Introduction to IT Project Management – Assignment Template

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| ARDEN UNIVERSITY |
| BSc in Computing |
| Introduction to IT Project Management |
| IT Project Management and Reflection |
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| 3315  CHECK THE WORD COUNT POLICY ON THE ASSESSMENT DOCUMENT AND ALSO IN THE ASSESSMENT DISCUSSION FORUM AND ZOOM SESSIONS. |

A REPORT ON PROJECT MANAGEMENT AND REFLECTION

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# Section1 – PROJECT PLAN

## TASK 1 -A Business Case

1.1 A brief rationale for the project

One of the top travel agencies in the world, Jack Ventures Ltd LTD, provides cheap airfares, hotel bookings, vehicle rentals, and international wedding packages. The company aims to create a unified web application that serves both clients and travel agencies in order to satisfy the demands of travelers looking for the best deals.

1.2 Summary of benefits

1. Cost Savings : The development, maintenance, and infrastructure costs associated with maintaining two distinct systems will be reduced by implementing a single web application for price-hunters and travel agents.
2. Improves customer satisfaction: The new technology will improve travel agents' and price-hunters' overall customer experience by offering a unified platform and timely notifications.

1.3 Current Problem, proposed solution and alternatives

Problem : Jack Ventures Ltd. is confronted with obstacles related to its present technological infrastructure, such as overburdened internal IT resources that struggle to fulfill the growing requests for technological advancements.Since there are separate interfaces for price-hunters and travel brokers, maintaining an improper web application is particularly difficult and interferes with client engagement.

Solution :

1. Create a single web application that can be used by price searchers and travel agents.

2. increase the travel agent's ability to process several requests quickly.

3. Enhance Excel functions to facilitate better data handling and decision-making

4. Automatic responses for price hunters and travel agents to lessen employee workloads and improved alerts and reminders to boost customer

Alternatives:

Although Jack Ventures Ltd. could keep using their current setup, this would not solve the drawbacks and inefficiencies of having different interfaces and manual procedures. This choice could make internal IT resources more burdened and make it more difficult for the business to successfully compete in the market.

1.4 Cost/Benefit analysis

The project's £75,000 funding is set aside for the development of agile methodology.

Jack Ventures Ltd. can cut expenses by creating and maintaining a single web application rather than two distinct ones. This results in cost savings for infrastructure, development, and maintenance, which boosts customer interaction effectiveness and guarantees project delivery within the allocated budget and timeframe.

## TASK 1B - Project Initiation Document

B.1 Purpose of PID

The primary goals of a project start document are to gather input from key players and decision-makers, assemble crucial planning data that will guide the project in the right direction, and develop a detailed plan for project completion.

B.2 Case Study Background

One of the top travel agencies in the world, Jack Ventures Ltd LTD, provides cheap airfares, hotel bookings, vehicle rentals, and international wedding packages. has issues with its current technological infrastructure, such as antiquated systems, a demand for new architecture solutions to support expansion, and taxed internal IT resources. They choose to create a single web application and outsource to ITnetics Consultancy Group in order to deal with these issues.By deploying a single web application, the development, maintenance, and infrastructure costs related to operating two separate systems will be minimized.

B.3 Project Objectives

1. Enhances infrastructure through the creation of a uniform web application

2. introducing Excel functions to enhance data management

3. assist travel brokers who make numerous reservations

4. Notify travel agents via email if the status of a deal changes.

5. To ensure smooth operations, integrate with the current MIS system.

B.4 Project Management Structure and Role Descriptions

The project management structure includes the Project Board, Project Manager, Team Manager, Project Analyst, Analysts, Web Developers, and Programmer. Each role has specific responsibilities:

* Project Manager: organizing, carrying out, overseeing, managing, and closing out projects
* Team Manager: inspiring a team of workers to strive for a common objective.
* Project Analyst: tracks the project's progress, creates reports, analyses data, and assists the team in their job.
* Analysts: Find patterns, trends, and insights that might aid in planning and decision-making by conducting research and analysing data that has been obtained privately or publicly.
* Web developers: Makes and maintain website according to the project requirements
* Programmer: Write, edit, and test the code and scripts necessary for the correct operation of computer programs and applications.

B.5 Constraints

* Project must be completed within 8 months
* Budget is limited to £75,000.

B.6 Assumptions

* Throughout the project, it is anticipated that important players from ITnetics Consultancy Group and Jack Ventures Ltd. will be accessible for frequent meetings and decision-making.
* It is anticipated that Jack Ventures Ltd. will interact extensively with the project team, offering prompt comments, explanations,
* It is expected that the infrastructure, software, hardware, and human resources required to support project activities and deliverables would be available as needed.
* It is expected that in order to reduce the risks' influence on project budgets, schedules, and results, the project team will properly identify, evaluate, and mitigate project risks.

