

Development of the project management for organizing the logistics services to a Formula One race

A case study of a local logistics agent for Formula One Vietnam 2020 that was postponed

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Abstract

The Formula One Series or Grand Prix is believed to be the most famous event in the motorsport world. The logistics of organizing each race requires an enormous amount of work, and it must be performed in cooperation with hundreds of parties around the world.

F1 Vietnam 2020 was the first F1 race to be held in Vietnam, and it was challenging for both the event promoters and logistics organizers to ensure the success of the event. In this context, the study focused on the performance and experience of Arktic, a Vietnamese logistics agent, which was responsible for handling all goods of F1 Vietnam 2020.

The objective of the study was to investigate the Arktic's project performance to review which areas should be improved for better services for the next time. It was hoped that the information presented in this study could be considered valuable resources for any party involved in the logistics work for an F1 event so that they could prepare for delivering better services.

In order to reach this objective, the qualitative research approach was applied. The heads of several departments, not only within the chosen logistics agent but also its strategic partners, were interviewed to collect diverse perspectives toward the project performance. The interview results were transcribed and analyzed afterwards.

The result of this study could be utilized by Arktic and other companies that follow a similar scope of work with an F1 event in the future. Nevertheless, the differences in working culture and industry must be considered before making any decisions.

Some proposals were given to Arktic to improve their performance in the next F1 projects. However, the results of this study should be reviewed after each project so that they could be amended and made more suitable for the users.

Keywords: Formula One, F1, the race, logistics, project management, Vietnam

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Terminology

Arktic The nominated local logistics agent for F1 Vietnam 2020

Circuit My Dinh circuit, the racing location of F1 Vietnam 2020

COVID An infectious disease spreading globally in the first half of 2020

Cut-off time Latest possible date or time that export cargo should be

delivered to the vessel

DHL A logistics company, the official logistics partner of Formula One

ETD - ETA Estimated Time of Departure – Estimated Time of Arrival

Grand Prix Another name of the Formula One race

GK A logistics company, one of two strategic partners of Arktic

F1 Formula One

FOM Formula One Management, the company responsible for the

promotion and administration of the F1 championship

Force Majeure An event that is out of control of an organization that prevents

the organization from delivering its obligation.

Flyaway race A Formula One race that is held outside Europe

IT Information Technology

KPIs Key Performance Indicators, a type of performance

measurement

Minh Nhat A logistics company, one of two strategic partners of Arktic

VGPC Vietnam Grand Prix LCC, the local promoter of F1 Vietnam 2020

1 Introduction

1.1 Background of the study

In recent years, Vietnam as a developing country has made a great deal of effort to reach out to the world in various fields, such as economy, trade and entertainment events. Globalization has made a positive impact on the growth of the Vietnamese economy by increasing the flow of goods as well as facilitating access to new cultures and higher living standards here. Regarding entertainment events, the Vietnamese have started to gain more interest in international sports, such as football, basketball, tennis and motorsports over the past few years. F1 racing, short for Formula One, is arguably the most well-known event in the motorsport which is not so popular in Vietnam. Therefore, the F1 global organizer, FOM, decided to choose Vietnam as a new race destination as of 2020 to attract more interest from the people here and open opportunities for foreigners to explore Vietnam.

VGPC, which stands for Vietnam Grand Prix LCC, announced to be the local event promoter for F1 Vietnam 2020. Being the host for the race meant that VGPC, either by itself or via a third-party subcontractor, was responsible for a considerable amount of F1 goods which would be transported to Vietnam to support the event. Since Vietnam is a country with strict customs regulations, VGPC needed to cooperate with a local company in order to handle the logistics work efficiently. After a long process of competency assessment, Arktic, short for Arktic GP Services Company Limited, was nominated to be the local logistics agent for F1 Vietnam 2020. Being in charge of the logistics activities, Arktic has collaborated with GK and Minh Nhat as two strategic partners to deliver the project together.

Unfortunately, the event was announced to be postponed in March 2020 due to the COVID pandemic, only a few weeks before the racing dates. Until that point, the project had been going well as planned, and every party was ready to set up the first F1 race in Vietnam. However, as this F1 project of Arktic should last for at least a few

years, the postponement of F1 Vietnam 2020 in April was not the end. The event could be rescheduled at the end of 2020 depending on the decision of FOM. That first project could be considered a test run for Arktic to assess its competencies and gain more information about F1 logistics work in order to be ready for the next time.

1.2 Research objectives

The study was conducted with the objective of improving logistics services that Arktic provides to FOM and other involved parties who support the organization of the F1 event in Vietnam. By studying the performance of Arktic in the F1 project, the author hoped that this agent could review its experience and apply the proposed development ideas to handle the project more effectively in the next F1 events. Furthermore, the result of this research could be a reference for future researchers who want to conduct studies related to this area.

The following research questions were used in this study:

- How did Arktic prepare for the F1 project?
- What went well and what problems did Arktic have while executing and monitoring the F1 project?
- What should Arktic pay more attention to in order to improve the project performance for the next time?

2 LITERATURE REVIEW

How could a project be considered a success? It depends on the factors that the project stakeholders and organization are mostly focused on, such as on-time delivery, saving costs and high-quality services. Understanding those key points should help the company to further identify the project goals and objectives. Once the target is established, it moves to the preparation, execution and monitoring phases which are the main stages of a project. In this chapter, the author focused on the main project phases. The risk management and logistics work for the F1 race are introduced later in this case study.

2.1 Preparing for a project

One of the critical factors for the success of a project is the preparation work in the beginning. A thorough and comprehensive plan should pay off for the performance of the project in the long run. In the preparation phase, the key activities are creating plans and schedules, building a project team, collecting information and gathering resources.

2.1.1 Creating project plans and schedules

Planning and scheduling are interrelated with each other because they form a guideline for the whole project ahead. While planning sets the project scope and work procedures, scheduling converts those outputs into a workable timetable for future follow-up and monitoring. (Moylan 2002.) In the beginning where there is barely information about the project, and the process of creating plans and schedules is valuable because it provides the participants with an overview of and orientation to the work ahead.

The first step should be to identify the project goals and scope of work. The project goals usually originate from the stakeholders' requirements in several aspects, such as time, cost, quality and services. Afterwards, they are converted to business objectives

and broken down into smaller achievable items with specific milestones in order to direct the project team toward the stakeholders' requirements. Once the objectives are defined, the scope of work should be clarified to summarize what is included in the project, for example, its length, list of services and products required from customers, and resources needed for the whole journey (ibid.).

When working on the schedule, all tasks must be listed to avoid any project areas being untouched. Engaging the whole team in making the list is the most effective way as ideas and expertise from different departments provide more diverse perspectives than any individual, even the project manager himself (Westland 2019). Thereafter, the tasks should be filtered and put in a priority order to generate a project schedule. Each task should be allocated to at least one person based on the importance of the task, the person's competency and his workload. By putting people's names into the schedule, a commitment is made between them and their assignment. The timeline including one task followed by another also illustrates the impact of one's work on that of others. (Berkun 2008, 24-25.) The schedule can be created by several means, for example, Westland (2019) recommends using the Gantt chart which is a tool for making a schedule where the schedule is visualized and the links between the tasks are presented so that the users can easily monitor the project progress (see Figure 1).

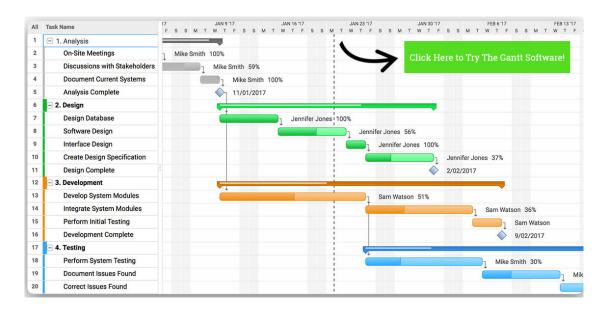


Figure 1. An example of a Gantt chart

2.1.2 Developing a project team

In order to succeed, every project must have a competent and united team. No matter how well-prepared the procedures and technology are, the project objectives cannot be accomplished without the right people. According to Darter (2016), identifying potential candidates for the team and planning a strategy together should be one of the first actions in the beginning phase of a project.

Each individual in the team matters, from the project managers to the intern who is hired to support the other members. The team members should come from different departments to provide diverse functional expertise for the future work of the project. Strong competency and interpersonal skills of each member are required to enable them to solve their problems as well as support others if necessary. Above all, there should be a project manager who can coordinate activities amongst the group, motivate the team members, share a long-term vision, and be fully invested in the project (Alexander 2017).

However, developing a project team is not simply selecting strong individuals and putting them together. A team only works if there is a high level of trust and an inspiring environment existing within the group. Darnall and Preston (2012, 151-153) explain in their book that trust forms the ground for all relationships. A mutual trust between two individuals enables a genuine and open relationship and encourages constant communication and cooperation between them. A group with the members trusting each other is often an open and supportive entity where everyone is updated with the working progress of others and always willing to assist others if necessary. In a broader view, a high level of trust between two organizations often leads to a high frequency of information exchange and a cooperative attitude toward each other. With clear communication, both parties collaborate to find solutions together instead of simply providing services as requested (see Figure 2).

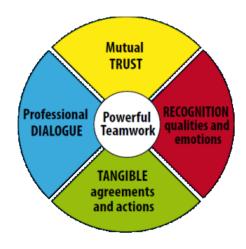


Figure 2. What makes good teamwork

Acknowledging the importance of this issue, it is the responsibility of the project managers to develop a climate of mutual trust and a motivating work environment for their members. In a team, the members could come from diverse cultures, have different personalities, and thus, the leader needs to facilitate an environment that drives the project ahead. There should be no hesitation to give a compliment or constructive feedback to a member whether it comes from his/her supervisor or colleague. Sometimes the strongest driver for an individual at work is the recognition and motivating attitude that come from the surrounding people.

