REPORT:

“FACEBOOK PROJECT MANAGEMENT AND RISK ANNALYSIS”

INTRODUCTION:

This report is about the Facebook project management and its risk analysis. This report covers the various methods and plans while designing the facebook software and how the project is managed timely and effectively. This report also introduces the risks identified for facebook, the types of risks, and the solution to these risks.

1. PROPOSAL WRITING:

Facebook is social networking application or web page. This application allows people to communicate, share documents/photos/multimedia files, make friends and so on. Facebook messenger is an instant messaging service/application which can be downloaded and installed on mobile and desktop devices. It allows text and video chat service for free. There are various features of facebook. News Feed has been recently added which highlights information such as profile changes, events, and birthdays and so on. It allows creating specific groups in which likeminded people can join and discuss or share their views or works. Business promotion is one of the biggest advantages of facebook. You can advertise your business on fan pages and through Advertisements. The best part of Facebook is that it is free of cost and that you don't need to pay for the services available to you. According to the analysis, the need to make this software is to maintain contact between people so that they can receive up to date information about public affairs.

2. PROJECT PLAN:

2.1 INTRODUCTION:

The objective of the facebook is to provide a place where people could share personal news, events, announcements and most importantly photographs. The cost required for making this type of multi featured app is about $300,000 and the time needed to make this software will be three months.

2.2 PROJECT ORGANIZATION:

Project organization includes the following development team and the people involved:

2.2.1 Project Owner:

As the name suggests, the product owner is responsible for all things relating to the product. They listen to briefs and design a product that creates value and meets the client's requirements. They're involved at all stages of the project and adapt to any changes. They have to fully understand business needs and are familiar with market trends. As the ones who most understand the final product, they're essential to any software development team.

2.2.2 Product Manager:

The project manager is in charge of the development, organization, and delivery of a project. They break it down into modular parts and design the workflow. They distribute

tasks amongst the team and are responsible for contracts, budgets and timeframes. They ensure things run to plan and authorize any changes in delivery. Without the project manager, there'd be no plan or structure to deliver the work.

2.2.3 UX/UI Designers:

UX means user experience, so the UX designer's main responsibility is ensuring a smooth and user-focused outcome. Their role is to imagine themselves as the end-user interacting with the product. They make it easy to use and focus on all aspects of the experience: usability, functionality and performance.

UI means user interface which means the UI designer's role focuses specifically on software and how it looks and feels to the user. They need to make it intuitive and straightforward.

2.2.4 Business Analyst:

The business analyst is responsible for delivering the client's commercial needs. That means they listen to the client's business goals and help them define clear objectives. Then, they take these objectives and convert them into viable software solutions. They're involved from the very beginning of the process, and connect the client's needs with the realities of the project. They conduct market research, check out competitors and define target audiences. Creating documentation and testing solutions are also within their remit.

2.2.5 Software Developers:

No software development project is complete without your developers. They're the ones that actually create the final product by coding in a range of different programming languages. Depending on experience level, teams may have junior, mid and senior developers. Junior programmers can support the rest of the team by helping with simpler tasks, freeing up more senior developers to tackle complex coding.

2.2.6 Team Lead And Tech Lead:

Team lead and tech lead are two related but different roles. The team lead is in charge of the overall performance, motivation, and organization of their team. A developer often assumes the role of team lead. They make sure team members work well together and are on track to deliver their software solutions on time. They're sometimes referred to as engineer managers or architects and are also responsible for the development and learning of their team members. The tech lead is responsible for overseeing any technical or hardware requirements not relating to the software development process itself. They provide technical direction and integrate external hardware.

2.2.7 Others Members:

For software developing team, the team members for gathering the requirements specifications for software will be three members. For the system design, there will be five members. for implementation, there will be four members. For unit testing, there will

be three members. For system integration, there will be five members. And for system testing, there will be three members.

2.3 RISK ANALYSIS:

The risk in developing facebook application might include the schedule risks where time is not estimated properly for the project, budgets risks like incorrect estimate of budget, management risks like failure in resolving the responsibilities of each member of the team and insufficient resources for project or software development, technical risks like endless changes of requirements for the software, external risks might include market's rapid development and government rule change etc.

