The Importance and Trending of IT Project Management

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Abstract— IT project management is a way to define the project's success. Various of organisation implemented IT project management in their project to ensure that the project meet the goals. The trending of IT Project Management has expanded to many fields not only in IT. Nowadays, many fields has related to IT to develop the project. It provides many IT career to the market at the same time.

Keyword— IT Project Management, Prince2

I. INTRODUCTION

IT project management is a process where we manage, plan, organize and accountability to achieve the goal of information technology. It is more than just applying knowledge and aligning skills to achieve project completion. IT project management deals with the challenge of rapid technological advancement, software upgrade and version changes throughout the project timeline. IT project management also trending to various domain. As technology is advancing rapidly, new jobs are opening for new generation.

II. IT PROJECT MANAGEMENT

A. The Important of IT Project Management

The Important of IT Project Management is to prevent the money wasted on failure project.IT Project Management can be performed through 7 principle of Prince2 that applied in different projects by the organisation. The basic requirement of a project is needed to apply all the 7 principles. [1][2]

Table 1: 7 principle of Prince2

Principle	Description
Continued Business Justification	-All project must start with a business cases to justify the needs and wants of the customers. -Business cases have to check regularly. -If there are any changes related to the business cases, the project has to rebuild or stop depend on the needs and wants. [1][2]
Learning from experience	-Everyone has to learn from the starting stage to the closing stage of a project. -Can be recorded as a reference for improving the future project. [1][2]
Defined roles and responsibilities	-All members have to know their role and responsibility clearly play in the project. [1][2]
Manage by stages	-A project will be separated into different stages to ensure the project can be planned and monitored based on stage-by-stage basis. [1][2]
	-All decision and arguments between the stages can be solved and improved.
Manage by exception	-All the project has a setting limits based on six plan which are time plan, cost plan, quality plan, scope plan, risk plan and benefit plan. -If there is an exception, project board have to make a critical decision to stop or continue the project based on the situation.
Focus on products	-A product has achieved the requirement on quality, description and scope of the project.
Tailor to suit the project environment	-Project environment such as size, risk, capacity, complexity and importance. -Reduce the chance of unsuccessful project due to disproportionate effort and inappropriate approach.

IT Project Management can manage the lifecycle of a project by step-by-step. All activities will be conduct through the project lifecycle.
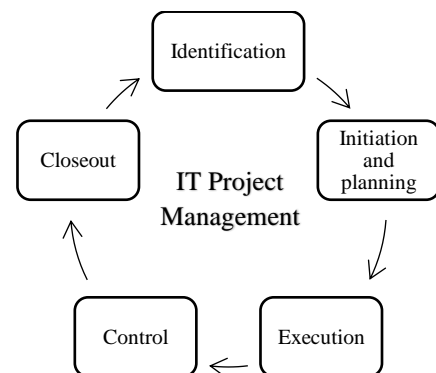

Figure 1: IT Project Management

Table 2: Description of IT Project Management phase

Phase	Description
Identification	To identify the project should be undertaken based on analysis of cost and benefit. If the sponsorship has given to the project, the project can be continued to next phase.[3][4]
Initiation and planning	A project manager has to lead the team and manage a project through define scope of project and get the project charter that approved by the project sponsor and authority. Thus, project team can start to plan the various works to ensure the project can be conduct smoothly without excess budget. [3][4]
Execution phase	All works has been executed during this phase based on requirement that setting on initiation phase. [3][4]

Control	Concentrated on project progress and performance to ensure the project meet the goals and within the budget. [3][4]
Closeout	A phase to confirm the objective of the project has been done and learn lessons from the project. [3][4]

B. Trending of IT Project Management

Table 3: Trends in IT Project Management.

Trends	Description
Artificial Intelligence (AI) and automation	Many industries have use AI and automation to perform the simple tasks in project management because AI can help to estimate budget, time and separate resources in real-time. [5]
Focus on Big Data	Data analytics will provide many data that useful in creating a strategic project management plan. [5]
Advance project management tools and solutions.	Project planning, scheduling and time tracking, budgets and deadlines, communication and collaboration and progress tracking are the important tools that can help in project management. [5]
Gig Economy	A free markets system that provides freelance work and short terms contract to people unlike traditional economy. [6]
Change management	Project manager have to ensure the project stay flexible and the daily task can perform smoothly. To improve the plan and clear communication and goals of project management. [7]
Method Melding	To ensure the combination of project can switch smoothly. [8]
Emotional Intelligence (EQ)	All members have to take care their emotions during the project. The failure control of emotion will create many emotional activity and lead to the failure project. [5]

III. RELEVANT IT CAREERS

Table 4: IT Careers

Career	Description
IT Project Manager	Responsible to carry the team and ensure the project achieve the goals. [9]
IT Consultant	Analyzing client requirements, delivering product demonstrations, attracting prospective clients, maintaining relationships with existing clients, checking training and marketing materials, and training staff related to product knowledge. [9]
Database administrator	Responsible for ensuring the company databases run smoothly to store data.
Support specialist	To support the business computer networking and hardware problem. [9]
Programmer	Use programming language like Java, C++ to write coding. [9]

Quality assurance tester	To testing software product like gaming have free from any problems. [9]
Web developer	Develop a website by using coding like HTML, JavaScript and CSS. [9]
IT security specialist	To protect the property and data of a company from hacking. [9]

IV. REFLECTION

Table 5: Reflection of each members

Member	Reflection
Teh Jing Ling	My goal is to explore more knowledge about Technology Information System. It can improve and preparing me in the future. To creating a project, I learn that we need to obey the IT project management process. This can help us to increase the chance of successful project and focus on the production and quality of a product. I will do many researches on the project management to improve my knowledge about it through various resources.
SM Tashdid Hassan	As a student There are many things I do not understand. Among them is Management. As stated in the meeting our life in the university is a one big management project that we have to complete. I hope in future I may be able to Manage Various Project with the skills that I will acquire in my time during UTM.
MD Shafiur Rahman	My goal with regards to the course is to know more about Technology Information and gain clear knowledge about future careers in different sectors. The talk influenced me a lot and cleared many doubts about IT project management. To improve my potential in the industry, I have to look for the methods to improve my visibility. I will develop a daily activity for my team and try not over complicate the projects hold on by team members. I will communicate with my team members regularly to let everyone become closing to each other.

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