterative standards would have on this type of work.

3.3.2 Evaluation

As established earlier, a continuous project evaluation is critical for project success. Presumably due to the alterative nature of mobile game creation, this aspect is well covered by the company. Daily standups are held in order to get a run-down of progress each day with each project deliverable. During these standups the employees have the possibility to ask questions, share information and re-schedule deadlines as needed. The company also utilizes both synchronous and asynchronous

communication tools effectively to guarantee a smooth and effective communication throughout the day, which is important especially due to the time differences.

The key KPI's for the team are the time it takes to finish a prototype and the quality of the end-product. Implementing a specific progress monitoring system does not make sense for this company as it would require plenty of resources as well as possibly even complicate the alterative flow of the operation. However, a system to bring a more collective understanding in the whole company progress with all the games and plans could have a great impact on the employee satisfaction through added cohesion and understanding. This could be done i.e. with monthly meetings about the company performance in a broader sense, such as market updates and news, retrospectives of finished projects and gathered learnings from them.

3.3.3 Risk Management

Risk management is all about identifying and predicting risks to prevent them from snowballing into bigger ones. In this set up it could be i.e. a small error in communication such as an undetected technical impossibility which would lead to the team developing a game further and further before realizing the whole game can not be created leading to wasted resources. Literature recognized some of the biggest potential issues for virtual teams to be poor knowledge exchange and ineffective tech solutions. Basing on my interviews I would say that the technology provided for working and communicating is effective and that the daily standup meetings enable a rather smooth knowledge exchange. As stated in the theoretical framework collaborative communication lowers the risk for undetected issues and that part is well covered by the technological tools provided and frequent meetings.

3.3.4 Conflict Management

As acknowledged in the theoretical framework, most virtual teams suffer more from task related issues, rather than people related issues, which fits for this company as well. Within the team the task allocation is as clear as it gets, as there is only one

developer and one designer on top of the management. Due to the differences between the tasks of the positions there is no need for a clarified allocation. Nonetheless, the continuously alterative character of developing games can bring challenge for the management on providing clear structure and objectives. These could create a more profound idea of the common goals for the employees and therefore nurture better performance.

The company keeps developing new games and improving older ones throughout the operation, which means several ongoing projects at a time. This could create conflicts, but well maintained be a good thing. The team highlighted that they enjoy the project-nature of the work and seemed rather happy with the management. If there are overlapping priorities the employees can get in immediate contact with the management to ask for help in re-prioritizing. I assume it also helps to know that other employees aren't even capable to do your job, so you know you're in the final end of one's own deliverable.

When it comes to data, the management keeps most of it to themselves, which is well accepted by the employees. The management shares all the required data with the team, but does not suffocate them with a data overflow. The employees are also well aware of the fact that they are able to get more information from the management if required.

The lack of face to face contact could have a bad effect on the team spirit, or even performance. However in this team it seemed more like a pro than a con. The lack of so-called unnecessary meetings and chitchats was positively perceived by the whole team, and probably one reason for great efficiency. The team has clear roles and possibility to connect via technology even more than face to face in a traditional set up.

3.3.5 Team Management

The way the management treats the team and the atmosphere, can have a high impact on efficiency and creativity of the whole team. Efficiency often stems from professional satisfaction, challenge, recognition and cooperation. The employees

enjoy great satisfaction with their work as they have rather open hands in creating what they can and the possibility for self development in their profession. The job often offers challenge for the employees, as the only limit is often their own capabilities and therefore drives for self development, too. As the team is very small recognition is easily available as successes are easily traceable. Communication between the team and the management is efficient and regular which enables good cooperation.

Creativity, on the other hand requires trust, consensus and flexibility. The team enjoys a great deal of trust from the management side, which shows in the form of self-created deadlines and autonomous work. Flexibility is almost a given, as things change constantly and require re-organizing. The consensus however is mostly in between the management to decide on, which the employees feel fine about as they do not have the market knowledge. The employees also have the ability to work on their own projects which is encouraged by the management. This however can create the feeling of inequality between the team members, which could be avoided by transparent and open communication and added ownership from the employee side.

3.3.6 Virtual Communication

The team has very frequent communication between all the team members, most of which is synchronous. The daily standups are organized every day for the whole team together, where everyone has a chance to audio communicate on time and react to each other. On top of which the team interacts by chatting online synchronously. The team barely uses email as they can more effectively communicate on time and act on the things needed immediately, without letting the issues to expand or cause a delay in the schedule.

The synchronous communication tools offer a good platform for brainstorming and team building as well, which is important for the project workflow due to the complexity of the tasks. The ability to share text, audio, video and figures online enables a very smooth and effective communication and knowledge sharing within the team.

The management and the employees are located in different continents, which could cause issues due to the time difference. Fortunately, the flexibility of the management team has enabled the team to overcome the time zone differences by working in the evenings, which allows the team to work during traditional working hours.

3.3.7 Cross-Cultural Issues

Considering the team consists of people from three different continents, the cultural aspects can not be overlooked. However, the differences between India, France and Brazil seem to come together quite well. One of the biggest factors I noticed that all of the team members have a very clear understanding of each others job roles and high respect for one another. Needless to say, all of the team members come from highly hierarchical countries and prefer a rather formal tone while working.

Three out of four people of the team come from relationship-focused countries, which tend to put high emphasis on building relationships and knowing their business partners. In despite of this the team does not have strong interpersonal relationships, which surprisingly seemed to be perceived as a positive thing amongst the team. It was understood that each individual prefers to keep the work in the center of the communication, which could be due to the project workflow and individual focus areas. Even though most of the cultures within the team are not categorized as deal-focused ones, everyone agrees they are able to communicate directly and efficiently with each member of team.

Low-context cultures tend to communicate mostly through spoken word, whereas high-context cultures tend to use more gestures to forward their message. This, combined with virtual communication, could weaken the quality of communication within a multicultural team if unrecognized. Though, within this team it does not seem to be a big of an issue, possibly as the communication is rather straightforward and work-related. When it comes to the context differences between the cultures it can be said that misunderstandings happen within the team, although it may not be due to false perceptions or poor communication, but more due to the creative and abstract nature of the projects. However, by increasing audiovisual communication

and supporting multi-media documents the amount of ambiguity could possibly be further decreased.

4 CONCLUSION

The base of the thesis was built on the literature review consisting of several topics on project management, virtual working and remote team management. The main pillars of the theoretical framework were chosen due their significance on the fore mentioned areas based on existing literature. The chapters from 2.1 to 2.7 give the reader a holistic view on some of the biggest areas worth focusing on when managing projects with virtual dispersed teams.

The research was conducted in the form of semi-structured interviews which were directly linked to the topics covered in the literature review. The interviews brought up valuable information through open conversation and opinions, from which development areas as well as successes of the company's virtual processes could be drawn.

The key takeaway from the research showed that the biggest development area for the company is a rather low level of cohesion, which though does not have a negative impact on productivity. However, according to literature the company could further increase the team performance by putting more effort on interpersonal relationships and free interaction. The company has successfully managed to maintain frequent communication through which the project evaluation is frequent and comprehensive, which is one of the most effective ways to manage risks in advance. Due to the small size of the team and specific roles the team also enjoys a clear task allocation regardless of high level of interdependencies. Nonetheless, a technical tool allowing each member to visualize each deliverable together with responsibilities and roles could help building unity within the team.

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