2.4 HARDWARE AND SOFTWARE RESOURCES REQUIREMENT:

2.4.1 Hardware requirements:

For facebook, the system must run over the internet, all the hardware shall require to connect internet will be hardware interface for the system. As for example modem, WAN, LAN, Ethernet Cross-Cable.

2.4.2 Software requirements:

Facebook requires the following mobile operating systems (environments) and software: iOS and Android.

2.5 WORK BREAKDOWN:

This includes the breakdown of project into activities and identifies milestones and deliverables associated with each activity. These activities are as follows:

2.5.1 Requirements Specifications:

In this activity, all the requirements of the facebook application either functional or non-functional should be finalized. Requirements gathering in time of seven days will be the first milestone and the final SRS document will be the deliverable.

2.5.2 System Design:

The systems design process partitions the requirements to either hardware or software systems. It establishes overall system architecture. Software design involves identifying and describing the fundamental software system abstractions and their relationships. Designing the system in next seven days is the second milestone and design documentation is the deliverable.

2.5.3 Implementation and Unit Testing:

At this, the Facebook software design is realized as a set of programs or program units. Coding of the system is done. Unit testing involves verifying that each unit meets its

specifications. Coding and testing of the software in the next seven days will be the third milestone and the verified code units will be the deliverables.

2.5.4 System Integration and System Testing:

The individual program units or programs are integrated and tested as a complete system to ensure that the software requirements have been met. Integrating the system and its testing in next seven days will be the fourth milestone and the integrated system application will be the deliverable.

2.5.5 Deployment:

Once the software product passes the testing phase, deployment of the product is done. Once the product is ready, it is opened to the public. That is known as Beta testing. If any changes are required due to customer feedback, or any bugs not seen during the testing phase arise, they can be corrected and implemented during this phase of software application development.

3. PROJECT SCHEDULE:

This shows the dependencies between activities, the estimated time required to reach each milestone and the allocation of people to activities. Following chart shows the tasks and their duration and their dependencies.

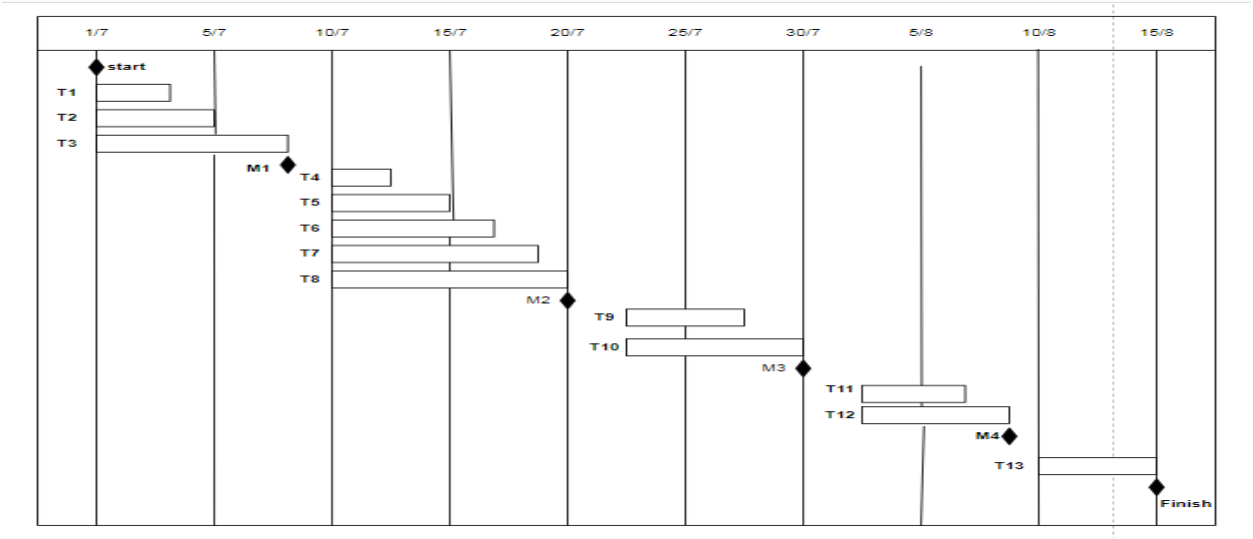
TASKS	DAYS	DEPENDENCIES
T1	3	
T2	2	
T3	2	
T4	2	T1 (M1)
T5	4	T2 (M1)
T6	5	
T7	3	
T8	2	
T9	7	T6 (M2)
T10	5	
T11	5	T9 (M3)
T12	3	
T13	2	T4 (M4)