Throughout the project, the formed team should be developed as they work together. The job competencies, work knowledge, interpersonal skills and overall environment are the key points for boosting the project performance. Upgrading knowledge and skills enables the members to deliver the project tasks with lower costs, on-time schedule and higher quality. Meanwhile, the team must keep increasing the level of trust and frequent communication flow between the members. Only then a dynamic and cooperative culture could be created within the group to encourage the team spirit, cross-training between participants, sharing of know-how and expertise. (PMBOK Guide 2013, 274.)

2.1.3 Preparing knowledge and resources

According to Alavi and Leidner (1999, 5), knowledge can be defined as "a justified personal belief that increases an individual capacity to take effective action". In project management, as well as business in general, knowledge is considered a critical factor to the success of an organization. Before initiating a project, the team needs to accumulate knowledge of customers and involved parties, the nature of the market related to the project including products, services and competitors. Understanding customers' needs and the working culture of the partners improves the cooperation level during the project execution phase and increases the customers' satisfaction. With regard to individuals, strong workplace competency is insufficient since the knowledge of the market is critical in project work. If one has experience with the goods and involved services, he surely saves abundant time and costs in the working process with internal and external parties. The number of mistakes is also mitigated because of his experience acquired beforehand. Moreover, the team members can benefit from their co-worker's knowledge, which leads to self-improvement and better productivity at work. (Manimaharan 2019.)

In most situations, there is a need to procure or hire resources, such as materials, products and equipment, either for internal usage or for providing to the customers. The procurement or hiring process for a project remains the same as the usual one, including the planning phase, sourcing and selecting suppliers, making contracts and monitoring product performance (PMBOK Guide 2013, 355). To prepare resources for the project, the sourcing department needs to cooperate with the project manager or other responsible persons to combine all demand of resources from different internal departments as well as project partners with clear specifications and quality requirements. With those inputs, suppliers are gathered and selected to provide the requested resources to the project team. This process is affected by the overall project schedule and budget, and vice versa; therefore, any change in one end should be promptly informed to the other for proper adjustment.

2.2 Executing and monitoring project progress

2.2.1 Maintaining effective communication

Communication is the first element in project success. Without clear communication, people simply cannot work together efficiently. Employers and colleagues certainly enjoy working with a good communicator, no matter what industry they work in. In a project, effective communication can tighten the team members' bonds, faster cooperation with internal and external partners, motivate each other and improve working productivity. However, it requires a significant amount of work to build such a healthy and productive environment. Rajkumar (2010) mentions in his article that 90 percent of a project leader's time is used for communicating with his followers and partners. Figure 3 illustrates the money and time lost due to poor communication, which increases considerably toward the end of the project's life. Therefore, developing and maintaining an effective communication system is critical to the success of a project. To achieve that goal, a suitable communication system should be implemented in the beginning of the project to provide participants with a good foundation later.

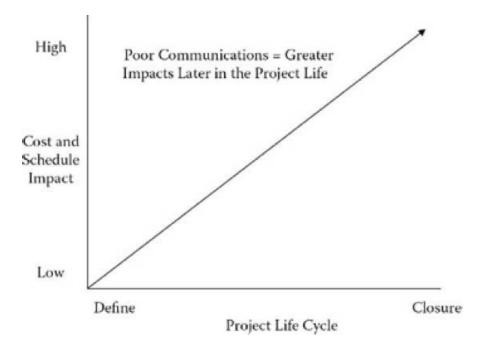


Figure 3. Cost of poor communication in the project

To build a cooperative environment, every member should develop their communication skills beforehand. Honesty is the first element that creates bonds of trust, a key factor in every relationship. With trust, one can count on one's partner to fulfill the assigned tasks and responsibilities. Working in a team leads to different opinions and mindsets, and thus, being open-minded is an essential trait for productive conversations and cooperation. As a result, active listening is required in the communication process. It means giving co-workers full attention when they are speaking and discussing the related content together. Being listened to makes people feel appreciated, which creates trust and better collaboration later. (Doyle 2019.) However, verbal communication is not the only important factor as body language makes up fifty-five percent of each conversation (Rajkumar 2010). Therefore, one needs to be careful about whether their non-verbal messages make others feel welcomed or uncomfortable. Other factors for building effective communication are empathy and motivation. Learning to know about the colleagues' life and emotions should be the basic activity at the workplace as it enables empathy, mitigates the work stress and improves work productivity. Furthermore, empathy helps one to recognize other members' work. Since encouragement and motivation raise morale and appreciation in the group as well as make others feel respected, they should be expressed frequently, by both the managers and colleagues, in order to create a healthy culture inside the organization.

As executing a project is teamwork, maintaining a good communication system is required to keep a smooth information flow in the team and with partners. According to Rajkumar (2010), a project team must ensure clear communication with two main groups including the members inside the team and their stakeholders. In this context, the stakeholders of a project mean those who invest time and money in the project, apart from the team themselves, including the board, customers and project partners. In the team, no matter how big the group is, the connection between every two members should be clear regarding the other's responsibility and work progress. There should be no misunderstandings within the group, which fastens the flow of information instead of asking the project manager every time. Regarding the

stakeholders, information about the project's progress, budget and arising problems must be periodically updated by the project team. There should be a report plan to specify which information needs to be reported to the board, who should update that information and what the report frequency is. Similarly, customers and project partners need to be notified of the project's progress and the status of the requested services. Keeping the partners up-to-date enables a clear understanding between two parties, which encourages early collaboration to save time and costs.

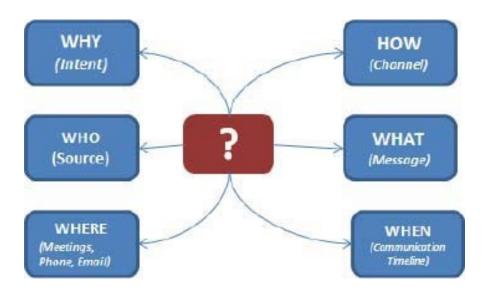


Figure 4. Six elements of a communication plan

After the communication plan is made, the means and methods for each type of communication should be decided, either via phone, emails, online meetings or face-to-face presentations. Technology plays an important part here as the supply chain is no longer limited to one country, which requires long-distance collaboration. The selection of the communication software or even the type of email platform needs to be considered thoroughly to ensure both smooth connections and high security.

During project time, there might be some communication obstacles that one needs to be aware of. Those obstacles can appear in different interfaces, such as between organizations, service providers and customer, between departments, or between the members in the team. Learning to know the background of the other side in the

conversation is essential to prevent those obstacles from deteriorating the friendly environment, which might lead to lower communication productivity. Politics should be the first and most complicated issue as it can directly influence the success of the project. The project manager must be the one to study the key political issues related to the project, customers and partners. Delicate subjects must be notified to the team so that they are aware of them in the execution phase. The differences in culture and personalities are another obstacle in project management, and they can be found in every business. The working styles vary between countries, cities or even individuals who can be, for example, conservative, dictators or straight forward and openminded. (ibid.) By studying the culture of the partners beforehand, the communication plan could be modified early to ensure the effectiveness of the cooperation process.

The language barrier is another concerning issue when working with foreign customers, which might lead to frequent misunderstandings and a slower communication process. This should be taken into consideration when building the project team so that suitable candidates are selected.

2.2.2 Performance measurement and monitoring

Peter Drucker, a popular American management consultant once said: "If you can't measure something, you can't improve it" (MacKenzi, n.d.). Indeed, project progress needs to be controlled closely to keep it on the right track. Therefore, there should be a measurement strategy to monitor the project plan and schedule. The metrics to be measured could originate from the breakdown of the project objectives. There are common metrics such as schedule performance, cost, quality, satisfaction level of stakeholders and employees (Gilbert, n.d.). Whatever metrics are selected, they should together give the project team a big picture to monitor the progress more comprehensively. There should be at least one responsible person for each metric, thus the measurement process can be done thoroughly before being reported to the project manager. Besides, allocating measuring metrics among the team helps to assign them to the the right expert as well as balance the workload between members.

When the measurement framework is completed, the next step is to set a monitoring schedule including the reporting routine and meeting interval. It is important to find a suitable frequency of reporting. If the project progress must be reported constantly, the team might feel being micromanaged and untrusted. Empower the team members to encourage them to get creative and control the assigned work better, thus taking power and trust away from the team should be the last thing the manager wants to do. However, giving the team excessive breaks between reporting intervals might cause serious harm to the project. (Frost 2018.) Detecting arising problems early is one of the most important tasks of project leader which is only achieved with the support of frequent reports from the team. As communication. Therefore, setting suitable reporting frequency is important to both make the team feel comfortable and ensure project success.

In the monitoring phase, another essential activity is team meetings where project progress and the measurement tracking are updated within the team. There are usually three types of meetings, each of which should be managed and planned appropriately. Leadership meetings should be the first one to hold with the purpose of updating project status and solving large issues such as the concern of the board, political issues and critical relationships to the project. The environment should be rather sharing thoughts and ideas than data-oriented. Another type of meeting is for management purposes, focusing on developing project plans and problem-solving. The discussion should be based on data and quantitative input, yet the content of the meeting should be qualitative-oriented as the data is evaluated to give a better understanding of the project. The performance of the existing plan is reviewed and any arising problem should be discussed to eventually adjust the plan. Midterm goals is also a subject in the management meeting which later defines the tasks and milestones for the team next month. After the management discussion, it should be broken down to the action item meeting, usually within a department. Here the participants discuss the short-term goals, tasks and expectations in a short period, for example, in one week. The main activity in this type of meeting is sharing information and fact instead of finding a solution to any problem. Though the content is short and simple, an action item meeting is essential to define the tasks and responsibilities between members to execute the project plan. (Darnall and Preston 2012, 155-157) Since three types of meeting carry different purposes and content, each one should have a fixed schedule with a suitable interval. Before each meeting, there should be clear agendas to increase productivity and save time of participants (ProofHub, 2017).

