

The Importance and Trending of IT Project Management

Low Junyi¹, Muhammad Imran Hakimi bin Mohd Shukri², Madina Suraya binti Zharin³,
Nur Syamalia Faiqah binti Mohd Kamal⁴, Sakinah Al'izzah binti Mohd Asri⁵

Technology and Information Systems, Universiti Teknologi Malaysia
Sultan Ibrahim Chancellery Building, Jalan Iman, 81310 Skudai, Johor

Email: Low.junyi2001@gmail.com¹, muhdimran190@gmail.com², madinasuraya@graduate.utm.my³,
nursyamaliafaiqah@graduate.utm.my⁴, sakinahalizzah@gmail.com⁵

ABSTRACT

In most modern industries, project management has a central role to play in these economic activities. Project management is the application of processes, methods, skills, knowledge, and experience to achieve specified project objectives. In IT, the project manages the strategy, organisation, and responsibility to achieve the objectives of information technology. Since IT reaches the majority of companies or businesses, the scale of these projects can be broad and complex. The team needs to manage the project expertly to deliver on time, on the budget result, specific scope, quality standard, expected benefits and risk from each project. Currently, IT project management is constantly evolving and known to be at the center of competitive advantage. Therefore, the magnitude of IT project management also means that it is more than just applying knowledge, aligning skills, and using regular methods and procedures to drive the project to completion. IT project managers need to tackle the challenges of interdependent integration, rapid technology upgrades, and version changes that may occur throughout the project timeline.

Keywords- project management, IT project management

I. INTRODUCTION

In this modern era, we as the Generation Z which raised on the Internet and social media and IT had become our trend and it is so important in our life that almost everything is relevant to IT. In this IT project management industry talk, the speaker which is Mohd Khairul Reeza had introduced what we should focus especially about the importance and trending of IT project management. Currently almost everything has relevance with IT project management from accounting field, business management or e-marketing and even education. For the trend of IT project management, almost every listed company has their own website and system such as RHB bank, Standard Chartered and Bank Negara Malaysia resulting from IT project management. Clearly, IT project management has become important and a trend in this era.

II. THE IMPORTANCE OF IT PROJECT MANAGEMENT

A. *Real-world testing following real-world conditions.*

This is one of the biggest factors to determine the success of an IT project. Almost everyone who conducts an IT project usually does the test on every subsystem, the problem is usually they do not try to conduct the test where some problems would show up on go-live or shortly after that. The inability to conduct this may be because people who put together the system do not understand the consequences. Hence IT project managers play important roles in conducting real-world testing to see if their IT project would survive in real-world conditions. This is also because they have the power as compared to the non-managers of an IT project.

B. *To improvise leadership.*

IT projects are not all about the understanding towards hardware, software or any technology-related. On top of all that, IT projects also require understanding between organizations. IT project managers are trained to communicate with every level of an organization with minimal disruption. A good IT project manager also understands everyone's business.

C. *For a more precise planning.*

Even before an IT project starts, every detail and information have to start. There will be no chances to figure anything out as it starts. Otherwise, there will be something to miss later on such as inaccurate dependencies, cost overruns and scope creep. In order to do precise planning, things such as business needs and goals, network and IT resources must be looked into. Project waypoints must be defined as precisely as possible so that both client and technicians know where the project should stand at a certain point. With this being said, we will know what we are going into, when the project starts and how much and what the project will cost.

D. *To set up a long-term success.*

When an IT project becomes a success, say for a company, it does not mean that it will continuously support the company's needs. Both short-term and long-term planning are always necessary in an IT project. Companies often do not take the importance of IT project management seriously in ensuring long-term system planning and monitoring. This, in return will result in executives to be uninformed when a hardware starts to fail or even low resources in a running system. Obviously, IT project management will help the system to run with a high performance and efficiency towards its lifespan for a very long time.

III. TRENDING OF IT PROJECT MANAGEMENT

A. Shifting, Globalized Gig Economy

Statistics from 'Gallup' show that 36% of workers earn income from gig work. Moreover, according to 'Arras People's 2019 Project Management Benchmark Report', 42% of project managers are freelancing. Project managers are already aware of this growing gig economy and many teams are bringing on gig workers with short-term contracts. This gig workers could take this as the first step to get a permanent job. Hence, this will become the norm.

There are some challenges of this trend which are the project managers need to handle the remote team members that stay in different time zones, different continents, and also commitment with other projects. However, these gig workers earn more but are bound with short-term contracts.

B. Greater focus on Big Data

Nowadays, with the collection of a large amount of data, companies use it to understand what other people or customers need. The '2018 WEF Future of Work Report' in 2022 states that 85% of companies are prone to expand the use of data analysis, especially big data. Big data involves analyzing massive data sets for insights on audiences, customer needs, and demographic.

