

The Importance and Trending of IT Project Management

First Lee Qing Ren¹, Second Heedayah.², Third Raghid³, and Fourth Arvind⁴

^{1,2,3,4}Faculty of Engineering, School of Computing, University Technology Malaysia, 80990
Johor, Johor Bahru, Malaysia;

Abstract - This report is for Industrial talk 2 in UTM given by Mr. Khairul and moderated by Dr. Goh. The topic of the talk was IT project management and we are going to discuss the importance of IT project management, the trends of IT project management, the relative careers in IT, and finally we will give our reflection.

I. INTRODUCTION

On Tuesday on 1 December 2020 from 10:00 AM to 11:00 AM we had a great meeting about the importance and trends of IT project management with Mr. Mohd Khairul Reeze Ruslan. Mr. Khairul who is an expert in IT project management. Mr. Khairul graduated from UM with bachelor of Computer Science in 2003, after that he completed his masters from University of South Wales, UK, and he also has a lot of work experience and professional certificates. Mr. Khairul worked in several companies, mostly banks and currently he is working with the Malaysian government on the ePerolehan Project.

II. IT PROJECT MANAGEMENT

A. The Importance of IT Project Management

IT project management possesses a strategic alignment and makes the objectives of a project to be clear.^[1] It introduces a project outline to visualise the procedures of the project. All work and tasks are clearly stated to prevent misunderstanding throughout the project. It is to ensure the project is carried out efficiently according to the plan.

IT project management provides risk management. Risk management is a must for a project to be a success as it helps to define the value and the success rate of the project. All budgets, funds, completion time, external or internal factors are taken into account in the risk management in order to reduce the risks of the project thoroughly.

Most importantly, quality control is available in IT project management to secure the product quality.^[2] It verifies the product to fulfill the standards in the market by quality planning, satisfying the market needs in the fullest. Meanwhile, the products will be checked by third parties to ensure that the products are free of bugs and errors, otherwise the industries will be imposed fines or sued for a law punishment if the product does not match the requirements.

IT project management tailors a suitable regulation for a project. Every project has their specific management which fits them perfectly. A project will eventually run well with the tailored management. In contrast, the project will be a failure without proper management.

B. Trending of IT Project Management

Gig Economy And Increased Remote Working

The gig economy and remote working have grown in the last couple of years. These show a greater reliance on digital. Remote working can give advantages to both project managers and teams.^[3] For a project manager, managing time, people, and task management to keep work more flexible and flowing smoothly are a challenge due to teams in different time zones and continents. But remote working offers flexibility in schedule and not having to shuttle to the office. Also, it reduces project costs. A project manager has to stay on top, keep track of teams knowing the progress of work, and status update by having a meeting weekly or biweekly.

More Focus On Data (Big data)

To manage a project, a project manager must prepare with a great amount of data to make a good and accurate decision. A project manager plays an important role in understanding data, especially

big data that involves data analytic and a lot of numbers. Before starting a project, understanding customer needs is a necessity, and analysed data insight is the ability to understand the needs beforehand. With a lot of data, it helps teams have a common understanding of the data and use for it. A mistake in deciding due to a lack of data can adversely affect the project. Choose and use data efficiently to prevent risk.

The Expansion Of Automation And Artificial Intelligence (AI)

Automation and Artificial Intelligence (AI) is an extra hand that helps humans. Most of the project management has started using AI to do a daily task through task automation that reduces human energy. Project managers need to embrace and leverage AI in project management. With automations and AI can assist humans in performing their task and save time doing a project. AI can instantly and efficiently schedule project time and also give the best need for a project. AI helps to build a meaningful connection between the project manager, teams, and client.

Importance of Change Management

Change in management is a frequently important role in project success. Changes management is important to complete the project and helps create a smooth process. The organization has to stay compliant in the change management, adapting and adjusting the workflows efficiently. To complete the project smoothly and encourage the organization, the project manager needs to manage the change effectively. Set a standard for teams to follow and maintain flexibility can help the organizations adaptables and adjustables.

Method Melding

An agile approach is a different methodology from the waterfall approach. An agile approach is an integrative approach and between the development phase or testing, the customer can give requirements or change to be implemented. While the waterfall approach is a persistent approach and customers can only reach the end of the product. The project manager has to be clear with methodology and alert with a new method to understand the mindset and atmosphere of teams. A great approach to methodology melding can make work more stable, efficient, and engaging.

Advance Project Management Tools And Solutions

Project management tools help to maintain the duration of time that has been designated to finish the project. With tools, the project manager gets to work in project planning and use the previous data project data into informative, easy to read, and custom reports. Tools help the project manager to complete the project on time. Help in scheduling events, meetings, and deadlines plus keep tracking the ongoing project. Tools give advantages in communication and collaboration, sharing information with the team around the world, it makes work more comfortable. Project management tools can reduce costs and deliver the project with the allocated budget. With tools, it can encourage the team to work from home by looking at the final of the project.