2.2.3 Adjust expectation

During the monitoring phase, there might be arising issues that affect project progress either positively or negatively. If a task can be delivered earlier than expected, a short notice should be sent to other departments so the followed up steps could be prepared to maintain the speed. In contrast, a delay of a single deadline could create the domino effect for the whole project, making future tasks being delivered late too. (Frost 2018.) Therefore, any unexpected change in the project schedule must be notified immediately to the concerned party to take proper actions in time. Similarly, changes in actual cost and quality needs to be updated with the project manager and stakeholders in time. Early notice helps partners and stakeholders provide supporting resources and cooperation to recover the damage. Communication plays an important role in this phase as clear communication enables better collaboration while a tiny misunderstanding could make the situation even worse than before.

2.2.4 Project closure

The team should plan for the project closure at the end of its life cycle. Team members are usually excited in the first stages of the project but gradually lose their interest toward the end. However, project closure cannot be ignored as its process and result should be analyzed to review the journey and provide experience to future projects.

As the project is reaching its end, the stakeholders' requirement, the scope of work, a working checklist must be reviewed one last time to ensure no requested service is ignored. Though this activity must be done constantly during the monitoring phase, it is important to keep in mind that a single missed task might be able to affect the project's success. If there is a large number of items remained undone in the checklist,

the project must return to the execution phase. Another issue that needs to be reviewed is the contract with customers and suppliers. The products and services exchanged between two parties should be evaluated to determine if the quality and expectations are made. This step is essential to assess partners' performance, especially if there is a long-term project that requires a long-term partnership. Any lack of quality in services and products should be recorded to adjust the payment later. (Darnall and Preston 2012, 409.)

Before finishing the project and disbanding the team, the team should be gathered for the post-project evaluation. Each member is encouraged to share his experience during project time, explore what went well and what did not. By giving their idea and opinion, the team can record the pros and cons of the project and understand why it happened. Lessons learned from the existing project are precious information for improving the following ones. However, the challenging part is that in the end, when people only want to wrap things up and leave the project behind, thus they seldom enjoy recalling all encountered problems. In this situation, the project manager should be the one to invest the effort to motivate the team to prepare for post-project evaluation. (Berkun 2008, 324)

Finally, project celebration is an inevitable part of every project, a symbolic ending to mark the finish point and seal the closure phase. The organizer must ensure that every person involved in the project is invited since they are deserved to have an enjoyable time after investing efforts and time. Beside the entertainment part, this is a great opportunity to give award and recognition to outstanding individual and groups as well as show the appreciation to everyone that contributed to the project. Hopefully, the celebration could create a meaningful memory and tighten relationships between participants for the sake of future businesses. (Darnall and Preston 2012, 414.)

2.3 Risk management

2.3.1 Importance of risk management

In every project, there is always uncertainty, also known as risk that may affect the project. Vanderjack (2015,55) defined risk as a probability of difference between the expectation of what should happen and the reality of what happens. Anything that may impact the timetable, budget, quality or performance of the project can be considered as a risk (Ray 2017). Risk is a product of the probability of an event and its impact on the project, either positive or negative (Kendrick 2003, 2). Since predicting the future is impossible and there are a variety of unknown risks that may jeopardize the project progress, risk management becomes increasingly essential.

Risk management is a process where project risks are identified, analyzed and responded to keep the project on its track. The complexity of risk management depends on the scale of the project. A larger project exposes to more arising risks in the execution phase, thus requires more thorough planning and solution to those scenarios. (Ray 2017.) Most of the risk management methodologies consider risk management as a separate area in the project management process. However, since risk management should be implemented with the effort of the whole project team, isolating it from other project management phases may lead to an incomplete result. (Zwikael, & Ahn 2015, 33.) By integrating this process into other areas, risks could be constantly identified and analyzed throughout the project. After the responding method to a risk is found, necessary changes should be made immediately to maintain project progress and save a significant amount of time and cost later during the project. Figure 5 (PMBOK 2013, 40) illustrates how the cost of changes increases and the effect of risks decrease from the beginning to the end of a project. Therefore, it is important to prepare a detailed and effective risk management strategy at the start and review it along the project to update and improvise accordingly.

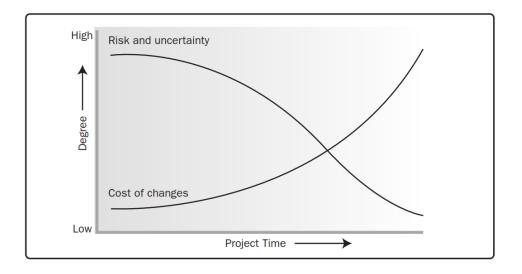


Figure 5 Degree of risk and cost of changes over the project time

2.3.2 Risk management process

There are several methods to execute a risk management process, depending on how detailed the process needs to be. In short, there are four main phases including risk identification, risk analysis, controlling and monitoring, and lastly reviewing the process.

Firstly, all the likely risks should be identified. In this phase, the best method is to gather the whole project team, stakeholders and, if possible, customers and partners to brainstorm any potential risk that may arise in the project life cycle. Engaging the internal knowledge is crucial in risk management as they are those who have a clear insight into the project and their participation certainly offer comprehensive opinions for the start. The second method is to consult expert opinions, for example a third-party consultant that is familiar with the industry and project scope of work. The last method could be to learn from the past, investigate previous projects to identify encountered risks and their leading cause. However, since there is no certainty that those risks would appear again, the project manager should compare the existing project with the previous ones to adapt this method effectively. (Pinto 2007, 224.) After all, whatever method is applied, risk identification should be an iterative process since there may be new risks arising and evolving throughout the project (PMBOK 2013, 321).



Figure 6 Risk management process

After being identified, each risk should be analyzed to provide a clear insight into what the project may encounter. First, the likelihood of a risk happening and its impact on the project needs to be studied. The output of this part could be a simple list or visualized in a risk matrix. Wilson (2018) gave an example of the risk matrix in Figure 7 where each risk presents a level of likelihood and the impact. After analyzing those two elements, the project manager needs to categorize risk as high, medium or low to manage them efficiently further. By prioritizing the list of risks, the team knows which one requires more attention and efforts to address and which ones can be ignored. (Ray 2017.) After that, each risk should be assigned to one person in the team to be in charge, propose a solution then monitor its progress. The goal is to share the responsibility among the team member instead of leaving it all for the project manager. The task should be assigned to the right person who is experienced with the risk, and any findings and solutions should be shared within the team to provide other members with a clear understanding of the situation.



Figure 7 An example of the risk matrix

According to PMBOK (2013, 344-345), there are four main strategies to deal with project risks which are accepting, avoiding, mitigating and transferring. Depending on the nature and criticality of the risk, a suitable method is chosen. If the risk jeopardizes the success of the project, the best way is to avoid it so the project is protected from its impact. This can be done by, for example, revising the schedule, reducing the scope of work, or changing strategy. Another solution instead of eliminating the risk is to mitigate its consequence or probability of occurrence. Though the project may be affected by the risk, taking early action to lower the criticality of the threat is usually efficient than recovering the damage inflicting on the project. In case the team has insufficient resources to address the risk by themselves, it is worth considering to transfer the risk to a third party. In other words, its impact and responsibility for management are shifted to another party. Purchasing insurance and contract guarantees are among the most popular methods to transfer risks. Lastly, acceptance is the favorable option when there is no possible or cost-effective way to address the risk beforehand. By choosing this strategy, the team decides to take no action until encountering the risk. However, periodical review is required to monitor the progress of the risk.

The final phase of the risk management process is to control and monitor the progress.

Though the strategies are thoroughly made, a slight change could turn the situation in another direction and the project team might need to apply another method to

address the risk (Rowe 2018). The owner of the risk is responsible for monitoring its progress and updating the team with the situation and proposed solution as soon as possible. At the end, when the risk was completely addressed, the whole process should be reviewed to evaluate the effectiveness of the risk management practice. The main objective of this phase is to constantly improve the risk responding strategies and the efficiency of the whole process. (PMBOK 2013, 349.)

2.3.3 Out of control situation

Applying risk management provides the project team with a detailed prediction and responding strategy to mitigate the fear of project failure. However, no matter how well-prepared it is, there is always a possibility that an entirely new threat, or worse, a Force Majeure event appears to prevent the team from achieving project goals. According to Elder, Buckworth, Shorten, Wang, Chew, Swil, & Altink (2020), Force Majeure is an event that is out of control of an organization that hinders the organization from delivering its obligation to other parties under a contract. Therefore, the responsible party should be relieved from the original requirements affected by the unexpected event. Force majeure events could be natural disasters, pandemic, political issues, terrorism, wars and other significant events that are beyond the control of all concerned parties.

In this situation, the project manager needs to calm down and analyze the problem. After that the key person in each department must be urgently gathered to discuss the situation, revise the strategy quickly and delegate tasks to responsible members. (Berkun 2008, 214-216.) Every team member needs to be updated with the new direction of the project to take immediate actions. At this point, risk management should be started over again due to the probability of new arising risks. Furthermore, a brief notice to customers and partners of the circumstance and proposed solutions is the right thing to do. An honest and supportive attitude certainly encourages partners to understand the problem and cooperate to deliver the project toward the new direction. After all, difficult situations offer project team opportunities to learn and gain experience in managing those new risks (ibid., 236). As a result, the risk

management process is enhanced and provides the team with a better foundation for the next time.

