

MANAGING PROJECT IN ORGANISATIONS

TOTAL SOFTWARE INCORPORATION

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INTRODUCTION

A project management plan is vital for the successful execution of a project, as it comprises of consideration of various factors and pre-defined procedure which helps ineffective management of the project (Burke, 2013). The report will demonstrate an understanding of the tools and techniques used in project management. The report will then present a project management plan for an organisation (TSI) Total Software Incorporation, who has recently approved the use of voice recognition technology to improvise the organisational performance and customer satisfaction. Later, the report will present a personal development plan for acquiring the skills vital for effective project management.

PROJECT MANAGEMENT TOOLS AND TECHNIQUES

There are various project management tools and technique, and their use depends upon the factors such as the size of the project, its complexity, the time taken in the project, the number of people involved and the type of it (Meredith et al. 2017). Given below are the project management tools and techniques, along with the demonstration of how they aid in effective project management.

PROJECT MANAGEMENT TECHNIQUES

AGILE PROJECT MANAGEMENT

According to the chosen case study of TSI, the most suitable project management technique is the Agile Project Management, which comprises of a set of principles which focuses on creating value of the project. It suggests the disintegration of the project into smaller goals to make it more understandable, manageable and achievable. This model helps organisations to use adaptive planning and improvise continuously to reach the best performance possible. For Agile Project Management, organisations use techniques such as FDD, DSDM, Kanban, Scrum, etc. (Heagney, 2016).

This project management technique can be used by TSI for its software development project for the voice recognition technology, and manage it effectively through iteration and collaborative teams. Software tools such as actiTIME can allow TSI to introduce Scrum, to coordinate different work levels and track the short-term as well as long-term deadlines (Vanhoucke, 2012.). The steps regarding how it can benefit TSI in project management are given below:

Planning: TSI can develop the scope of the project in this phase. The advanced voice recognition technology will meet and exceed the standards of software currently being used, along with the other needs as mentioned in the charter. The scope also considers the completion of all training aids, manuals and other documentation, through their integration with voice recognition (Pinto, 2013).

Project roadman creation: The road map of the project allows the managers to disintegrate the features which make the final product. These individual features are built during every sprint towards the project's goals (Pinto, 2013). TSI at this point should develop a backlog of their project, which lists the deliverables and features to its current software. Thus, the employees can gain the tasks from this record in the right order (Pinto, 2013).

Plan release: It is vital to have a mutual agreement on the plan developed, therefore it should be shared and discussed before implementing. The planning must be shared with all the relevant stakeholders, to ensure everyone is comfortable with it (Pinto, 2013).

Planning the sprint: All the relevant stakeholders of the TSI project, which are the employees and the managers must be informed about their roles and responsibilities and the methodologies to be followed. This stage allows equal or appropriate distribution of tasks among all. Visual documents of the workflow can help the managers to ensure the accomplishment of each task in each sprint (Leach, 2014).

Short meetings: The Agile project management technique suggest that there should be short but regular meetings between the relevant stakeholders, such as between the employees and project managers. This determines whether the current plan needs amendments and in what areas (Pinto, 2013). Such meetings last for 15-20 minutes, and discussions are in brief.

Monitoring and control: This is about the assessment of performance or progress to ensure things are on track and performing as intended. For the TSI project, it can be done through a sprint review meeting with stakeholders to show them the final results. Later, the things that went well and which didn't are discussed to make appropriate changes (Pinto, 2013).

WORK BREAKDOWN STRUCTURE

The Work Breakdown Structure is the graphical representation of the various roles and responsibilities shared by the individual for the completion of the project. It is a foundation building block to initiate, plan, execute, monitor and control a project. This technique utilizes the charter of the project as the starting point (Schwalbe, 2015). TSI can use the WBS network diagram to arrange the various tasks sequentially, which will detail the starting and ending points of each task for the implementation of the voice recognition feature in their current software infrastructure (Bjorvatn and Wald, 2018).

For the TSI project, the WBS will serve as the starting point for managing the scope of the project. For this, it is important to understand the different levels of managerial, leadership and fieldwork levels in a WBS network (Rao, 2012). The upper levels of the TSI project will consist of the major work areas and the major deliverables disintegrated into logical work grouping further. The lower levels will then represent the right focus and details, which supports the management of the project through assisting in risk assessment, resource allocation, cost estimation, schedule development, and many more (Rao, 2012). Going further down the

network, the lowest level of the WBS network will comprise of the work packages and defines the tasks to be tracked or performed. This will allow TSI to use these definitions as the input the scheduling process for supporting the elaboration of milestones, resources, activities, and tasks.