4. MONITORING AND REPORTING MECHANISM:

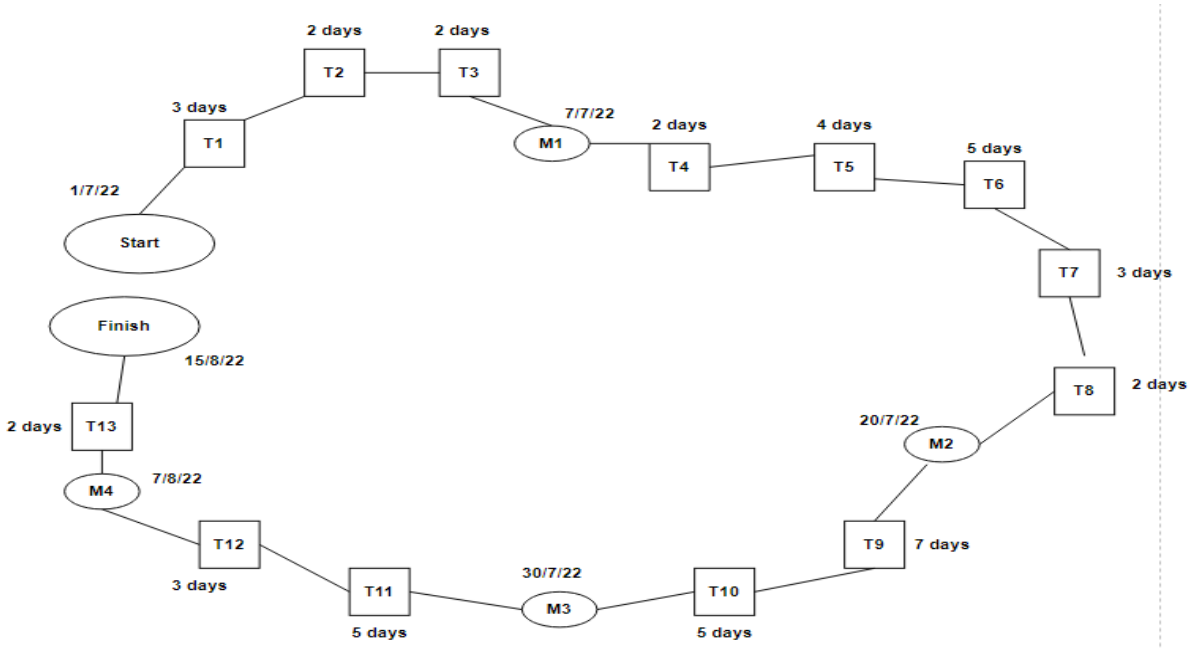
Monitoring is a management tool for tracking progress of ongoing projects. The basic idea is to compare actual performance with plans and to measure actual results against expected results. The monitoring function is an integral part of project execution. It is simply a way of making efficient project follow-up and to provide systematic, consistent and reliable information on project progress. This is all required to check if you have achieved your project goals or not. Team members of every team should generate reports to provide to the manager. Reports should include all the information about their working and performance. It

should address the expected results level, i.e. when, whether or to what extent expected results are being achieved. At the task and the activity levels, performance will be checked against the calendar of activities and the budget. Reviews should also be made on regular basis usually three to four months.

5. BAR CHARTS:



6. ACTIVITY NETWORK DIAGRAM:



7. RISK MANAGEMENT:

Facebook provides a powerful tool for engaging your customers, but it opens your business up to risk, including data breaches and poor customer reviews.