2.4 Logistics for an F1 race

Formula One, now considered as one of the world's biggest sport events, is a road racing circuit that has been established since 1950. The championship is participated by 10 teams of two drivers and their sponsor, only one of which could be the champion after playing 21 races over the year. (Beresford-Howe 2019.) At first, the races were only held in Europe but it has been gradually expanded and introduced to other continents over the years.

To build a magnificent front scene of every F1 race, the logistics behind the stage is insane and requires months of preparation. After each race, every team's goods are transported to the next destination, including cars, garage tools, broadcast media and hospitality equipment. Nothing is left behind as each engine, car components, garage tool and even catering stuffs have been selected after a significant amount of analyzing time and development cost (Nobel, & Huges 2004, 16).

Three modes of transport as airway, roadway and seaway are used to carry teams' goods and personnel, depending on the urgency level. If both the origin and destination are inside Europe, road transport is mostly used for economic purposes. When there is a "flyaway" race, which means the race is held outside Europe, the logistics are much more challenging as it requires the long-distance transportation. Now the goods are categorized into 2 types as critical and non-critical items. Critical parts, which need to be set up and assembled first such as the bare bone of garage, car chassis and IT racks, are sent via plane that chatter by FOM (Iyengar 2017). Other goods are packed into sea containers and depart months before the race to save transport costs. According to DHL, each team sends out 660 tons of air freight and 500 tons via sea over an F1 season, which illustrates for huge amount work of for logistics companies (see Figure 8).

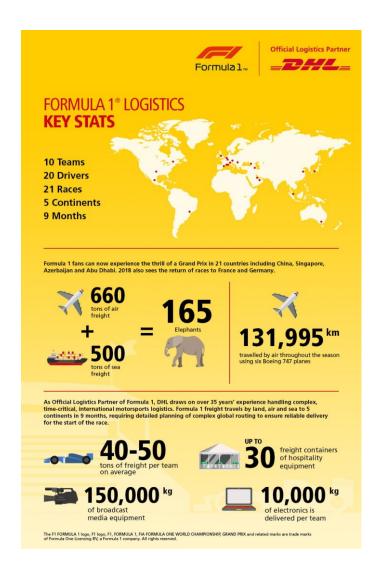


Figure 8 Cargo for one team over an F1 season

To prepare for this huge transport plan, one day before the race weekend, the operation manager must make the plan to decide the packing orders and layout of each container. The team starts packing even before the race finishes to catch up with the laid out schedule. With logistics people working for Grand Prix, time is the essence, thus sometimes their incredible work speed could clear out the circuit 8 hours after the finish of the race. (Haldenby 2019.)

After all, the logistics of moving F1 goods could barely be done by a single company, even the giant DHL itself. Normally DHL is responsible for the transport all shipment between harbors and airports between two racing locations. When it comes to the

local work such as road transport and customs clearance, DHL may take care if being familiar with the neighborhood; otherwise, it is subcontracted to other local logistics agents to avoid any confusion and wasting time, especially with the flyway race.

3 Research methodology

3.1 Research method approach

At the beginning phase of the study, the author compared the differences between the qualitative and quantitative approaches. This helped to decide which one should be selected and applied for the present study.

According to Erlingsson and Brysiewicz (2013, 94), a quantitative study looks for concrete results like statistical data, and the only truth of the experiment. Therefore, a large number of participants is required, and there should be minimal differences between their status, roles and attributes. Meanwhile, the qualitative approach focuses on human factors and expects each participant to provide their truth from an individual perspective. A small sample with large variation is sufficient in most cases as long as they have experienced the event under research.

In this case study, the objective was to examine the performance of Arktic and later find potential solutions to improve productivity and services for the next F1 events. The qualitative approach seemed to be an ideal approach by including the participation of the personnel from Arktic and two strategic partners. Diverse perspectives from different departments and personal backgrounds would both paint a big picture and deliver a deep insight into this F1 project.

The quantitative approach was also a feasible option at the first thought, because it would provide statistical data of the F1 project, such as freight volumes, transport timelines and project expenses for measuring Arktic's project performance. However, the numbers related to an F1 event are confidential, and there is hardly any F1 data available for public access, which finally ruled out the quantitative approach. As a result, the author decided to apply the qualitative research method to proceed with the study.

3.2 Research framework

As the qualitative approach was selected, it was necessary to define a research framework including identifying the data sources, planning a step-by-step research process and preparing for each stage of the plan.

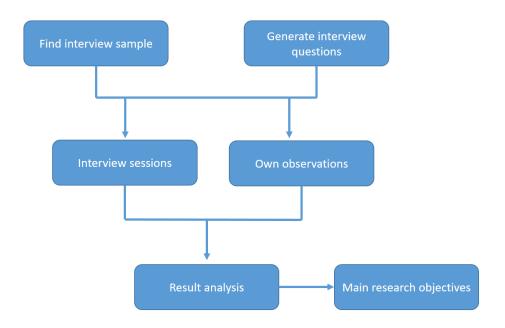


Figure 9. Research process

Interviews were selected as the main method to collect data on the genuine experiences and perspectives of the participants. Kvale (1996) believes that an interview is one of the most efficient methods to seek the complete insight of the responders and enhance the understanding level of the phenomena under research. In addition to the primary source, the author's observations while working in the project were taken into consideration to provide the study with an extra angle. Figure 9 illustrates the research process that was developed and followed to reach the main objectives. The interview questions were generated based on three research questions presented in Chapter 1, and they are introduced in the next section.

3.3 Content of interview sessions

Table 1. Interview questions

No.	Research question	Interview questions
1	How did Arktic prepare for the F1 project?	1.1. How did Arktic create the project plan and schedule in the beginning phase?1.2. How was the project team formed and developed?1.3. How did Arktic prepare information and resources for the project?
		1.4. What were the potential risks to the project and the proposed solutions?
2	What went well and what problems did Arktic have while executing and monitoring the F1 project?	2.1. What went well and what problems did Arktic have while monitoring the schedule and measuring project performance?
		2.2. What went well and what problems did you have while cooperating with external customers and partners?
		2.3. What went well and what problems did you have with internal communication and collaboration inside Arktic?
		2.4. After the postponement announcement of F1 Vietnam 2020, how did Arktic continue delivering the project?
3	To what should Arktic pay more	3.1. Would you provide suggestions to create a better project plan and schedule for the next time?
	attention to improve the project performance for the next time?	3.2. Would you provide suggestions to make a better personnel and resources plan for the project next time?
		3.3. Would you provide suggestions toward the cooperation and communication plan with the external partners as well as the internal project team?
		3.4. Would you provide suggestions toward the risk management process required for the F1 project?

To address each research question, the author broke down each of them into numerous detailed questions, which were used as interview content in the research process. Table 1 describes the interview content implemented in the study. By giving such detailed inquiries, the author hoped that confusion and misunderstanding with the interviewees could be minimized so that they could deliver complete answers from their own perspectives.

For this study, nine key persons of the project team were selected including the Logistics Coordinator (Project Manager), Director of Arktic, Director of GK, Director of Minh Nhat, Project assistant, Head of Customs Clearance, Head of Customer Service, Head of Equipment and Head of Ground Operations. While the project manager and directors were ideal for visionary and strategic questions, the participation of different department managers provided daily experiences with the customers and the project team members. The interview content and questions were delivered to the interviewees one week before the actual interview for better preparation. The interviews were conducted separately either face-to-face or via phone calls. Key points and findings were noted during the interviews, which were later combined and analyzed to address the three research questions and the main research objective. For confidential purposes, the names and personal information of the interviewees were not revealed, what mattered most was their experience in and insight of the F1 project in this study.

4 Results

4.1 Project preparation phase of Arktic

4.1.1 Project planning and performance measurement system

Since it was the first experience of Arktic with F1 logistics, the best way was to follow strictly the instructions of FOM, the owner and organizer of the F1 Championship, to ensure the success of the project. Standing as a strict party, FOM had paid frequent visits to Vietnam to assess Arktic's capacity to deliver the project. The scope of work for the F1 project was defined by FOM through several meetings in 2019. Arktic's responsibilities were to handle the incoming shipments for the F1 event including customs clearance, delivery to the Circuit, supporting the ground operations, and the same activities to re-export those shipments to the next race destination. VGPC, the event promoter in Vietnam, was the partner working alongside Arktic during the whole project, especially in two areas, namely, connecting Arktic with the cargo owner to set up the Circuit for the race and ground operations at the Circuit. VGPC was the consignee of F1 cargo on all shipping documents, and Arktic worked as a third-party logistics company for VGPC. At the beginning of the project, the steering group, including the project manager and directors of three companies (Arktic, GK and Minh Nhat), were the only ones that attended meetings with FOM and VGPC to define the scope of work. After forming the big picture, the leaders passed information to their personnel and formed a project team together. The project goal for the team was to provide the most efficient logistics to the F1 event with high-quality services.

Acknowledging the workload, the head of each department estimated the lead time for their logistics activities before discussing with the steering group. The amount of time required to prepare for the events was predetermined based on the results of the team, which was passed to FOM later to decide the arrival date of cargo. Figure 10 illustrates the project timeline in November 2019, which was created to help the team follow the progress. The level of importance, the person in charge and lead time were decided to monitor those activities later more effectively. Details of activities and

names of the persons in charge (PIC) were removed due to confidentiality reasons. At first, the work was mostly to prepare the documents for the required equipment and procedures in order to apply for special customs mechanisms from the Vietnam government (the mechanism allows F1 cargo to be cleared more quickly and easily than usual at the port). Since January 2020, when the shipping schedule of the incoming cargo was notified, there were more weekly goals and milestones, especially for the most high-priority shipments.