PROJECT MANAGEMENT TOOLS

Given below are the key project management tools, in an organisational context:

WORKFLOW PLANNING AND ORGANISATIONS

This is the essential part of project planning, as it defines the methodology to be adopted to ensure the best quality possible. TSI can use comprehensive solutions such as the MS project, which will offer them features related to road-mapping of the project and hence help them to visualize the progress of the project in future, such as using the data mining for making the voice recognition more effective and receptive (Papke and Boyer, 2017).

COMMUNICATION

Communication is the key to effective project management, as it ensures that the right information has been exchanged with the right individual, and everyone is well aware of their roles and responsibilities. The entire TSI project revolves around the voice recognition technique, to make communication more effective, hence communication will be the key to test its effectiveness (Verzuh, 2015).

SCHEDULING

During the allocation of planning and resources, scheduling software helps in providing clear visual charts of the individuals present and the ones who are absent. Scheduling can be beneficial for the TSI project, as it will help in allowing flexibility in the roles and responsibilities, by planning the roles of the present and managing the potential losses due to absent ones (Verzuh, 2015).

TIME MANAGEMENT

Time is the key to every project management as it ensures that all the activities are completed within their deadlines and the project is handed over on the agreed time. TSI can use time management tools such as actiTIME, which will assist the project managers to identify expenses of both individual time and team results within a period (Müller et al. 2014).

FINANCE AND ACCOUNTING

The finance and accounting tools such as Zoho, Freshbooks, QuickBooks, etc., is important to manage the project expenses and keep all the expenditures within the budget. The financing and accounting tools will help in managing the expenses of the change implementation at TSI, and ensure minimum losses takes place such as during the work halt or systems updates. These tools will also help TSI in proving insights into team performance and project profitability (Verzuh, 2015).

IMPLEMENTATION OF A PROJECT WITHIN THE WORKPLACE AND COMMUNICATING THE PLAN WITH THE RELEVANT STAKEHOLDERS

EXECUTIVE SUMMARY

The TSI (Total Software Incorporated) has decided to initiate a SmartVoice project, which will establish a new voice recognition software. This will in compliance with the organisational corporate strategy, to enhance the level or the effectiveness of communication, to make operations work faster and to provide great customer satisfaction through customer services. The company encourages flexibility, quality, ease of use and customer services. The company believes the adoption of latest technology is both vital and necessary, and the company believes that through Voice Recognition software, the company will reinforce its privacy and capitalize on technological evolution (Van Camp et al. 2015).

APPROACH

The manager of the project will have the entire authority and their roles are to manage and execute the project before the deadline. The management team will consist of the testing group, technical writing group, quality control/assurance group and a coding group. The sponsors of the project will review and approve all the plans about the project and subsidiary management (Lientz and Rea, 2012).

For delegating responsibilities over the project manager, must be in written and signed by both the parties. The team will work in a matrix arrangement, in which the organisational management will be informed by the team member(s). The manager also has to communicate with the manager to know what is the progress and how resources are being used (Lientz and Rea, 2012).

PROJECT SCOPE

The TSI project Smart Voice project scope consists of the plan, the design, development, tests and evolution of the voice recognition software. The software has a great scope in enhancing the management and operations at TSI, which is expected to either meet or exceed the current operational standards and requirements. It also consists of training aids, documentation, manuals, etc., in coordination with the software (Van Camp et al. 2015). All the activities within the project will take place within the organisation, and no outsourcing will be done. The chart below presents the major milestones, while the smaller ones are covered in the work structure. Any delay in the schedule must be informed immediately to the managers.

MILESTONE	DATE OF COMPLETION
Complete procurement of resources and requirements	28/2/2021
Completion of theoretical designing of the SmartVoice project	30/5/2021
Coding for delivering software prototype	30/7/2021
Testing the functionality and correcting the errors identified	30/8/2021
The complete solution developed and documentation transition, handing it over for use	30/11/2021