B.7 Interfaces

The key to managing interfaces in the project is the Project Interface Management Plan. Pretty self-explanatory, however it needs to be done within the parameters of the project and other important documentation.

* Customizable Settings To improve user experience, provide choices for customizing notification settings, language preferences, and preferred destinations.
* Provide price shoppers with the ability to easily search for and book travel discounts based on their interests.

B.8 Project approach

Project Approach is a recommended procedure or methodical approach that guides a project toward the intended result precisely and effectively.

In this we are using Agile methodology aproach

Iterative development, user interaction, prioritized backlogs, cross-functional teams, continuous delivery, flexibility to change, daily stand-up meetings, continuous integration and testing, and retrospectives are all components of the agile methodology. In order to effectively address user needs, it places a high priority on adaptability, teamwork, and the incremental delivery of functional software.

B.9 Scope

It sets the parameters and objectives of a project, providing team members with a structure and stakeholder expectations—all necessary for the project's successful completion. It entails email notification capability implementation, backend development, system integration, and user interface design.

B.10 Quality Criteria

A set of requirements that must be fulfilled by a product before it can be considered high-quality enough to be sold to customers. These requirements include things like functionality, usability, performance, interoperability, security, scalability, maintainability, and regulatory compliance for web applications.

B.11 Risk management approach

* Risks of exceeding the allocated budget
* Technical risks like issues with existing systems, scalability limitations, or unexpected software bugs.
* risk in terms of a lack of resources

B.12 Communication strategy

To get in touch with any external stakeholders, send an email. therefore it is possible to schedule regular meetings for internal stakeholders. Use Slack for synchronous communication on urgent queries and daily updates. For any team meetings, use Zoom or Google Meet so that all team members can participate without any problems.

B.13 Project Controls

Keeping an eye on project expenses, providing timely feedback, creating reports for each stage of the project, and refining project tactics to allow for improved results later on

## TASK 2 - Project Plan

2.1 Project Plan

1. Initiation

• .Define project goals and scope ( 1 week )

• Draw up the list of stake holders and establishing communication channels (1 week)

• Develop Project Initiation Documents (PID) (1 week)

2. Planning

• creating a project plan (2 weeks)

• Define roles and responibilities (2 weeks)

• Setting budget and resouce plan ( 3 weeks)

• creating risk managment plan and quality management plan (2 weeks)

3. Design

• UI/UX design (4 weeks)

• Ensuring Architectural foundation (3 weeks)

• build the technical system of design(2 weeks)

4. Development

• Frontend Development (6 weeks)

• Backend Development (6 weeks)

• Integration Development (4 weeks)

5. Testing

• Unit testing (1 week)

• Integration testing (4 week)

• System testing(4 weeks)

6. Deployment

• prepare Deployment Environment (1 week)

• making application work on targeted device(1 week)

• post-deployment testing(1 week)

• documentation (2 weeks)

7. Project closure

• Handover and review project deliverables (2 week)

• Get project result approved (1 week)

• Document project learnings (2 weeks)

Milestone 1 : Project intiation (3 weeks)

Milestone 2 : Target market aquired (9 weeks)

Milestone 3 : Design approval (week 18)

Milestone 4 : website completion (week 20)

Milestone 5 : Testing phase completiom (week 21)

Milestone 6 : Deployment (week 45)

Milestone 7 : project closure (week 53)

CHECKPOINTS

1. conducting weekly meeting to check the progess and identifing issues

2. Design review

3. Development progess review

4. Testing progress review

Constraints

Time contraints - project must completed in 8 months

budget contraints - The allocated budget is £75,000

Resource contraints - limited availability of workers

2.2 Work Based Structure

1. Initiation

• Define project goals and scope

• Draw up the list of stake holders and establishing communication channels

• Develop Project Initiation Documents (PID)

2. Planning

• creating a project plan

• Define roles and responibilities

• Setting budget and resouce plan

• creating risk managment plan and quality management plan

3. Design

• UI/UX design

• Ensuring Architectural foundation

• build the technical system of design

4. Development

• Frontend Development

• Backend Development

• Integration Development

5. Testing

• Unit testing

• Integration testing

• System testing

6. Deployment

• prepare Deployment Environment

• making application work on targeted device)

• post-deployment testing

• documentation

7. Project closure

• Handover and review project deliverables

• Get project result approved

• Document project learnings

* 1. Critical Path Analysis

1. Define project goals and scope ( 1 week )
2. Draw up the list of stake holders and establishing communication channels (1 week)
3. Develop Project Initiation Documents (PID) (1 week)
4. creating a project plan (2 weeks)
5. Define roles and responibilities (2 weeks)
6. Setting budget and resouce plan ( 3 weeks)
7. UI/UX design (4 weeks)

