Experiment No. 10

Aim: Develop a Risk Mitigation, Monitoring and Management Plan (RMMM) for the project

Objective:

To be able to:

- Identify Risks
- Analyse the risks and prepare the RMMM plan

Resources Needed:

 MS-office / Open office

Theory:

- Planning the Risk Management - The proactive strategy for risk estimation is used which helps in identifying the possible threats that can occur during the project well in advance. Accordingly, steps to avoid, monitor and manage the risk are to be carried out and noted down in the form of RMMM plan.
- THE RMMM PLAN - A risk management strategy can be included in the software project plan or the risk management steps can be organized into a separate Risk Mitigation, Monitoring and Management Plan. The RMMM plan documents all work performed as part of risk analysis and is used by the project manager as part of the overall project plan.
- Some software teams do not develop a formal RMMM document. Rather, each risk is documented individually using a risk information sheet (RIS). In most cases, the RIS is maintained using a database system, so that creation and information entry, priority ordering, searches, and other analysis may be accomplished easily.
- Once RMMM has been documented and the project has begun, risk mitigation and monitoring steps commence. Risk mitigation is a problem avoidance activity. Risk monitoring is a project tracking activity with three primary objectives:

  1) to assess whether predicted risks do, in fact, occur

  2) to ensure that risk aversion steps defined for the risk are being properly applied

  3) to collect information that can be used for future risk analysis.

- In many cases, the problems that occur during a project can be traced to more than one risk. Another job of risk monitoring is to attempt to allocate the origin (which risk(s) caused which problems throughout the project)

- Risk management is the identification, assessment, and prioritization of risks (defined in ISO 31000 as the effect of uncertainty on objectives, whether positive or negative) followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities.
- In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss (or impact) and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order.
- In practice the process of assessing overall risk can be difficult, and balancing resources used to mitigate between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability of occurrence can often be mishandled.
- Risk Identification and Management Process comprises of following steps:

  1) Risk Identification

  2) Risk Analysis

  3) Risk Assessment

  4) RMMM (Risk Mitigation, Monitoring, Management) plan

Risk Information Sheet			
Risk ID: R001	Date: 05/09/23	Prob: Medium	Impact: High

Description:
Payment Processing Failure - There is a risk that the payment processing system on the Urban Garden platform may experience failures, causing disruptions in transactions and customer dissatisfaction.

Mitigation:
- Implement redundant payment gateways to ensure backup options are available.
- Regularly update and test payment processing software for reliability.
- Establish a dedicated technical team responsible for resolving payment issues promptly.

Monitoring:
- Monitor transaction success rates in real-time and set thresholds for acceptable failure rates.
- Implement automated alerts to notify the technical team immediately upon detecting payment processing issues.
- Regularly review payment processing logs to identify any recurring patterns of failure.

Management:
1. Activate the contingency plan.
2. Notify the technical team to diagnose and resolve the issue promptly.
3. Notify affected customers of the issue and assure them of resolution.
4. Use backup payment gateways if necessary to minimise disruption.
5. Continuously update affected parties on the progress of issue resolution.

Current Status:
This risk has been identified and measures are in place for both mitigation and monitoring.

Originator: Om Shete	Assigned: Om Shete, Mohib Abbas Sayed, Hamza Sayyed

Risk Information Sheet			
Risk ID: R003	Date: 05/09/23	Prob: Medium	Impact: High

Description:
Data Security Breach - There is a risk of a data security breach where unauthorised individuals could gain access to sensitive customer data stored on the Urban Garden platform, including personal and payment information.

Mitigation:
- Implement robust encryption for all customer data, both at rest and during transmission.
- Enforce strict access controls, limiting data access to authorised personnel only.
- Conduct regular security audits and vulnerability assessments.

Monitoring:
- Utilise intrusion detection systems to monitor network traffic for suspicious activity.
- Implement log analysis tools to review access logs for unusual or unauthorised behaviour.
- Regularly update and patch software to address security vulnerabilities.