BASELINE SCHEDULE

The work structure of the TSI project consists of work packages, with a maximum duration of work as 40 hours and a minimum of 4 hours. It defines the various roles and activities to be undertaken, including all deliverables and resources (Williams, 2013). This dictionary will help with the planning of resources, completion of tasks and meeting project needs. The schedule of the project was derived from the Project Charter and work structure, which accepts inputs from all the staff members (Van Camp et al. 2015). The Project Sponsor will review, approve and base-line the project. The project has a dedicated change control process which will manage any proposed changes. The manager and staff will identify the impacts of change on the risks, scope, resources, costs and schedule of the project. If the proposed changes go beyond the permissible boundaries, it will be transferred to the project sponsor for reviewing and approving (Meredith et al. 2017). The boundary conditions are:

- Cost Performance Index greater than 1.2 or less than 0.8
- Schedule Performance Index greater than 1.2 or less than 0.8

COMMUNICATION MANAGEMENT PLAN

This plan consists of the framework of communication, to guide all the communications during the project life cycle. The roles and responsibilities of the staff members of the Smart Voice project because the idea of the project is to enhance current communication methods. It will have a communication format to map the requirements of communication of the project, along with the conduct of communication for other interactions such as meetings (Williams, 2013). The information related to contacts will be provided by a project team directory, accessible to all the relevant stakeholders. The project manager is the leader and will use the communication matrix given below to guide the type of information to be exchanged and between whom (Zulch, 2014).

COMMUNICATION TYPE	FREQUENCY	FORMAT	PARTICIPANTS	DELIVERABLE	OWNER
Weekly Status Report	Every week	email	Stakeholders, team and project sponsors	Status report	Manager of the project
Team meeting for reviewing status and action register	Every week	personally	Project team	Updated action register	Manager of the project
PMR (Project Monthly Review) to present project status to sponsors and team	Every month	personally	Stakeholders, team and project sponsors	Presentation of metric and status	Manager of the project
Gate reviews to complete the executed phase and move to the new phase	As per the requirements	personally	Stakeholders, team and project sponsors	Completion and kick-off	Manager of the project
Design review of technicalities	As per the requirements	personally	Project team	Technical design package	Manager of the project

COMMUNICATION CONDUCT:

INFORMAL COMMUNICATION:

It is an integral part of the TSI project, vital for the completion of the project. All the updates, any concerns and issues must be communicated to the manager to make the right decisions (Hall, 2012).

EMAIL:

The communication through emails must be error-free and in brief, distributed to the right individuals as per the communication matrix. The organisation software suit programs will determine the format and the attachments required in the email (Van Camp et al. 2015).

MEETINGS:

The meeting agenda will always be delivered by the project manager 2 days before the schedule and all the members will review the agenda. The adherence of the members to the schedule will be supervised by a timekeeper. Meetings will take place in a quiet place and it is mandatory to cell phones on silent mode before commencing the meetings (Van Camp et al. 2015).

COST MANAGEMENT PLAN

The project-related costs will be managed and the costs performances will be reviewed by the project manager. The manager will then present these during meetings. The project manager will use the earned value calculations for accounting the deviations in cost and present options to the sponsors to align the expenditures with the budget (Williams, 2013). The Project Sponsor will handle all the budget changes during the implementation of Smart Voice project at TSI. The fourth level of work structure represents the control accounts for the tracking and management of all the costs and performances. Earned value calculation will be used to measure the financial performance of the project. 50% of the credit will be given when the work package starts, and the remaining 50% after the completion (Meredith et al. 2017).

The project manager will share the project's CPI and SPI with the sponsors every month. The limit of acceptable variances is 10%, beyond which it will become cautionary. Further, if the cost variances reach 20%, the status will become critical. For making any changes or corrections, the CCB will first approve it before its implementation (Hornstein, 2015).

SCHEDULE MANAGEMENT PLAN

MS Project will be used for creating the project schedule, which will commence after the identification of the deliverables within the structure of the project. The order of work packages and relationship assignment of the relation between different tasks will be determined through activity sequencing. The time required for completing each work package will be calculated through activity duration estimating (Conforto et al. 2016).

After the completion of the preliminary schedule, the project team will review it. Upon mutual agreement of all on the plan, it will be further transferred to the sponsors after which it will become the base-line (Hornstein, 2015).

The milestones for all project schedules of the TSI's project are:

- Complete scope statement and work allocation directory
- The baselined project schedule
- Final budget approval
- Beginning the project
- Approving responsibilities/assignment of tasks
- Approval on requirement definitions
- Complete data inventory
- Implementation of the project
- Deliverables acceptance

QUALITY MANAGEMENT PLAN

Quality management requires the contribution of all the members. If the correction or changes are approved by the CCB and Sponsors, the information will reach the team through the project manager. Given below are the quality management roles:

Project Sponsor: approval of accepted standards of quality, review of all the activities and deliverables and signing-off on the acceptance of the final deliverable (Meredith et al. 2017).