8. Ensuring Architectural foundation (3 weeks)

9. build the technical system of design(2 weeks)

10. Frontend Development (6 weeks)

11. Backend Development (6 weeks)

12. Integration Development (4 weeks)

13. Unit testing (1 week)

14. Integration testing (4 week)

15. System testing(4 weeks)

16. prepare Deployment Environment (1 week)

17. making application work on targeted device(1 week)

18. post-deployment testing(1 week)

19. documentation (2 weeks)

20. Handover and review project deliverables (2 week)

21. Get project result approved (1 week)

22. Document project learnings (2 weeks)

Calculating Early Start (ES) and Early Finish (EF)

ES - ES is the greatest of the late start time of their precedents.

EF = ES + t ( t is the duration)

Calculating Late Finish (LF) and Late Start (LS)

LF - LF will be the least of the late start time of those activities.

LS = LF -t

SLACK

a window of time during which a delay in one activity won't affect the project as a whole. There is no slack in any of the crucial path's activities.

CPM

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Activity | Duration | ES | EF | LS | LF | SLACK |
| 1 | 1 weeks | 0 | 1 | 0 | 1 | 0 |
| 2 | 1 weeks | 1 | 2 | 1 | 2 | 0 |
| 3 | 1 weeks | 2 | 3 | 2 | 3 | 0 |
| 4 | 2 weeks | 3 | 3 | 5 | 3 | 0 |
| 5 | 2 weeks | 5 | 7 | 5 | 7 | 0 |
| 6 | 3 weeks | 7 | 10 | 7 | 10 | 0 |
| 7 | 4 weeks | 10 | 14 | 10 | 14 | 0 |
| 8 | 3 weeks | 14 | 17 | 14 | 17 | 0 |
| 9 | 2 weeks | 17 | 19 | 17 | 19 | 0 |
| 10 | 6 weeks | 19 | 25 | 19 | 25 | 0 |
| 11 | 6 weeks | 25 | 31 | 25 | 31 | 0 |
| 12 | 4 weeks | 31 | 35 | 31 | 35 | 0 |
| 13 | 1 weeks | 35 | 36 | 35 | 36 | 0 |
| 14 | 4 weeks | 36 | 40 | 36 | 40 | 0 |
| 15 | 4 weeks | 40 | 44 | 40 | 44 | 0 |
| 16 | 1 weeks | 44 | 45 | 44 | 45 | 0 |
| 17 | 1 weeks | 45 | 46 | 45 | 46 | 0 |
| 18 | 1 weeks | 46 | 47 | 46 | 47 | 0 |
| 19 | 2 weeks | 47 | 49 | 47 | 49 | 0 |
| 20 | 2 weeks | 49 | 51 | 49 | 51 | 0 |
| 21 | 1 weeks | 51 | 52 | 51 | 52 | 0 |
| 22 | 2 weeks | 52 | 54 | 52 | 54 | 0 |

The slack for each activity is listed ats “0”, Therefore, the critical path is the sequence of the activities as zero slack

## TASK 3 - Approaches to Project

Project planning, which comprises creating a detailed plan detailing the resources and actions necessary to meet the project's goals, is a crucial part of project management. This include deciding on the project's parameters, establishing a timeframe, assigning duties and resources, and creating a budget.

"Dr. Kerzner’s 16 Points to Project Management Maturity

1. Adopt a project management methodology and use it consistently.

2. Implement a philosophy that drives the company toward project management maturity and communicate it to everyone

3. Commit to developing effective plans at the beginning of each project" (kerzners,2013)

These are the crucial steps to be followed in planning a project according to Dr Kerzners

PEOPLE MANAGEMENT

People managers oversee all duties related to hiring new employees, fostering employee engagement, and advancing careers. They typically supervise the new hires' onboarding and training processes.

After onboarding, people managers help supervisors mentor and provide feedback to staff members. With this collaborative approach to people management, employees may achieve their goals and work as a cohesive team.

Spencer Johnson and Ken Blanchard's "The New One Minute Manager" This book emphasizes the value of clear communication, setting expectations, and giving feedback while offering doable tactics for effective people management and leadership.   
  
Kerry Patterson, Joseph Grenny, Ron McMillan, and Al Switzler's book "Crucial Conversations: Tools for Talking When Stakes Are High" - This book offers methods for resolving disputes and having uncomfortable talks in project teams while encouraging candid dialogue and teamwork.

RISK MANAGEMENT

Risk management is the process of identifying, assessing, and controlling risks to an organization's capital and earnings, including financial, legal, strategic, and security risks. Numerous factors, including unforeseen financial conditions, legal responsibilities, inadequate strategic management, accidents, and natural disasters, can give rise to these hazards, also known as threats.