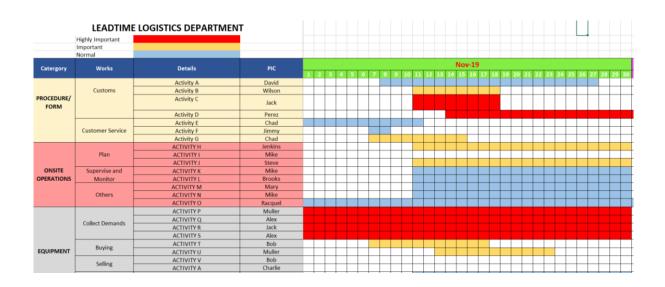


Figure 10. Project timeline

Regarding the performance measurement method, Arktic did not create their own KPIs for the team due to the lack of experience in F1 logistics. The team planned to hold periodical meetings to update the work of each department, make self-evaluations and provide improvement ideas to others. In contrast, FOM provided a clear measurement system with details to assess the work performance. Most of those KPIs were time-related for evaluating if Arktic could finish logistics operations within the given time. However, both sides discussed and revised those KPIs because there were large differences between the Vietnam customs regulations and other countries. Afterwards, the lead times for the logistics tasks were concluded within the project team to ensure that FOM's requirements were met. Table 2 gives an example of the

lead times for three main logistics tasks in the project, applying to different types of cargo. The actual lead time was removed due to confidentiality reasons.

Table 2. Lead times for some logistics activities

Time to complete Import Customs Clearance		
Air cargo	X working hours after ETA	
Hand carry shipment	X working hours after ETA	
Normal sea cargo	X working hours after ETA	
Food & Beverage via sea	X working hours after ETA	
Dangerous Goods via sea	X working hours after ETA	
2. Time to deliver cargo from Port / Airport to Circuit		
Air cargo	X working hours after ETA	
Hand carry shipment	X working hours after ETA	
Normal sea cargo	X day(s) after clearance day	
Dangerous Goods via sea	X day(s) after clearance day	
3. Time to deliver cargo from Circuit to Port / Airport		
Air cargo	X day(s) before ETD	
Hand carry shipment	X day(s) before ETD	
Normal sea cargo	X day(s) before ETD	
Dangerous Goods via sea	X day(s) before ETD	

4.1.2 Form the project team

Before the F1 project, Arktic is a young and potential logistics company yet its logistics competency could barely match the level of F1. To be considered as a qualified

candidate for F1, Arktic had to create an alliance with two other logistics companies, GK and Minh Nhat which both are experienced organizations in the industry. Each of them has a unique strength that benefits the project. Arktic is the one with good relationships with government parties and excellent negotiation skills, which is critical while applying for special customs mechanism for F1 cargo as well as solving potential issues with customers and government parties in the future. Meanwhile, GK is an expert at freight forwarding and customs clearance, two major activities in logistics. The last member, Minh Nhat, provides transport solution, ground operation at Circuit and port, which is convenient as Minh Nhat is located near Hai Phong port, the only seaport used in the F1 project.

Key employees of each company were assigned to work for the project. The project team was divided into functional departments including administration, customer service, customs clearance, transportation, ground operation and financial, each of which usually included employees from two or three companies. Each department had a unique set of requirements for its members depending on the nature of work such as logistics competency, years of experience, customs knowledge, problem-solving skills and English level. The whole team worked under the name of Arktic for convenient communication with customers. As being the official local agent, Arktic held the highest power in the group of three companies and was responsible for making final decisions for the project.

In the beginning, the project team merely knew their responsibility and the required work for F1. Weekly meetings were held by leaders to help the team define the scope of work and assign responsibility to each department. Members in each department instructed and trained each other as well as discuss the working method via their own meetings throughout the project. A large number of members in the team led to different backgrounds and personalities, thus compromise needed to be made to ensure the harmony atmosphere and productivity of the team.

As FOM required its partner to follow its working rules strictly, only the leader group was able to make decisions related to F1 cargo. It was necessary to clarify this rule within the team to avoid any trouble with such an organization with high discipline as

FOM. Therefore, when a problem arose, the involved team member needed to propose a solution to the leader group before being given approvals to proceed the work with customers.

4.1.3 Prepare knowledge and resources for the project

Since Arktic was inexperienced at F1 logistics and this was an unpopular sport in Vietnam, the team applied various methods to accumulate more knowledge for the project. Three field trips to the F1 races in Australia, Singapore and Dubai were organized in 2019, helping the team to gain a better understanding of the logistics work for this sport event. They were valuable opportunities to meet FOM and logistics agents responsible for those races who Arktic learned a lot from. With FOM's introduction and support of those logistics agents, the team could observe logistics work required for F1 cargo, the ground operation at airports, seaports and the race circuits. Furthermore, in one of the field trips, Arktic had a chance to meet a Malaysian logistics company, who were experienced in providing services to F1. After the field trip, they sent personnel to consult Arktic about the ground operation plan, the required amount of equipment for the project and finalize the KPIs before discussing it with FOM.



Figure 11 The team on Singapore field trip

Apart from those field trips, each member also accumulated knowledge about F1 and the logistics work via the Internet and other materials. It was necessary to learn about the race, customs regulation related to F1 cargo, and build the transport plan beforehand. Since there would be various types of cargo, each might require different customs procedures and transport conditions. Thanks to the observations in three field trips and the consultation of experienced companies, the team could determine the type and estimated number of needed equipment, vehicle and other supporting materials. Table 3 presented the required quantity of some main equipment that the team would use for the ground operation. The equipment team sourced for potential suppliers to ensure their availability in advance before discussing it with the transport department. Since the number was estimated, there might be some changes during the project, which made the equipment department always prepare to provide more resources whenever requested. Afterward, the team identified potential transport routes and conducted road surveys to assess their efficiency and road infrastructure. A standard F1 air container was packed, lashed onto the trailer to simulate the transport process. Transport time, road conditions and height limit were recorded carefully to compare between options and report to FOM.

Table 3 Estimated resources for the ground operation

Туре	Quantity	Source
Low-bed trailers	22	Own vehicles
Forklifts (3-10 tons)	12	Rented
Lashing belts	150	Purchased
Wood pieces to support under cargo during transport (various sizes)	3000+	Purchased
Hand pallets	2	Rented
Forklift loading dock ramp	2	Rented

4.1.4 Risk management

Though risk management is not a familiar activity with logistics companies in Vietnam, Arktic did not neglect the importance of this process. Throughout the project, the leader group and the departments managers frequently discussed to identify potential risks to the project and find solutions to manage them. There were four main categories of risks that might affect the project progress such as operational, management, financial and Force Majeure risks.

Operational risks represented factors which possibly hinder the project timeline. The biggest threat was the speed of customs clearance process and involved procedures. Vietnam customs require several complicated inspection procedures and necessary documents from cargo manufactures, which could be a bottleneck for the project timeline when a significant amount of goods arrived in a short period. Acknowledging the risk, the leader group took early action and submitted an application for a special customs mechanism for F1 cargo. This special mechanism would consider F1 cargo as high-priority goods, expedite the customs clearance process, remove unnecessary procedures and change the inspection location from port to Circuit to save time. This was a relief to both FOM and Arktic to simplify the customs procedures and keep the project timeline on the right track. Traffics and road infrastructure were also considered to be potential issues to the delivery plan as they have been always key problems for transportation in Vietnam. Road survey was the solution to ensure that the selected route would be available for the project.



Figure 12 An example of traffic jam in Hanoi, Vietnam

In the project, the majority of cargo arrived in March, leading to a huge amount of work for documentation and ground operation in that month. There was a risk that the involved department would be overloaded and failed to manage all of their assigned work efficiently. Therefore, three companies agreed to prepare a backup workforce from each company to support the team whenever needed. Cultural differences were other management risks that created difficulty in the working progress. Language barriers sometimes led to misunderstandings between two parties and delay the work speed. The department affected the most was the ground operation with low English proficiency workers. All employees were recommended to improve their English level by online learning and taking courses, and for the ground operation department, short-term interpreters were hired to support the communication with customers.

Regarding financial issues, it was taken seriously by all three companies. Most logistics activities required Arktic to pay expenses to, for example, the port authorities or shipping lines, on behalf of FOM and cargo owners. Those large payments exposed Arktic to financial risks as they would not be refunded until the F1 event finished. Since this was the first F1 project, Arktic accepted to spend its own money for those payments in advance. The financial department had actively worked with the operation team to determine the estimated cost and payment schedule to make the cash flow plan and ensure the operation plan would not be interrupted by financial issues. However, from the next time, a deposit should be provided by FOM to cover those expenses and allow Arktic to focus on main logistics activities rather than financial issues.

The last type of risk was possible Force Majeure events that could re-direct the project anytime. In Vietnam, there is a rule that if a state funeral is organized, all entertainment events on that day must be postponed. However, as it is a "force majeure" risk, the team could do nothing but wait for any political news to improvise promptly. The second possibility to postpone the F1 event was the COVID pandemic. Though the disease started in December 2019, it was not until late February 2020 that Arktic considered it a serious threat. FOM and Arktic discussed the possibility of postponing the event and proposed a solution to change the direction of the project

in that case. As the risk gradually increased in March, the leader group started to reorganize the personnel plan and prepare to announce the team. However, the process was still passive as other customers did not have experience in handling the work after the postponement incident.

The review phase of the risk management process should be presented in section 4.3.4 with suggestions on how Arktic could improve the productivity of this activity for the next time.