7.1 TYPES OF RISKS

Following are the types of risks:

7.1.1 PROJECT RISK:

A project risk is an uncertain event that may or may not occur during a project. It occurs due to

- **Staff change:**
  Risks include incorrect or inefficient performance of practice procedures, loss of intellectual capital when staff leaves, workplace bullying or staff disharmony, theft and fraud, unauthorized internet activity and privacy breaches.
- **Management change:**
  Poorly managed or uncontrolled changes can harm your project severely, leading to missed deadlines; budget overruns, and even project failure.
- **Requirement change:**
  The goal of requirements change is to improve the value of the current software system. However, it triggers the risks in terms of late delivery, cost overrun, low product quality and sometimes failure to the entire software project

7.1.2 PRODUCT RISK:

Product risk is the possibility that the system or software might fail to satisfy or fulfill some reasonable expectation of the customer, user, or stakeholder. It occurs due to:

- **Specification delays:**
  Schedule delay can lead to many undesirable effects on the project and its participating parties such as lawsuits between utilities and contractors, increased costs, loss of revenue, and contract termination.
- **Size underestimation:**
  The software size is very important for perfect planning of the development process because Size is the base factor to determine effort, duration, schedule, cost etc that affect the development process.
- **CASE (tools):**
  CASE tools enable the developing of systems that are easier to test and maintain and contain good quality documentation.

7.1.3 BUSINESS RISK:

Business risk is the exposure a company or organization has to factors that will lower its profits or lead it to fail. It occurs due to

- **Technological change:**

Technological change will force changes in basic managerial functions. There will be increased responsibility on management for organization outcomes leading to added emphasis on planning, decision making, control, and coordination.

- **Product change:**
  The set of things that could go wrong with the service, software or whatever is being produced by the project
- **Competition:**
  The contest between organizations that provide similar products or services or that target the same audience of consumers.

8. RISK IDENTIFICATION:

Risk identification is the process of determining risks that could potentially prevent the program, enterprise, or investment from achieving its objectives. It includes documenting and communicating the concern. Following are the identified risks for facebook:

8.1 ORGANISATIONAL RISKS :

- Loss of IP and Sensitive Data
- Compliance Violations
- Reputation Loss
- Financial Disclosure
- Effect on Human Resources
- Inability to Manage the Generational Divide
- Safety
- Competitor Risk
- Brand Hijacking
- Poor Management of Social Media Forums

8.2 TECHNOLOGY RISK:

- Cyber bullying (bullying using digital technology)
- Invasion of privacy
- Identity theft
- Seeing offensive images and messages

8.3 PEOPLE RISKS:

- Depression and Anxiety.
- Fear of Missing Out
- Unrealistic Expectations
- Negative Body Image
- General Addiction.

8.4 REQUIREMENTS RISK:

- Wrong Stakeholders
- Ambiguous Requirements
- Incomplete Requirements
- Conflicting Requirements.
- Infeasible Requirements
- Unverifiable Requirements
- Undocumented Assumptions
- Invalid Assumptions
- Lack of Traceability
- Inadequate Validation

8.5 TOOLS RISK:

- Using a case tool is very costly. Most firms engaged in software development on a small scale do not invest in CASE tools because they think that the benefits of CASE are justifiable only in the development of large systems.
- In most cases, programmers' productivity may fall in the initial phase of implementation, because users need time to learn the technology. Many consultants offer training and on-site services that can be important to accelerate the learning curve and to the development and use of the CASE tools.
- It is important to build an appropriate selection tool mix to urge cost advantage CASE integration and data integration across all platforms is extremely important.

8.6 COST RISKS:

8.6.1 Internal Factors:

- Incorrectly forecasting the budget to complete the project.
- Delivery of work taking longer than expected.
- The need to outsource to contractors or freelancers.

8.6.2 External Factors

- Change in price of materials needed.
- Regulatory changes requiring extra work.
- Exchange rate fluctuations.

9. RISK ANALYSIS:

The process of risk analysis includes identifying and quantifying uncertainties, estimating their impact on outcomes, how project outcomes and objectives might change due to the impact of the risk event. Once the risks are identified, they are analysed to identify the qualitative and quantitative impact of the risk on the project so that appropriate steps can be taken to mitigate them.