According to david Hillson,

"We also need dual-focus, the ability to keep our eye on the main objectives and purpose of our

project, while being fully aware of the detail. All risks affect our ability to achieve objectives, but

they usually arise unexpectedly, in those areas of the project which we think are OK"(hillson,2019)

PROJECT DELIVERY

Project delivery is fundamentally about transforming an idea or strategy into a measurable outcome.

It's the process of taking an idea from inception to completion, turning it into a reality. But let's dissect it more to identify its essential elements.

Scott Berkun's book "The Art of Project Management" covers themes including stakeholder communication, team management, and project planning.

It provides helpful insights and recommendations for project managers. It offers case studies and real-world examples to highlight important

ideas and difficulties in project delivery.

# Section 2 – REFLECTION

TEAM WORK

Working as a team involves bringing disparate people together to accomplish a task quickly and successfully.

A manager who has managed a team, however, will tell you that building strong teamwork is far more difficult

than this description suggests. In order to ensure that project objectives are reached, Jack Ventures Ltd. and

ITnetics Consultancy Group must collaborate effectively.

RELEVANT LITERATURE

Jon R. Katzenbach and Douglas K. Smith, "The Wisdom of Teams: Creating the High-Performance Organization" -

The traits of high-performing teams—including project teams—within corporations are examined in this book.In addition to offering project managers useful guidance, it offers insights into creating and maintaining team effectiveness.

"Team Building and Leadership in Project Management: How to Achieve Excellence" written by Dennis Lock - This book examines the importance of leadership and team building in successful project management. It provides information on how to create cohesive project teams, inspire team members to meet objectives, and construct successful project teams.

Amy C. Edmondson's book "Teaming: How Organizations Learn, Innovate, and Compete in the Knowledge Economy" The idea of "teaming," which entails flexible and dynamic cooperation across organizational boundaries, is examined in this book. It provides methods for encouraging collaborative behaviors and setting up settings that support learning and creativity.

REFLECTION

I understand how crucial collaboration is to the management of IT projects. To help team members feel respected and free to voice their opinions, I've established a welcoming environment. I am aware, though, that I still need to work on honing my facilitation and conflict-resolution abilities inside project teams.

PEOPLE MANAGEMENT

As the name implies, people management is a subset of human resource management that is concerned with people. Its goal is to assist organizations in optimizing outcomes by raising worker productivity and enhancing overall performance. In order to guarantee teamwork and alignment with project objectives, Jack Ventures Ltd. and ITnetics Consultancy Group must both manage their own teams in the case study.

RELEVANT LITERATURE

Daniel Goleman's book "Emotional Intelligence: Why It Can Matter More Than IQ" The idea of emotional intelligence is examined in this book along with how it affects people management and leadership. It talks about the five facets of emotional intelligence (EQ) and provides methods for growing EQ to improve dynamics in teams and interpersonal interactions.

"Radical Candor: Be a Kickass Boss Without Losing Your Humanity" written by Kim Scott - In order to build trust and boost team performance, this book presents the idea of radical candor, which entails being really compassionate while still being forthright in one's criticism. It offers helpful guidance on how to give and receive feedback, create enduring bonds with others, and foster development.

REFLECTION

Even though I've led and inspired project teams in the past, I know that improving my people management skills is crucial, especially in understanding individual motivations. This is because reducing team members' stress levels is essential to successfully completing projects, giving constructive feedback on time, and resolving conflicts.

TIME MANAGMENT

Keeping track of the amount of time spent and the progress achieved on project tasks and activities is known as time management. All project activities must be planned, scheduled, monitored, and controlled for optimal time management. The Project Management Institute lists time management as one of the six main functions of project management. Following the project timeline in the case study is necessary to satisfy the client and keep the project profitable.

RELEVANT LITERATURE

Thomas A. Limoncelli, "Time Management for System Administrators" - This book provides professionals handling complex tasks and projects with useful time management skills, even if it is not explicitly focused on project management. It offers helpful guidance on how to prioritize your work, reduce distractions, and increase productivity.

James Wood, Suzette Blakemore, and Kory Kogon's book "Project Management for the Unofficial Project Manager" - This book is intended for people who manage projects without having had any professional project management training. It offers helpful guidance and resources for organizing work, setting priorities, and adhering to deadlines.

REFLECTION

In past projects, I have created efficient time management plans, like employing productivity measures through the establishment of SMART targets. I am aware that I still need to improve my time management abilities, especially when it comes to accurately calculating task durations and avoiding procrastination. and assigning appropriate tasks to team members without hesitation in order to meet the project's estimated deadline

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