Management:
1. Activate the incident response plan immediately.
2. Notify affected customers and regulatory authorities as required by data protection laws.
3. Conduct a forensic analysis to determine the extent of the breach and identify vulnerabilities.
4. Enhance security measures to prevent future breaches, including updating security protocols.
5. Collaborate with legal and public relations teams to manage the crisis and communicate with affected parties.

Current Status:
This risk has been identified, and comprehensive measures for both mitigation and monitoring are in place.

Originator: Om Shete	Assigned: Om Shete, Mohib Abbas Sayed, Hamza Sayyed

Risk Information Sheet			
Risk ID: R004	Date: 05/09/23	Prob: Medium	Impact: Medium

Description:
Platform Performance Degradation - There is a risk that the Urban Garden platform may experience performance issues, resulting in slow response times and reduced user satisfaction.

Mitigation:
- Regularly conduct performance testing to identify bottlenecks and areas of improvement.
- Invest in scalable infrastructure to accommodate increasing user loads.
- Optimise code and database queries for efficiency.

Monitoring:
- Implement performance monitoring tools to track response times, server load, and database performance.
- Set performance thresholds and automate alerts for immediate issue identification.
- Monitor user feedback and complaints related to platform performance.

Management:
1. Activate the contingency plan.
2. Notify the technical team to investigate and address the performance issues.
3. Communicate with users, acknowledging the issue and providing estimated resolution times.
4. Implement temporary measures such as caching or load balancing to mitigate performance issues.
5. Continuously update affected parties on the progress of issue resolution.

Current Status:
This risk has been identified, and measures for both mitigation and monitoring are in place.

Originator: Om Shete	Assigned: Om Shete, Mohib Abbas Sayed, Hamza Sayyed

Risk Information Sheet			
Risk ID: R005	Date: 05/09/23	Prob: Medium	Impact: High

Description:
Vendor Reliability - There is a risk that a key vendor or supplier, responsible for providing essential services or products to the Urban Garden platform, may become unreliable or face operational issues.

Mitigation:
- Diversify vendor relationships to reduce dependency on a single supplier.
- Maintain open communication with vendors to stay informed about their operational status.
- Establish contingency agreements with backup vendors for critical services.

Monitoring:
- Regularly assess vendor performance and reliability through key performance indicators (KPIs).
- Monitor vendor news, financial stability, and industry trends that may affect their reliability.
- Maintain a process for immediate communication with vendors in case of issues.

Management:
1. Activate the contingency plan.
2. Initiate communication with the vendor to resolve the issue or transition to backup vendors.
3. Assess the impact on platform operations and customer experience.
4. Implement contingency measures, such as switching to backup suppliers or services.
5. Update affected stakeholders, including customers, on any service disruptions and expected resolution timelines.

Current Status:
This risk has been identified, and measures for both mitigation and monitoring are in place.

Originator: Om Shete	Assigned: Om Shete, Mohib Abbas Sayed, Hamza Sayyed

Risk Information Sheet			
Risk ID: R006	Date: 05/09/23	Prob: Medium	Impact: Medium

Description:
Insufficient Marketing Reach - There is a risk that the Urban Garden platform may struggle to reach a wide audience and potential customers due to limitations in marketing efforts.

Mitigation:
- Develop a comprehensive marketing strategy that includes online advertising, social media, email campaigns, and content marketing.
- Explore partnerships with gardening influencers or relevant online communities.
- Allocate a budget for marketing and promotions to ensure consistent outreach efforts.

Monitoring:
- Track key performance metrics for marketing campaigns, such as click-through rates, conversion rates, and customer acquisition costs.
- Monitor the effectiveness of different marketing channels and adjust strategies based on performance.
- Gather and analyse user feedback related to the effectiveness of marketing efforts.

Management:
1. Review and update the marketing strategy to identify areas for improvement.
2. Consider reallocating marketing budget to more effective channels.
3. Collaborate with marketing experts or agencies to optimize campaigns.
4. Explore additional marketing partnerships or collaborations to expand reach.
5. Maintain a proactive approach to user engagement and retention.

Current Status:
This risk has been identified, and measures for both mitigation and monitoring are in place.

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