Project manager: handling the effective implementation of the quality management plan, working with the qualified specialists to determine the best quality standards, ensure compliance of all the documentation, process and tasks with the plan and effective communication and track of quality standards (Meredith et al. 2017).

Quality specialists: work in conjunction with the manager for the development and implementation of the Quality Management Plan, creation and maintenance of the assurance logs and quality control and recommending appropriate methods and tools for checking (Meredith et al. 2017).

RISK MANAGEMENT PLAN

The risk management in the SmartVoice object will be done through predefined methods, which will help in identifying, scoring and prioritizing the various risks. The risks with maximum impacts are in the project schedule so that the risk management can have a course of action to act proactively instead of investing time in planning and risk assessment (Pritchard and PMP, 2014). Through bi-weekly project team meetings, the risk managers will share updates with the project manager and the sponsors first, later to the other staff members is necessary. The managers are responsible for analysing the risks and the management process adopted, on behalf of which the manager will determine the areas of improvements required for further projects (Edkins et al. 2013).

COST BASELINE

All the budgeted costs are included in the cost baseline of the project, to ensure its successful execution and within the present constraints.

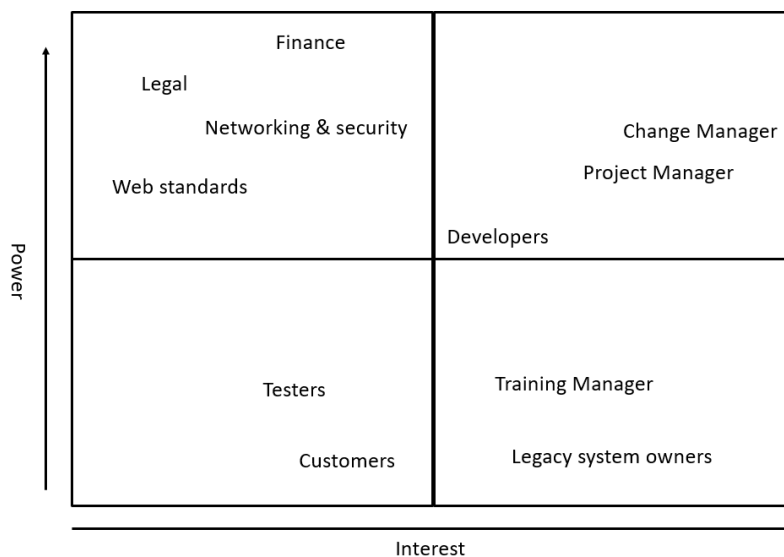
PHASE	TOTAL BUDGET ALLOCATED (IN £)	COMMENTS
Planning	267,000	Comprises of all the costs of planning
Designing	191,000	Pertains to all the activities for the conceptual designing of Smart voice systems
Coding	152,000	Pertains to the SmartVoice coding work hours
Testing	133,000	Pertains to the testing costs of the SmartVoice systems (beta testing included)
Transition and closeout	114,000	Pertains to the transition and closeout workhours costs

GANTT CHART

The Gantt Chart given below demonstrates the period allocated to each stage or milestone of the TSI's project. The project is expected to begin on 28/1/2021 and ends on 30/11/2021/

	28/1/2021- 28/2/2021	28/2/2021- 30/5/2021	30/5/2021- 30/7/2021	30/7/2021- 30/8/2021	30/8/2021- 30/11/2021
Planning					
Designing					
Coding					
testing					
Transition and closeout					

STAKEHOLDER ANALYSIS



Given below are the stakeholders and their significance in the stakeholder's matrix of the SmartVoice Project:

Keep satisfied: The stakeholders in the “keep satisfied quadrants” are the finance team, the legal bodies, the web standards and the networking and security. The finance department satisfaction will make sure that the expenditures are within the budget allocated by the sponsors, the satisfaction of legal bodies is vital to ensure that the project is taking place within the ethical standards, such as the issue of data privacy through voice data collection (Turner et al. 2012). The networking and security are necessary to protect the knowledge from a cyber

threat so that customers can gain benefit and their data is protected, payments are secure, and so on (Garel, 2013).