9.1 PROBABILITY OF RISK OCCURRENCE:

- **High probability** – The likelihood of this risk affecting the organization is extremely high (once every year) (80 % ≤ x ≤ 100%)
- **Medium probability** – The likelihood of this risk affecting the organization is slight (once every three to five years) (60 % ≤ x < 80%)
- **Low probability** —The likelihood of this risk affecting the organization is extremely low (less than once in five years) (0 % < x < 30%)

9.2 RISK IMPACT:

- **High – Catastrophic (Rating A – 100):**A high impact risk will cause catastrophic failures and may force the organization to terminate projects, departments or activities as a result
- **Medium – Critical (Rating B – 50):** A medium impact risk will significantly affect company performance or costs
- **Low – Marginal (Rating C – 10):** A low impact risk will be easily managed and have little-to-no negative effects on the operations of the organization.

10. RISK PLANNING:

Risk planning identifies potential problems that could cause trouble for your project, analyze how likely they are to occur, take action to prevent the risks you can avoid, and minimize the ones that you can't. There are four basic ways to handle a risk.

- **Avoid**: The best thing you can do with a risk is avoid it. If you can prevent it from happening, it definitely won't hurt your project.
- **Mitigate**: If you can't avoid the risk, you can mitigate it. This means taking some sort of action that will cause it to do as little damage to your project as possible.
- **Transfer**: One effective way to deal with a risk is to pay someone else to accept it for you.
- **Accept**: When you can't avoid, mitigate, or transfer a risk, then you have to accept it. But even when you accept a risk, at least you've looked at the alternatives and you know what will happen if it occurs.

10.1 WAYS TO MINIMIZE THE RISK ON FACEBOOK :\

- Understand what information they have on you:
- Check your privacy settings.
- Review your friends list.
- Do not use Facebook to sign into other accounts
- Don't do the quizzes
- Don't use Messenger.
- Reduce phone access.
- Verify that Facebook and third-party developers are adhering to all regulatory requirements.

11. RISK MONITORING:

Risk monitoring is the process which tracks and evaluates the levels of risk in an organisation. As well as monitoring the risk itself, the discipline tracks and evaluates the effectiveness of risk management strategies. Risk monitoring of facebook involves the following risks:

- **Forgetting About Your Potential Audience:**
  When you receive lots of friend requests, it might be tempting to accept them all. After all, you don't want to hurt anyone's feelings.
- **Insecure Third-Party Apps:**
  Facebook third-party apps are some of the worst offenders for data harvesting anywhere in the social media world; they regularly misuse email addresses and user data. Moreover cybercriminals only need a little of your personal information to take over your identity and apply for store cards or even commit crimes in your name.
- **Suffering From Social Media Addiction:**
  Facebook is the king of sucking you in and keeping you on the site for hours on end. There are just so many things to do chatting with friends, looking at photos, posting content, playing a game, searching for old friends, and so on.
- **Poorly Configured Privacy Settings:**
  Most people still don't deploy even the most basic privacy settings. That often means anyone can see their profile, even if they don't have a Facebook account. It also means you're making it a lot easier for bad actors to scrape your information. From there, it becomes a lot easier for them to commit identity fraud, hack your devices, or steal your banking information, all of which will cause significant real-world problems for you.
- **Facebook Marketplace Scams:**
  With the increased popularity has come an increased number of scams. Some of the most common scams to watch out for include:
  Fake items: Bootlegged CDs, fake designer clothes, and even fake tech items are frequently listed.
  Strange Payment methods: Scammers will suggest non-mainstream payment options, often under the pretense of avoiding fees.
  Requests for early payments or shipping: If your seller asks for money upfront to reserve the item or prove you're a serious buyer, it should set alarm bells ringing.
- **Predators on Facebook:**
  Sadly, all the major social media platforms have problems with predators. Facebook is no different. According to Facebook's own terms of use, convicted sexual offenders aren't allowed to maintain a profile on the platform. In practice, however, it's very difficult to enforce.
- **Competition:**
  Right next to reliance on advertising, one of the biggest risk factors is the fact that Facebook faces a vibrant social ecosystem that wants to chip away at the company's user base.