Emotional Intelligence (EQ)

With IQ, the project manager can handle the project but EQ determines the project to succeed. Emotional intelligence is a skill to observe one's own and others' emotions.^[4] Emotional intelligence is a skill to observe one's own and others' emotions. Other than making deals, deciding the budget, and collecting data, the project manager also deals with people that a machine cannot deal with. The project manager has to understand the team member's emotions to avoid a bad atmosphere in the team. The project managers need to apply leadership skills to make sure teams are more motivated and responsible to work on the project efficiently.

III. RELEVANT IT CAREERS

In this era, digital technology has been improved to the finest level. Henceforth, there are many careers presented to employees who are educated in the IT field. Employers seek individuals with a degree in computer science and valuable traits which include patience, logical thinking and attention to detail.

Software application developer

Software developers are responsible for creating and executing software for devices.^[5] Someone who has a futuristic vision and is ready to collaborate with others to bring new ideas. The mastery of the basic coding and maths are vital in this career.

Web developer

Web developers need to comprehend the clients' needs and develop the best website for their business. Web developers will have to present the design of the website. The proficiency in coding and the experiences in developing websites, which are in stated their portfolio, are essential to a web developer.^[6]

Computer systems engineer

Computer systems engineer is responsible for searching and looking for simple solutions for intricate application problems, system administration issues and network related issues. They have to work with clients or internal stakeholders to comprehend the main problem and find the effective solutions while collaborating with developers. This career suits business-savvy professionals.

Database administrator

The job scope of a database administrator is to secure, organize and troubleshoot storage for a vast amount of data and information online. A person who prefers to analyze data and recover information and is good at solving problems fast could be the ideal in this career.

Computer system analyst

The main work of computer system analysts is to merge information technology initiatives and company's business. They evaluate computer network systems and propose improvements and upgrades to achieve business targets and needs. One has to master computer coding and possess the knowledge of the business in this career.

The average of the salary in IT careers is shown as below:

TABLE 1: AVERAGE OF THE SALARY IN IT CAREERS

IT Careers	Average Salary (RM)
Software application developer	41696
Web developer	36343
Computer systems engineer	40071
Database administrator	53698
Computer system analyst	59704

Source by: <https://www.payscale.com/>

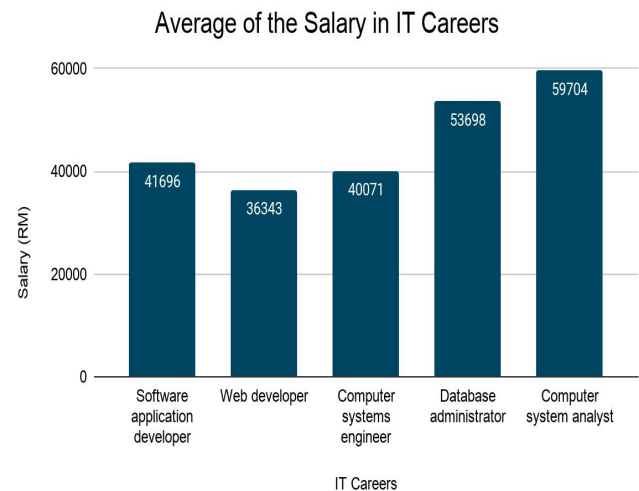


Figure 1: Average of the Salary in IT Careers

IV. REFLECTIONS

- Reflection of Lee Qing Ren.

My personal goal is to put my efforts as much as possible in realising a digital world in the future with regard to my course, Technology and Information System. This talk enlightens me as to the importance of project management in the IT industry. A good project management should have crystal clear goals and objectives with and foresee the risks and benefits behind. In order to improve my potential in the industry, I should learn more about IT project management and polish my soft skills to increase my ability and adaptability in the working environment.

- Reflection of Heedayah.

From my course, I want to make animation and graphic design using multimedia technology. Explore more about IT and develop a new technology that can help and bring enjoyment to people. The talk makes me realize that developing a new product all comes from good project management. With good teamwork and great management, I will be able to achieve my dream. I need to improve myself by adapting and following the trend in the industry besides growing my skill.

- Reflection of Arvind.

Based on my course, my main dream is to create good cartoons and show my passion towards designing in my career. Plus, I love drawing and arts, henceforth, I hope that I am able to pursue my dreams in this course by designing the best graphics. The talk has made me realise how to improve our world by creating good inventions. This encourages

me to create good graphics for the world to look at and experience 3D graphics very soon.

- Reflection of Raghid.

I want to help my country because the courses I take are still very rare in my country. In order to help people, I need to be more serious in pursuing my dreams, more able to manage my time and thoughts, more logical and realistic in thinking, and can collaborate with friends more in the same course. I will be more serious and active in studying, try hard, manage my time wisely, seek for experience and relation as much as possible, worship God obediently, and must be more confident than before.

ACKNOWLEDGMENT

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