4.2 How well did Arktic execute and monitor the project?

4.2.1 Monitor project progress and performance

Before the postponement announcement of the F1 event, Arktic prepared thoroughly the administration work and gathered all necessary resources such as vehicles and equipment for the ground operation. Shipping documents and ground operation plans were completed to support the import process for F1 cargo. In fact, Arktic handled excellently some early shipments that arrived at the beginning of March, delivering every requested service to customers on time. The team was ready to work with the rest and about to prepare for the outbound process. Figure 13 breaks down types of sea cargo that Arktic handled in the F1 project, the total number of containers is hidden for confidential reasons. The equipment of teams in the main race including cars and parts, garage tools, office stuffs, fuel and tires were carried by official logistics partners like DHL. There was also kitchen equipment provided by official suppliers of F1, cargo for the support races and other equipment purchased by VGPC to set up the Circuit. With a considerable number of sea and air cargo in the first project, it was impressive that Arktic managed to monitor the status of all shipments, and ensure the availability of necessary resources to provide requested services to customers.

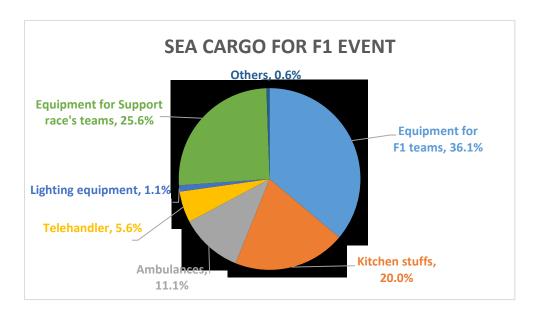


Figure 13 Types of sea cargo for F1 event

The project progress was monitored closely by the team throughout the project. The status of each shipment was updated constantly within the team via shared data files. Weekly meetings were organized to update the work, exchange information between members, and measure the performance of each department. The team presented their arising problems, discussed the solution and asked for confirmation of the project manager. Furthermore, each department frequently gathered its members to review the workflow and plan the schedule for the next weeks. Although the lack of internal KPIs made the performance measurement less systematic, leaders and department managers still managed to assess the work efficiency of their followers due to high experiences and competencies in the industry. Compliments and constructive feedbacks were frequently given to motivate the team and improve their work productivity. Regarding time-related KPIs of FOM, Arktic delivered successfully the promised lead time of their logistics activities to the early shipments and keeping its customer schedule on the right track. The only piece that was not going as planned was the application for the F1 special customs mechanism. The decision to grant the mechanism was given 2 months later than the estimated date, causing a minor delay to the project timeline. However, that issue was comprehensible since this was the first time that Vietnam customs and involved government parties handled this type of mechanism.

4.2.2 Corporation with external customers and partners

Working in an F1 project required Arktic to cooperate with lots of external parties including global logistics partners of FOM who were responsible for transporting the team's equipment to Vietnam port, owners of cargo to be used in the F1 event, port authorities and local logistics agents involved in the project. Fortunately, most customers cooperated with a supportive attitude, especially VGPC (the event promoter in Vietnam) and FOM. They empathized with the difficulties and new experiences of Arktic handling the F1 project for the first time and supported the team with a win-win approach. VGPC assisted the team with quick access to Circuit, removed complicated procedures, and solved any problem that interrupted the work of the ground operation team. Meanwhile, FOM provided its F1 expertise by thoroughly instructing Arktic on how to work with FOM's global logistics partner, preparation work for the shipping document and financial issues at the end of the project. For the rest of Arktic's customers, the working progress was also pleasant as both sides aimed to a similar target toward the success of the F1 event.

However, since this was the first F1 event in Vietnam, the required logistics work was new to all parties except FOM and its global logistics partners. From time to time, Arktic and its customers were not clear about their responsibilities in the shipment. Both sides could not keep clear communication and clarified with each other about who must take care of which procedure throughout the project. As a result, both parties stayed passive and waited for the news from the other to proceed with the work. Besides, as not getting the big picture, the team must ask customers constantly whenever a piece of information was missing, which wasted time significantly and prolonged the work. On the other side, there were several last-minute requests from customers, pushing Arktic in a difficult position to find an appropriate solution. Nevertheless, the team was able to maintain quick communication with customers to be available whenever a problem arose. With outstanding problem-solving skills, the team always managed to improvise to provide effective solutions to customers' issues in such a short time.

Another issue while working with customers was that cargo owners and third-party logistics agents were unfamiliar with Vietnam customs regulations and procedures. Many complicated rules applying to the import process, which is different from other countries' customs. Not knowing the discrepancy, customers usually assumed that the import process in Vietnam were the same as their countries, and made impractical requests to Arktic. Besides, communication with foreign customers were not always smooth due to culture difference such as language barriers and different time zone. Misunderstandings and working overtime happened frequently, making both sides feel frustrated and slowing down the work speed. Although it caused Arktic much time to explain the customs procedures to customers, both sides eventually understood the other's situation and made compromises to proceed with the work. Since it was a new experience for customers to interact with the work in Vietnam, hopefully the cooperation would be improved the next time.

4.2.3 Collaboration within the project team

The project team included personnel from three companies, which were a critical decision to the project. In the beginning, the whole team struggled to find a mutual working method to ensure all three companies could collaborate in this project. It was difficult to exchange information and define others' responsibilities when team members located distantly and did not know much about persons from other organizations. After several meetings with weekly frequency until November 2019, the team eventually finalized the work plan including responsibilities of each organization and members, communication platform, report frequency and work location.

Working in the F1 project required the team to collect and store an enormous amount of information such as shipment components, tracking status, customs regulations, delivery schedule and financial figures. Being unfamiliar with this significant size of information, Arktic could not maintain an efficient method of exchanging information. Google Drive was the main platform throughout the project but most team members were not used to it. Therefore, whenever someone needed information, they always contacted the responsible person instead of finding it on the storage platform. Though this way of exchanging information wasted time and delays work speed, this issue was

inevitable since the team was absorbed in the work and hardly able to keep track of all data. Besides, technology has been always a problem in developing countries like Vietnam since people usually resist changing their old working ways. However, team members always provided information promptly to other members when requested to keep the work uninterrupted. It proved that every member kept track of their work closely and stayed ready to support others whenever needed.

During the project, one of the key factors to maintain the team's productivity is that members in each department supported each other excellently. Everyone knew their colleagues' responsibilities and progress; thus they could back up each other when one felt overloaded. Experienced employees constantly mentored who was lack of logistics competencies or F1 knowledge, creating a healthy work environment. However, there were occasional conflicts within the team due to different personalities and work methods. It was a result of combining three different organizations into a team. Though this problem did not affect the work productivity much, it should be taken more seriously next time.

4.2.4 Project progress after the event postponement due to COVID incident

The F1 event was announced to be postponed due to the outbreak of the COVID pandemic in the middle of March 2020. At that time, two-thirds of sea containers were already on board to Vietnam, half of which reached Hai Phong port, and some containers were even delivered to Circuit to be unloaded. Air cargos, fortunately, were not dispatched yet and canceled immediately afterward. The leaders who knew the postponement decision first, agreed to remain calm and discuss the next moves together before announcing to the team. Afterward, the whole team was gathered and passed decisions from the leader group. The project was decided to be re-directed immediately with the implementation of return logistics for FOM cargo. Although the one-third of containers reached Hai Phong port, most of them were not customs cleared yet. In other words, the import process for those shipments was even started, thus Arktic needed to take care of the customs procedures for cargo refusal and return them to the shipper. Since there had been not a rescheduled date for F1 Vietnam 2020, both Arktic, FOM and other customers agreed to re-export cargo as soon as possible

to avoid storage costs and return the cargo ownership to customers. The goal of the project team was to successfully return cargo to the owner with minimal costs.

In Vietnam, the return logistics is an unusual activity to every party, even the shipping lines and port authorities. Therefore, each carrier requires a different procedure to return cargo which is not cleared of import customs. Being the local logistics agent, Arktic was responsible to handle the customs process for all F1 cargo on behalf of customers. Though it took the team a few first days to gather information on the required procedures, Arktic did a great job explaining the return process to FOM, VGPC and other customers. There were several documents to be supplied to port authorities and shipping lines, for example, the cargo refusal letter of VGPC who was the consignee of all cargos on shipping document, a letter of Arktic asking customs authorities to allow the shipment being re-exported, and the letter of responsibility from the foreign customers who guaranteed to receive and take responsibility of the returned shipment.

While the customs procedures were handled, another logistics activity needed to be executed urgently was organizing the shipping schedule. Figure 14 illustrates the percentages of each country to which sea cargos were returned as customers' request. Unlike in the inbound process where the transportation of all shipments was handled by the global logistics partner of FOM, the outbound transportation was organized by both Arktic and FOM's global partners depending on the assignment of FOM for each shipment. It was a golden chance for Arktic because the team had experiences and good connections to the local shipping lines and port authorities, which helped the team save costs more effectively than other global logistics companies. Arktic delivered great services for those shipments that they were assigned to book the vessel. The rest was assigned to FOM's global logistics partners such as DHL who did not have much experience with shipping lines in Vietnam and unfamiliar with the customs procedures for returning shipments. As a result, the work was delayed and it cost more time and expenses to handle a shipment.

