INFO3333
Individual in depth analysis and reflection
Afterpay System
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Contents

1.Introduction

The project management approach and aspect are discussed in the report for Afterpay system developing. It aims to explain the works done during the aspect selected and how approach influence the project. Our group adapts with XP approach well and creates risk management to point and avoid the risk both of us may take. Extreme programming (XP) was created by Kent Beck as an agile project management methodology in purpose of developing software more quickly and frequently and being flexible for clients' changing requirement (Lucidchart Content Team, 2018). It has basically 5 parts, planning, managing, designing, coding and testing and team member can reenter previous part depends on feedback and customers' demand after regularly demonstrating. The aspect of risk management is allocated in this report. The definition of risk in a project is different from the general one which means "the possibility of losing something of value". When this uncertain condition or event happening, either negative or positive effect may happen on the project (Rabiul and Alan, 2019, P5). The risk management is used to plan and make decision with some uncertain situations in advance. The description of work, comparison from XP and iterative waterfall and reflection are presented in following parts.

2.Description of work produced

2.1 Details on how the risk management was applied in the project

We started with 8 different categories which are the fact of people, technology, government, partner, market, financial, process and legal to ensure we have covered every aspect in our project we may meet. Then we thought about the specific situation with the category as well as the risk owner for each case. Brainstorming, grabbing from experience and searching from internet are three ways we look for the risk cases. Due to the particularity of our six-member group which does not belong to any company, the risk owners were decided to be team member who experiences the risk, group leader who takes response of every issues are related to the whole project or between team members and Afterpay. After that, impact and probability are defined for each case by comparing each other. After comparing, 3 levels for both probability and impact are taken as the best level for the cases. Finally, the risk mitigation strategy is implemented for every case by the method we used for searching risk.

Feedback1: In the demonstration in week 5 tutorial, we were informed that the risk matrix needed to be added in the risk management.

Feedback2: In the group meeting after week 5, we looked back to risk management plan to see if we should change some plans or add for something else such as secondary risk.

Feedback3: After the oral presentation, tutor suggested that the extreme case should be written more detailed.

It is refined by creating two tables which are risk matrix and the detailed mitigation plan and secondary & residual risks of top 5 extreme risk case. They combined with risk register as the final version of the risk management part.

Probability

Rare	Low	Low	Medium
Sometimes	Low	Medium	Medium
Common	Low	Medium	Major
	Low	**Medium**	**High**

Impact

Risk ID	Risk Description	Risk Category	Impact	Probability	Risk Owner	Mitigation Strategy
1	Funds somehow lost i.e. stolen or miss transfer of funds	Financial	High	Rare	Team Leader	Have another bank account with some funding in case or secure your bank account
2	Colesworth decides to cut the budget during the implementation	Financial	High	Sometimes	Team Leader	Convince them that the money should not be cut, otherwise we will sacrifice quality or "unnecessary" parts of the product
3	Our budget is increased	Financial	High	Sometimes	Team Leader	Increase the scope or quality
4	Government decides to change their technology policies	Government	High	Rare	Team Leader	Try to get an exemption from the government otherwise have a backup plan
5	Leak of information on the project	Legal	High	Rare	Team Leader	Ensure that everyone signs a contract stating that no information shall be leaked outside of the project
6	A competitor releases a similar, better product during the implementation	Market	Medium	Rare	Team Leader	Improve your product based on the competitor's
7	Afterpay gets positive public feedback i.e. awards won	Market	Low	Sometimes	Team Leader	Everyone becomes more motivated on the project to further bring out Afterpay good name
8	Colesworth decides to change the scope of the project	Partner	Low	Sometimes	Team Leader	Team Leader informs the member and advises the team member on the plan of doing the tasks
9	Colesworth decides to no longer support the project	Partner	High	Rare	Team Leader	Escalate to higher executives of Afterpay
10	Colesworth's scope is very well defined with no ambiguity	Partner	Medium	Rare	Team Leader	Makes the Work Breakdown Structure even simpler
11	A member being unable to complete their tasks due to personal issues	People	High	Common	Team Leader	Have someone else take over the tasks
12	Team member having conflicts with other members	People	Medium	Common	Team Leader	Mediator using his/her professional counselling skills resolves the conflict
13	Misunderstanding tasks and doing something irrelevant	People	Medium	Sometimes	Team Member	Check up regularly and give feedback
14	Someone part of the project decides to leave	People	Medium	Sometimes	Team Leader	Have slack in the schedule for other people to take over the tasks
15	Afterpay decides to hire more people for the project	People	High	Sometimes	Team Leader	Distribute workload even more or increase scope
16	Task taking longer than expected	Process	Low	Common	Team Leader	Create slack for the tasks which may highly likely take a large amount of time
17	Tasks takes faster than expected	Process	High	Sometimes	Team Member	Get more tasks done in the same time frame
18	Lack of knowledge in a particular task	Process	Low	Common	Team Member	Consult expert or do research
19	Computers decides to malfunction	Technology	Medium	Rare	Team Member	Backup regularly to GitHub
20	A function completed after a sprint being incompatible with Colesworth's current system	Technology	High	Rare	Team Leader	Do prior research before the project and discuss with Colesworth the current software functionality and whether they should change or not
21	Afterpay's system goes down	Technology	High	Sometimes	Afterpay	Afterpay assumes risks for Afterpay system issues. Colesworth should take out insurance in the event this occurs.