Manage closely: The stakeholders who must be managed closely are the change manager, the project manager and the developers. The change managers are the ones who will make sure that the changes in the current software infrastructure are implemented properly. They will supervise the entire change implementation of the project from start to the end (Turner et al. 2012). The project managers will manage and direct all the activities within the project, and therefore their satisfaction is necessary to execute the project before the deadline and in an orderly manner. Further, the developers are the ones who will develop the voice recognition software which is the main purpose of the entire project, hence must be managed closely for successful implementation (Turner et al. 2012).

Monitor: The stakeholders who must be monitored are the customers and testers, as they are the ones who will be ultimately benefiting from the project. The SmartVoice project aims at enhancing its customer services by making interaction more convenient through voice recognition. The testers are the ones who will test the effectiveness of the new systems before it allowed to use. Thus, monitoring these two stakeholders is necessary to ensure that the new systems are working as intended (Garel, 2013).

Keep informed: The stakeholders who must be informed are the training managers, who after the successful implementation will train the staff to work in the new working environment and on the new systems. This will include training for using voice commands to get things done, as well as assist the customers through responding to their queries through voice (Turner et al. 2012).

SELF EVALUATION OF PROJECT MANAGEMENT SKILLS AND PREPARING A DEVELOPMENT PLAN

PERSONAL SKILL ASSESSMENT FOR PROJECT MANAGEMENT

Project management skills identified	Current rating (1-5)
Time management skills	2
Communication and Interpersonal skills	2
Decision Making and Leadership ability	3
Negotiation	3
Risk of Managing ability	5

SMART OBJECTIVES

It is necessary to deliver an efficient working structure that supports the project through analysing relevant and required information. The SMART goals are set for accomplishing project management objectives by implementing five distinct components for setting proficient objectives. Numerous skills are required to frame the business plan after analysing risk, opportunities and every single process that can affect the project. For the concern of improving project management skills, it is required to be specified learning objective to improve; communication and time management of the activities. There is a setup of performance parameters which help to analyse the consistent growth, along with the attainable resources that support to improve project management skills. The smart goals of improving skills are required to look ethical process on the other business activities which are tie with the career path of project management. Every goal has a definite time duration, which also helps in managing time for every learning skill.

PERSONAL DEVELOPMENT PLAN

SKILL REQUIRE D	METHOD	APPROACH	RESOURCES/SUPPORT NEEDED	SUCCESS CRITERIA	TIME DURATION
Time management skills	Delegating Tasks and completing within the durable time which can improve time managerial activities and Avoid Multitasking activities (Hwang and Ng, 2013).	Self-focused	Managers, Leaders and Other Associates	Responses and criticisms by leaders and managers, and views of colleagues	1-2 week
Decision Making and Leadership ability	Interact with all age group people, get more social online, learn more languages, and use some artistic process to get judgemental actions (Hwang and Ng, 2013).	Self-focused	Managers, Leaders and Other Associates	Responses and criticisms by leaders and managers, and views of colleagues	2-3 week
Communication and Interpersonal skills	Interacting with other people, share thoughts, read books and use some learning applications. The most essential engage with the audience in the discussion (Hwang and Ng, 2013)	Self-focused	Managers, Leaders and Other Associates	Responses and criticisms by leaders and managers, and views of colleagues	2 week
Negotiation Skills	Preparation is the prior process to improve negotiation with others; due to low communication it could be affected, so improve the communicational process (Hwang and Ng, 2013).	Self-focused	Managers, Leaders and Other Associates	Responses and criticisms by leaders and managers, and views of colleagues	2 week

CONCLUSION

The report above demonstrated the understanding of the various tools and techniques used for the effective management of a project, after which the report also presented an in-depth project management plan for the TSI's project of upgrading their IT systems by including voice recognition technology. The plan presented the various aspects of planning, designing, prototyping, testing and final launch of the project, hence discussed all the necessary aspect of a project management plan required for its complete execution, on behalf of which the personal skills of project management were identified. The skills identified to be improved were communication, time management, leadership, negotiation and decision making. Later the report presented the current competencies of those skills and developed a personal development plan necessary to enhance the current skills. It also consists of ways to acquire those skills and the success criteria.

Overall, the report concludes that undertaking the project management plan is essential for the fruitful execution of a venture, as it includes thought of different components and pre-characterized system which helps in the successful administration of the task. The report exhibited a comprehension of instruments and procedures utilized to venture the board. The report at that point presented an undertaking the executives plan for an association (TSI) Total Software Incorporation, who has as of late endorsed the utilization of voice acknowledgement innovation to extemporize the authoritative execution and consumer loyalty.

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