Project managers need to become the data analyzer and also the translators for clearer insights from data by always staying up-to-date on new tools for data visualization. This is due to the fact that data can make accurate decisions for companies.

C. Automation and Artificial Intelligence

Artificial Intelligence (AI) is one of the components that bring a large impact into the fourth industrial revolution. AI can quickly and efficiently schedule and assign resources in real-time.

Moreover, with AI-powered bots, decisions for the best projects could be made. The consistency of decision-making on multiple levels within a company could also be improved by machine intelligence.

D. Importance of Change Management to Project Success

The number of companies nowadays expands day by day. Hence, this increasing competition means that the organizations must always be aware by adapting and adjusting their processes, workflows, and competencies.

Digital project managers could strengthen their organization by managing the change effectively to complete projects. After completing the projects, companies should implement something by always making sure that people are ready to use it.

E. Method Melding

Complex working environments are making companies increasingly adopt simultaneous planning to replace traditional methods for developing products. Thus, different methodologies are blended into project management such as Agile and Waterfall especially in software development.

The main difference between agile and waterfall method is waterfall projects completed sequentially while agile projects completed in circle.

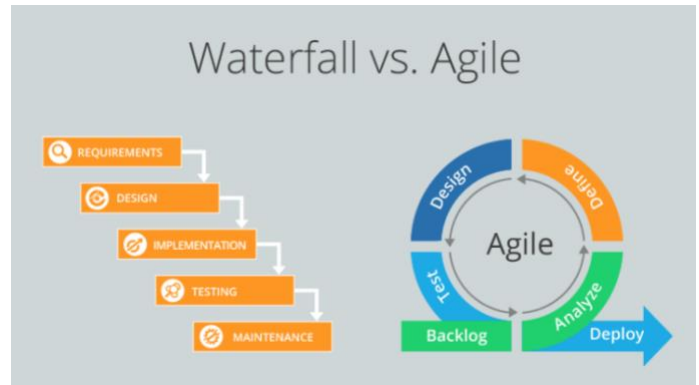


Fig. 1 Difference between Agile and Waterfall method

F. Advanced Project Management Tools and Solutions

Project management tools are one of the most essential parts in project management. Most high-performing projects use project management software to control all aspects in project management.

Some of the aspects are project planning by using previous project data, scheduling and time tracking, communication and collaboration, budgets and deadlines and lastly progress tracking for the ongoing projects.

G. The Impact of Emotional Intelligence (EQ)

Project performance could be analysed by emotions as it plays a vital role towards a project success. Team members should be able to understand one another as different people have different personalities.

Handling a project could make people stressful. Thus, each person must be able to handle their own emotions as it represents someone's leadership skills.

IV. THE RELEVANT IT CAREERS

Career and Job's Descriptions	Salary Range (per month)
Project Manager Project managers are charged with preparing those types of projects within an organisation and ensuring that they are carried out and on-track during each step of the process. In order to achieve clear objectives, this position can require regular	Minimum of RM6,000 and maximum of RM10,000

V. REFLECTION

assessments of staff, as well as leadership and motivation. These project managers monitor and review projects before they are completed to decide if follow-up projects are required and what improvements can be made.	
Software Engineer Software engineers evaluate the needs of consumers and build software applications. Usually, software engineers have programming expertise, but they focus on the design and development of systems using mathematics and engineering concepts. To further integrate disparate programme functions into a single whole, the software developer may collaborate with designers. The starting salary depends on both experience and the type of software that is being created. Applicants for many other specialised IT professions are accomplished software engineers.	Minimum of RM4,500 and maximum of RM7,000
Computer Programmer Companies that manufacture and sell software employ most computer programmers, but programmers may also be working in numerous other companies. Many computer programmers work as contractors on a project basis, meaning that they are employed by a corporation only to complete a particular programme. Programmers' job is to develop, test, and troubleshoot programmes. They also upgrade existing systems and restore them. Alternatively, programmers may use one of many supported languages to write their own custom scripts for Nao.	Minimum of RM4,500 and maximum of RM7,000
Computer Technician Computer technicians repair computer parts and devices and mount them. Setting up and managing computer networks is the responsibility of certain computer technicians. In order to diagnose problems and run routine maintenance on complex systems, experienced computer technicians can work with computer engineers. In this sector, job growth is expected as computer equipment becomes more complex and technology expands. Computer technicians should also expect their schooling to continue in order to keep up with technological changes. In this area, strong communication skills are essential. RM4,500 is the minimum monthly salary to be expected for this job.	Minimum of RM3,500 and maximum of RM5,500

A. Low Junyi

As my dream is to be a successful and outstanding data engineer. This talk has taught me to focus on soft skills so as emotional control as knowledge which is IQ is just a key for me to be hired but soft skill and emotional control can help to promote my position and become one of the key people in the company. Action needed for me to achieve my dream is to focus on my programming language skill and should learn more than 2 or more programming languages. I should prepare well for my soft skills as this would help me in the future.