Risk ID	Risk	Risk Mitigation Plan	secondary & residual risks	Risk Mitigation Plan
11	A member being unable to complete their tasks due to personal issues	Team Leader should get someone else to take over the tasks. The Team Leader should identify which team member has the skills and knowledge that suits the tasks and someone who has a good level of motivation.	Task taking longer than expected	Create slack for the tasks which may highly likely take a large amount of time and inform colesworth
9	Colesworth decides to cut the budget during the implementation	Team Leader should convince them that the money should not be cut, otherwise we will sacrifice quality or "unnecessary" parts of the product. If Colesworth insists cut the budget, manager should tell the member to rearrange the plan and discover what part of project can be simplified and cut depends on the amount of budget.	None	None
15	Colesworth's scope is very well defined with no ambiguity	Take advantage of the situation, make a plan on the tasks needed to done by creating a work breakdown structure (which should be done anyways) to simplify even more on the scope of the project and then assign tasks to members.	Task takes faster than expected	Take advantage of the situation and allocate members additional work from future tasks. If the task finished early is at the end of the project, do final checks on all tasks to ensure it is at its best quality.
17	Tasks takes faster than expected	Take advantage of the situation and allocate members additional work from future tasks. If the task finished early is at the end of the project, do final checks on all tasks to ensure it is at its best quality.	Afterpay gets positive public feedback i.e. awards won	Everyone becomes more motivated on the project to further bring out Afterpay good name
3	Our budget is increased	Plan A: The Team Leader and team can discuss with the stakeholders if there are any more extra features to be added to the scope. Plan B: We could use the extra money to hire more developers to complete the extra tasks. We could also hire more testers to test the code more thoroughly and as a result, deliver a higher quality product.	Afterpay decides to hire more people for the project	Distribute workload even more or increase scope

2.2 Additional sources to support the conclusion

1. The journal shows how the risk matrix impacts choices on risk strategies and why it is important (Corinne & Maria, 2006).

2. The article gives case study and detailed description for the importance of secondary risk and how to discover and prepare for it (Fei & Kialing, 2017).

2.3 Description for decision taken

1. The risk category is made by every aspect that a member can think of.

2. The risk description should get approval of half of group.

3. The level of risk matrix is decided by all members.

4. The risk owner should get approval of half of group.

5. The mitigation stagey should get approval of 2/3 of group.

6. Secondary risk is made by the idea of a member and resources from internet.

3.Comparsion to Iterative Waterfall

3.1 Risk management with Iterative Waterfall

The characteristic of Iterative Waterfall is that for each iteration part of the project, it experiences plan, build, test, review and deploy. After deploying, group members will not go back to the part again. If risk management is implemented by Iterative Waterfall, the risk matrix will be planned and built first and tested by creating some risk case to confirm the number of levels is suitable for difference situations. Before deploying, group should have a meeting or find consultant for feedback to fix with matrix. The rest part for risk management will be implemented with the same steps.

3.2 Advantages of Iterative Waterfall over XP

1. It is more suitable for an immature or medium and large size group, because XP approach needs a stronger team which every member has high individual discipline, courage and openness.

2. Documentation maintenance will be easier.

3. The pre-design is more completed and specific.

3.3 Disadvantages of Iterative Waterfall over XP

1. It is hard to add more risk cases after deploying risk register.

2. It has longer development cycle.

3. Client can only receive the whole product at the end of the project. In other words, client cannot give feedback until the project is done.

4.Reflection

4.1 Strengths of implementation

    1. It is prepared for emergencies case group may deal with in project execution.

    2. It gives a reference to client depends on their risk tolerance.

    3. The extreme case will be paid close attention between group member.

    4. Group can learn from lessons and add them to the risk case for next group project.

4.2 Areas need improvement

    1. Need more risk cases for the category 'legal' and 'government'.

    2. Need more experience to make the risk mitigation plan more detailed.

    3. Every risk mitigation plan needs a plan B for more complicated situation.

    4. The risk matrix can have more level if more cases are provided.

    5. Finding somebody else take responsible for part of risk case.

4.3 Advantage using XP

    1. Knowledge can be learnt between group members.

    2. The communication ability has been improved.

    3. Be inspired when complete a milestone and be more motivated for next one.

    4. The project can meet others needs at any time.

4.4 Disadvantage using XP

    1. If someone cannot complete or understand the task, it will be a huge burden to others.

    2. Team leader takes more responsibility.

    3. Some parts may be forgotten at beginning without designing first.

    4. It needs a long adaptation period when people contact with it at first time.

5.Conclusion

To maximize the interests of both parties, it needs avoiding the risks and managing the project with better approach. The experience of our group makes a great impact on producing high-quality product. Also concluding the weakness and uncertain issues happened during project, our group can work better in following ones. Continuous lasting cooperation of Afterpay system are expected by our team.

6.References

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