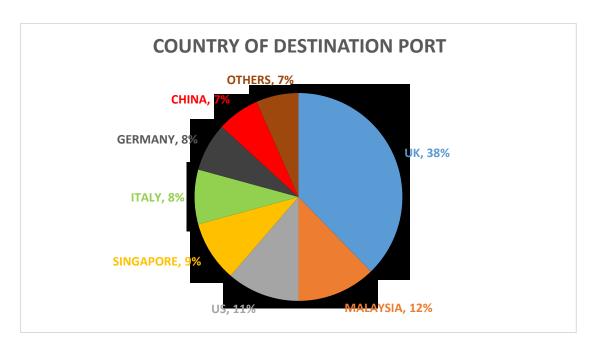


Figure 14 Destination countries for sea cargos

As Arktic was too absorbed in the customs work for the return process, there were few issues that the team neglected their importance and performed ineffectively, especially financial issues. Although explaining well the urgency of returning cargo to avoid arising cost, Arktic should have supported and monitored FOM's global logistics partners more closely to fasten the work with shipping lines. There were several shipments that those agents could not finalize the work and payment with carriers on time, making cargo unable to catch the vessel deadline. Prolonging the process and rescheduling the shipment cost every involved party time and money, which could have been prevented if Arktic monitored the work and instructed its partners better. Another financial problem was that Arktic postponed the payment process until April when the customs work was almost finished. Although it proved the dedication of the team to deliver the best services for the return process to customers, Arktic was exposed to financial risks while paying an enormous amount of customs expenses on behalf of customers. Fortunately, there was no serious consequence and the project progress was maintained perfectly.

4.3 Improvement suggestions

4.3.1 Improve project planning and measurement method

After this time, Arktic should build a rough framework for the F1 project including the Arktic's responsibilities, project timeline, list of cargo and customers, required customs work, ground operation plan and necessary resources. A standard set of document form for shipping and customs procedures should be reviewed and saved to be used in the next times. The final forms must be stored on the shared data platform which is accessible by every member but can only be edited by the project manager and authorized team members. Secondly, the team should identify which activity had delayed the work progress and the cause, for example, inadequate equipment, miscommunication, or incomplete paperwork. Minimizing those mistakes helps to reduce the handling time for a shipment, thus provide a better lead time and service to FOM. As time is the essence for the F1 project, the timeline must be monitored more closely next time. More milestones must be set at regular interval to review the work more thoroughly, detect potential problems and prevent them affecting the progress. Goals and milestones should be applied to every shipment instead of only important ones. Besides, the whole team needs to be engaged more in the monitoring progress as they are who execute the work daily.

Another area that Arktic should improve is the performance measurement system. There must be a set of KPIs for each department and for major activities. The team should consider set up a scorecard to visualize the measurement system and monitor the process more efficiently. Project manager and heads of each department should be responsible for assessing the productivity of the team. Each KPI must have a challenging yet realistic target, suitable frequency and responsible person to monitor the result. Table 4 gives an example of a scorecard where performance of major activities is recorded and measured. The performance should be measured by those who directly conduct the work and reported back to their department manager. Since the peak time of project is only two or three months, measurements in those months are enough. After each project, the whole scorecard should be reviewed to adjust the target for next project.

Table 4 Example of a performance scorecard

Goal	Target	Owner	Review frequency	March 2020	April 2020	
Customs work						
Hours to get one shipment out of seaport	1 hour		Weekly			
Accuracy rate in customs documentation	99%		Weekly			
Transportation						
On-time delivery rate to customers	98%		Weekly			
People						
Acceptable overtime hours per week	15 hours		Weekly			
Total absences days per employee per month	1 day		Monthly			

Regarding time-related KPIs of FOM, they should be reviewed again for necessary adjustments. With those activities that Arktic delivered the lead time easily, they can be shortened to challenge the team. On the other hand, the lead time of those activities which the team struggled to complete on time, should be adjusted more practically; therefore, FOM would know to revise the plan accordingly. After deciding on those KPIs, they should be brought into the scorecard of Arktic to be followed more effectively.

4.3.2 Prepare personnel and resources better

Arktic should keep the core personnel as the existing project team since they were doing an excellent job in the last project. Nonetheless, there are some areas lacking of

logistics competencies and experiences. This issue could be solved by increasing the training level such as assigning more work with increased difficulty, cross-training within the department or organizing a training course at the company. As the project should be on hold at least until the end of 2020, there is plenty of time for the team to improve their competencies. However, Arktic should keep looking for potential candidates outside to strengthen the team, especially in fundamental departments such as customer services, financial and ground operations.

With the resources planning, the team should make more accurate planning to avoid the excess of equipment like the first time. After reviewing the resources planning at the end of the project, the team realized that they prepared around 50 percent more than necessary. Though the purpose was to ensure the availability of equipment in case of emergency or changes in cargo quantity, planning resources more accurately should help to save costs and create a budget plan better. To improve resource planning, the team needs to review its own project and learnings from three field trips more thoroughly.

4.3.3 Cooperate with external and internal customer more efficiently

Since the team now has a better understanding of the project, they should apply a better working method to improve work efficiency. Before starting the work, the team must clarify the full responsibilities of customers and discuss the scope of work between two parties thoroughly. The person communicating with customers should list out all information that the team needs from customers before sending the request of information. It would help to save considerable time and ease the information tracking efforts in the future. Besides, Arktic needs to encourage customers to send their request of services at the beginning, otherwise, a deadline must be set to give the team sufficient preparation time. Early customer engagement can strengthen the cooperation of two parties and make the work progress more proactive. By exchanging information constantly, both sides can assist better to monitor the progress and find solutions for arising issues together.

For internal collaboration throughout the project, the two most important areas to be improved are the method of exchanging information and the work structure of the team. The data source must be fixed and only edited by authorized members. Google Drive is a strong tool but only effective if the whole team makes efforts to use it. An internal training course should be considered to introduce the importance of instructing the team to use important features of Google Drive such as uploading documents, sharing access right, document collaboration and streaming between devices. By standardizing the information sharing process, the team can save a significant amount of time and maintain a proactive working style which might be the stepping stone to standardize other complicated activities in the future. Furthermore, collecting information directly from the shared location instead of asking another member increases the trustworthiness of the information, provided that the responsible person updates the data constantly and accurately. Regarding the work structure, Arktic should assign the work to members more systematically. The work should be divided into different categories according to, for example, different groups of customers or types of cargo. Afterward, each member is assigned into certain categories to be responsible for related activities. It would encourage the team to gain more required knowledge and improve expertise in the assigned categories. Limiting the work inside certain areas also help to reduce overlapping tasks and avoid overloading situations. The communication plan should be re-organized accordingly so members of the same category can collaborate better. However, it would take a long time and effort to apply such a systematic change to the team for long-term benefits. Therefore, Arktic should implement the changes step-by-step without rushing to make the system function efficiently in the next project.



Figure 15 Information sharing

4.3.4 Improve risk management process

After the project, the whole team was gathered to review the risks that affected the project, according to response methods and their effectiveness. Most of the threats were handled effectively except for the COVID pandemic. Information on all those risks was recorded to prepare for the next project. However, leaders should let the whole team involve in the risk management process earlier, from the risk identification phase. Every member needs to be encouraged to give opinions to identify the risk and response methods. Another issue that Arktic needs to improve is the risk ownership and monitoring method. Each risk should be assigned to at least one responsible person with suitable reviewing and reporting frequency. In the current project, mostly leaders were the ones to monitor the status of those risks, which probably overloaded them as they were already managing a considerable amount of work. Engaging other members in the monitoring tasks would help to relieve leaders of unimportant risks and let them focus on critical issues.

Secondly, Arktic should consider engaging main partners as VGPC and FOM in the risk management process. Diverse perspectives and F1 expertise from these two organizations provide valuable opinions to identify potential risks to the project and event. Furthermore, Arktic's partner could support more proactively to manage the risks if they were already involved in the beginning of the process. For example, three parties could consider buying a pandemic insurance to offset the revenue loss in case of unfortunate cancellation like this. The case study of Wimbledon, the global tennis tournament, is an ideal example where its organizer received 141 million dollars due to the cancellation in 2020. The decision to purchase pandemic insurance started in 2003 with the global spread of the SARS pandemic. Acknowledging the risks from this type of pandemic, Wimbledon chose to pay 2 million dollars of pandemic insurance per year to protect itself from this event and other similar situations in the future. (McDonald 2020) However, such a decision like this is up to FOM and VGP as being the event organizer and promoter, thus the role of Arktic is to consult and propose opinion to support the decision-making process.

5 Discussion

This research study was conducted with the interests of the author in the F1 project of Arktic for the F1 2020 Vietnam event. The objective of the study was stated clearly at the beginning, in chapter 1.1.2. Three research questions were set out to support the author addressing the stated objective. However, the result of this study would be mainly applicable to Arktic and other logistics organizations to handle the project related to the F1 event in Vietnam due to the differences in the nature of the logistics industry between countries. Although the F1 Vietnam 2020 was postponed, Arktic must have gained valuable experiences from the first project, which could be an advantage for the team to provide better services for the next event, either at the end of 2020 or 2021. Since F1 was a new experience for both the businesses and government in Vietnam, there was not enough time to provide resources and favorable policy to support the event this year. Three field trips of Arktic proved that there is a huge gap between Vietnam and other countries with regards to organizing an F1 event. Table 5 shows the record of those 3 countries in organizing the F1 championship. Though it is not fair to compare Vietnam with those countries with a long history with F1, Vietnamese business and government should set the objective as learning from the predecessors and narrow this competency gap to be trusted as a long-term partner of the F1 championship.

Table 5 History of three mentioned countries with F1

Country	First F1 event to be held in	Number of times held before 2020
Australia	1928	84
Singapore	1966	20
Dubai	2009	11

Businesses as Arktic and VGPC need to improve their F1 knowledge and competencies to provide better services upon FOM's requests. Although being experts at operation work and problem-solving, they need to develop activities that require visionary and strategic planning such as the performance measurement system and risk management process. The efforts should come from every division and level, not only leaders and managers. Employees' productivity and self-discipline are the two most fundamental characteristics that Vietnamese organizations must enhance for their personnel.