B. Muhammad Imran Hakimi bin Mohd Shukri

By attending this course, I really hope that I will be able to strengthen my knowledge in the world of technology since I really love it. Furthermore, technology has now become a part of our lives where with the use of technology, it will make everything easier. I also hope that not only I can understand the concepts, but also to practice them.

With the IT project management talk being held, I have learned that whatever we are doing, we need to be organized, and as a result, we could shoot our shot to the higher levels, not only today but in a long-term vision. Also, when conducting a project, there must be a leader that manages the team. This would help in keeping any goals more achievable.

C. Madina Suraya binti Zharin

My goal in this course is to be able to gain knowledge and fully understand all the subjects that I learned. Thus, I could implement it well in the future.

Based on the talk, I got a wider view about the working conditions in the industry especially on how a project is being conducted. Project management is not an easy process and it requires much effort and steps especially with the advancing trends towards the industrial revolution 4.0.

Therefore, to be a good employee in the industry, I should improve my skills by doing a lot of practices. Other than that, I also need to be able to understand other people well because to run a project, teamwork is really important.

D. Nur Syamalia Faiqah binti Mohd Kamal

For this course, my goal is to gain knowledge and experiences as this information is valuable in the upcoming future. Besides, Malaysia is striving forward to achieve industrial 4.0 which means that this course will give me a handicap and a chance to improve myself better.

This inspiring industry talk gives me the impact of giving my best effort in everything I do. Achieving my goals is possible as long as I know and plan earlier because the talk already gave an idea on how the industry works and employment.

Hence, I need to sharpen my soft skills, communication skills and critical thinking as these skills are necessary to become a good employer. I also

have to study smart and arrange my timetable diligently as a preparation for the future.

E. *Sakinah Al'izzah binti Mohd Asri*

My goal in this course is to be able to understand and fully practice the syllabus that I have learned in class. Furthermore, my dream is to get a good result and work in the technology industry field because I believe in the future technology industry will become wide-ranging and demanded.

The impact of project management talk on my goal is to make a plan to achieve the goal. It was an efficient way for me to strive for the goal on time by setting the scope, schedule, and budget from the start. Next, I need to stay on the plan and focus to improve the quality of work.

Thus, I need to develop my skills in computing languages, soft and technical skills, and catch up with the fast trend IT. Finally, I need to explore the technology to create a connection with the industry. It is very important to fit in the IT industry.

ACKNOWLEDGMENT

First and foremost, we would like to express our special thanks of gratitude to Dr. Aryati Binti Bakri as well as the whole lecturer in technology and information subject for conducting an industry talk about project management.

Secondly, we would like to thank Mr. Mohd Khairul, the head of the project management office in commerce Dot Com Sdn Bhd. We are grateful for the time and effort you took to share your thoughts and experiences in the industry. We got a lot of input and knowledge about project management during the talk.

REFERENCES

- [1] Aston, B., 2020. *5 Emerging Project Management Trends Of 2020 - The Digital Project Manager*. [online] The Digital Project Manager. Available at: <https://thedigitalprojectmanager.com/project-management-trends/>. [Accessed 23 December 2020].
- [2] Kashyap, V., 2020. Project Management Trends (2020): What Does The Future Look Like. [online] Proofhub.com. Available at: <https://www.proofhub.com/articles/project-management-trends/>. [Accessed 23 December 2020].
- [3] Nash, B., 2020. *Agile Vs Waterfall: Learn The Differences In 5 Minutes*. [online] TrustRadius. Available at: <https://www.trustradius.com/buyer-blog/difference-between-agile-vs-waterfall/>. [Accessed 23 December 2020].
- [4] PERSOLKELLY. (2020). Malaysia Salary Guide 2020/21. Available at: https://www.kellyservices.com.my/media/kellymalaysianew/client/PERSOLKELLY%20MY%20Salary%20Guide%202020/Malaysia%20Salary%20Guide%202020_2021.pdf. [Accessed 23 December 2020].
- [5] R. Downey, "The Importance of IT Project Management: Why Expertise Isn't Enough," *Symmetry Corp*, 03-Jun-2016. [Online]. Available: <https://symmetrycorp.com/blog/the-importance-of-it-project-management/>. [Accessed: 22-Dec-2020].
- [6] T. J. O'Leary and L. I. O'Leary, *Computing essentials 2017: complete edition / Timothy J. O'Leary, Linda I. O'Leary*. 2016.