Regarding the government aspect, more supportive policies should be timely approved to assist local businesses in executing their work in favorable conditions. The most concerning area is customs regulation including several complicated procedures and strict cargo inspection. For example, Vietnam customs only allows a limited number of logistics companies, which are located at Noi Bai airport, to operate vehicles and equipment inside the airport ramp. Therefore, any arriving air cargo must be handled by one of those companies before being transferred to the airport warehouse and delivered to customers. This procedure complicates and prolongs the cargo pickup process, which hinders logistics agents like Arktic from meeting time requirements of customers like FOM.

6 Reflection

Thanks to this study, the author has accumulated many academic and practical knowledge in the project management area. The qualitative research method allowed the author to acquire diverse perspectives toward the project of the local logistics agent for F1 Vietnam 2020. Throughout the research, the strengths and difficulties of the project team had been explored and used as major inputs to make improvement suggestions for the team in the future.

However, the result of this study could be more valuable if the following limitations could be overcome in future researches. Firstly, it was difficult to provide any numbers or statistics involved in the F1 project due to confidential reasons. The quantitative research approach would provide more hard facts and scientific results, which could be generalized to be a reference for the F1 project in other countries (Daniel 2016, 94). Though it is surely a challenge to get approval from FOM to conduct this type of research, the result should be a priceless resource to support any party involved in the organizational process of the F1 championship. The second limitation is that this study was conducted from the perspective of Arktic, the local logistics agent in Vietnam. If the future researcher should consider engaging more involved parties such as the local event promoter like VGPC, F1 organizer as FOM, shipping lines and third-party logistics companies, it would offer the reader a more complete picture and additional perspective beside logistics. Finally, the research could be extended to other countries rather than only within Vietnam, a country with highly customized and complicated customs regulations. Findings from the F1 project in other race locations would help newcomers like Arktic to have a better understanding of the required work for F1 and learn from the experiences of those predecessors.

7 References

Alavi, M., & Leidner, D.E. 1999. Knowledge management systems: Issues, challenges and benefits. *Communications of the Association for Information Systems*, 1(7). Accessed on 20 March 2020. Retrieved from https://doi.org/10.17705/1CAIS.00107

Alexander, M. 2017. 6 traits of highly effective project managers. *CIO*. Accessed on 16 March 2020. Retrieved from https://www.cio.com/article/2433916/project-management-six-attributes-of-successful-project-managers.html

Alshenqeeti , H. 2014. Interviewing as a Data Collection Method: A Critical Review. English Linguistics Research, 3(1), 39-45. Retrieved from https://doi.org/10.5430/elr.v3n1p39

Beresford-Howe, J. 2019. Everything You Need to Know About the Formula One Race. *Smart Shanghai*. Accessed on 15 March 2020. Retrieved from http://www.smartshanghai.com/articles/sportrecreation/everything-you-need-to-know-about-the-formula-one-racing

Berkun, S. 2008. Making things happen. Sebastopol, SA, USA: O'Reilly Media, Inc.

Daniel, E. 2016. The Usefulness of Qualitative and Quantitative Approaches and Methods in Researching Problem-Solving Ability in Science Education Curriculum. *Journal of Education and Practic,* 7(15), 91-100. Accessed on 26 April 2020. Retrieved from https://files.eric.ed.gov/fulltext/EJ1103224.pdf

Darnall, R. W., & Preston, J. M. 2012. Beginning project management. USA: Creative Commons. Retrieved from https://2012books.lardbucket.org/pdfs/beginning-project-management-v1.1.pdf

Darter, K. 2016. The Importance of Project Preparation. *Project Management*. Accessed on 17 March 2020. Retrieved from https://www.projectmanagement.com/articles/323911/The-Importance-of-Project-Preparation

DHL, n.d. FORMULA 1: Enabling the Greatest Racing Spectacle on the Planet. Accessed on 15 March 2020. Retrieved from https://www.logistics.dhl/global-en/home/about-us/partnerships/motorsports/formula-1.html

Doyle, A. 2019. Communication Skills for Workplace Success. *The Balance Careers*. Accessed on 21 March 2020. Retrieved from https://www.thebalancecareers.com/communication-skills-list-2063779

Elder, J., Buckworth, N., Shorten, B., Wang, X., Chew, D., Swil, J., & Altink, D. 2020. Covid-19: Force majeure event. *Shearman & Sterling*. Accessed on 21 March 2020. Retrieved from https://www.shearman.com/perspectives/2020/03/covid-19--force-majeure-event

Erlingsson, C., & Brysiewicz, P. 2013. Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, 3(2), 92–99. Accessed on 10 April 2020. Retrieved from https://doi.org/10.1016/j.afjem.2012.04.005

Frost, S. 2018. How to Monitor Project Progress. Basic steps. *Chron*. Accessed on 22 March 2020. Retrieved from https://work.chron.com/monitor-project-progress-3352.html

Gilbert, N. n.d. 10 Project Management Success Metrics To Measure Your Team Performance. *Finances Online*. Accessed on 20 March 2020. Retrieved from https://financesonline.com/10-project-management-success-metrics-to-measure-your-team-performance/

Haldenby, N. 2019. The Logistics Of Formula 1. *F1 Destinations*. Accessed on 16 March 2020. Retrieved from https://f1destinations.com/the-logistics-of-formula-1/

Iyengar, R. 2017. The Logistics behind F1. *Medium*. Accessed on 16 March 2020. Retrieved from https://medium.com/speedbox-is-typing/the-logistics-behind-f1-7537e445de20

Kendrick, T. 2003. Identifying and Managing Project Risk. New York, NY, USA: Amacom

Keränen, R. 2018. Risk management in client specific projects in Optofidelity Oy. Master thesis. Tampere University of Applied Sciences, Institute of Business, Degree Programme in Business Administration. Accessed on 18 March 2020. Retrieved from http://urn.fi/URN:NBN:fi:amk-2018112818815

Kvale, S. 1996. Interviews: An introduction to qualitative research interviewing. Thousand Oaks, CA, USA: Sage

MacKenzi, G. n.d. If You Can't Measure It, You Can't Improve It. *Guava Box*. Accessed on 20 March 2020. Retrieved from https://guavabox.com/if-you-cant-measure-it-you-cant-improve-it/

Manimaharan, K. 2019. Why Knowledge Is Important To The Success Of Your Business? *Wealth Mastery Academy*. Accessed on 18 March 2020. Retrieved from https://wma.my/business/why-knowledge-is-important-to-the-success-of-your-business/

McDonald, S. 2020. Pandemic insurance? Wimbledon's \$2 million gamble paid off by canceling tournament during Coronavirus scare. *Newsweek*. Accessed on 25 April 2020. Retrieved from https://www.newsweek.com/pandemic-insurance-wimbledons-2-million-gamble-paid-off-canceling-tournament-during-coronavirus-1496961

Moylan, W. A. 2002. Planning and scheduling: The yin and yang of managing a project. Paper presented at Project Management Institute Annual Seminars & Symposium, San Antonio, TX. Newtown Square, PA: Project Management Institute. Accessed on 16 March 2020. Retrieved from https://www.pmi.org/learning/library/planning-scheduling-managing-project-8510

Muslihat, D. 2018. Why You Need Good Teamwork For Project Management Success. *Zenkit*. Accessed on 16 March 2020. Retrieved from https://zenkit.com/en/blog/why-you-need-good-teamwork-for-project-management-success/

Nobel, J. & Huges, M. 2004. Formula One Racing for Dummies. Chichester, West Sussex, England: John Wiley & Sons, Ltd.

Pinto, J. 2007. Project Management: Achieving Competitive Advantage (4th ed). Pennsylvania State University, USA: Pearson Education international

PMBOK Guide 2013. A guide to the Project management Body of Knowledge (5th ed). Newtown Square, PA, USA: Project Management Institute, Inc.

ProofHub 2017. Managing Project as an Expert — A Step-by-Step Plan. *Medium*. Accessed on 21 March 2020. Retrieved from https://blog.proofhub.com/5-phases-of-project-management-for-running-successful-projects-5c485a133475

Rajkumar, S. 2010. Art of communication in project management. Paper presented at PMI Research Conference: Defining the Future of Project Management, Washington, DC. Newtown Square, PA: Project Management Institute. Accessed on 19 March 2020. Retrieved from https://www.pmi.org/learning/library/effective-communication-better-project-management-6480

Rampton, J. 2016. Manage a project from start to finish. Due. Accessed on 15 March 2020. Retrieved from https://due.com/blog/how-to-manage-a-project-from-start-to-finish/

Ray, S. 2017. The Risk Management Process in Project Management. *Project Manager*. Accessed on 22 March 2020. Retrieved from https://www.projectmanager.com/blog/risk-management-process-steps

Rowe, C. 2018. The 5 Step Risk Management Process. *Clear Risk*. Accessed on 21 March 2020. Retrieved from https://www.clearrisk.com/risk-management-blog/bid/47395/the-risk-management-process-in-5-steps

Vanderjack, B. 2015. The Agile Edge: Managing Projects Effectively Using Agile Scrum. USA: Business Expert Press

Westland, J. 2019. How to Create a Project Management Schedule. *Project Manager*. Accessed on 15 March 2020. Retrieved from https://www.projectmanager.com/blog/create-project-management-schedule

Wilson, F. 2018. How to Use the Risk Assessment Matrix in Project Management. *Task*. Accessed on 22 March 2020. Retrieved from https://www.ntaskmanager.com/blog/risk-assessment-matrix/

Zwikael, O., & Ahn, M. 2011. The Effectiveness of Risk Management: An Analysis of Project Risk Planning Across Industries and Countries. *Risk analysis*, 31(1), 25-37. Accessed on 19 March 2020. Retrieved from https://doi.org/10.1111/j.1539-6924.2010.01470.x