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# Change Management and its Contribution to the Success of IT Project Implementation

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# **ABSTRACT**

Witnessing our contemporary time, Technology and its rapid advancement could make a tremendous impact on every aspect of our life. Technology has been used in various daily life operations regardless of their fields. Most business sectors have moved toward ICT and consider it as one of potential competitive advantages. Thus, more IT projects are conducted. It has been shown that the numbers of IT projects failure are currently high and this due to various factors but the main factor stated was poor project management. Additionally, time gets change from day-to-day rapidly and creating a dynamic organization becomes very challenging. Projects are long-term process where project management is short-term process. Therefore, proper management is required to ensure the effectiveness of the projects implementation plus felicitous change management is much demanded since it focuses on the enhancement of the projects after being implemented to cope with the current massive change aspect to ensure the productivity and sustainability of any organizations.

**Keywords** – Change Management, Project, project management, Project success

### I. INTRODUCTION

To stay ahead on rivals and combat the competitors; one way is stressing and putting pressure on ICT to produce tangible project's outcome efficiently with limited resources. Additionally, contemporary time is facing a rapid changing in various aspects and the usage of advanced technology has been raised and become one of the competitive advantages plus the demand of clients has been more complicated.

Therefore, the issue of project implementation successfully is very critical to project manager, since the project implementation is ongoing process that involves challenging phases and requires valuable and adequate resources for the rise of the project. In order to establish a project, three main variables should be available which they are human, budgetary and technical variables.

The implementation of a project requires very alert attention and simultaneous observation and monitoring by the project manager to ensure the smoothness of the project progress. Since a project is conducted in a dynamic environment, Project manager must have potential information, experience and skill to overcome any unpredictable outcomes which are unfavorable. [7]

There are certain criteria that judge the success of a project implementation. However, before moving to the success factors and successful project features, a project concept needs to be clarified first to have a proper understanding about the nature of a project.

### II. PROJECT

There are various definitions for the term project and it is being illustrated differently based on the established project environment and the wide variety of organization activities. However, to generalize the common understanding for the term project, it has been defined that a project is the collection of human and nonhuman resources that are assigned to accomplish certain specified goals and produce indented deliverables within specific time and allocated amount of money that serve the needs of its customer. [7]

In the words of Turner (1999), "a project is an Endeavour in which human, financial and material resources are organized in a novel way to undertake a unique scope of work, of given specification, within constraints of cost and time, so as to achieve beneficial change defined by quantitative and qualitative objectives." [6]

According to PMBOM Guide 4th edition, project was defined as "A project is a temporary endeavor undertaken to create a unique product, service, or result. The temporary nature of projects indicates a definite beginning and end. The end is reached when the project's objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists." [10]

Some criteria should be satisfied by the project in order to be carried out which are start-end stage, equipped with achievable goals, series of unique complex and interrelated required process involved and limited budget and resources should be allocated.

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Additionally, there are potential factors that need a serious attention which are the size and complexity of the project, types of project clients plus the level of client involvement. And not to mention the level of risk can be associated during the implementation of the project.

### III. SUCCESSFUL PROJECT

Everybody has his own point of view regarding the success of the project. The meaning of success can be seen differently from one individual to another. However, there are common factors that evaluate the success of the project and its implementation. There are several elements which contribute to the success of the project. For instance, speaking about the proper management handling the project, it is referred to the project management. Treating the risk and mitigate it is under the process of risk management. Dealing with clients and project people such as top management, stakeholders and team members, it needs effective communication skills. Aiming to obtain intended deliverables calls for the Quality management. Finally continuous enhancement and ensuring the sustainability of the organization to cope with the rapid change requires a proper change management process.

### IV. PROJECT MANAGEMENT

In this paper, project management and change management are the main core areas to be highlighted. Project management is a potential process that handles most critical elements of various managements such as people, business, technology, risk management and any other critical management required to implement a project successfully. A attaining a desired success of any required project, a proper project management must be established.

According to Guru Prakash Prabhakar, he has explained there are three main factors focused by project management which are: time, cost and performance. Projects can be considered as successful if they have been completed within the time and budget given and satisfied the level of performance requirement. [7]

In the PMBOK, it has been stated that "Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements".[10]

Diallo & Thuillier (2003) had reviewed the project management literature and outlined a set of evaluation dimensions. They pointed the most important things that a project should aim to it. One of the most important element is a project must respect to the three traditional constraints (time, cost and scope). The second element is seeking the acceptance and satisfaction of the project stakeholders and gaining their commitment. For instance, top management and project team members beside the

involvement of the actual end users during the process of project implementation. [7]

Additionally, a project management must ensure the alignment of the project results with the organizational outlined objectives plus analyzing how well the project could leverage the Institutional or organizational capacity of the organization.

In the case of financial return, an effective project management can be able to evaluate and measure the productivity of the accomplished projects and to which extent they could contribute to the economical and social benefits. As being mentioned in Guru Prakash Prabhakar article that according to Kerzner (2003) "A project management was defined as the process of planning, organizing, directing, and controlling for the company resources for a relatively short term objective that has been established to complete specific goals and objectives" [7]

Since conducting a project is an ongoing process which is segmented in to several stages that need to be carried out precisely, a project management is responsible for providing a proper management over those stages and ensures the quality and effectiveness of each single stage before moving to the next stage. Project processes are initiation, planning, execution, monitoring and closing.

Successful project management is through the correct utilization for knowledge, tools, skills and techniques that may elevate the project to the success point.[13]

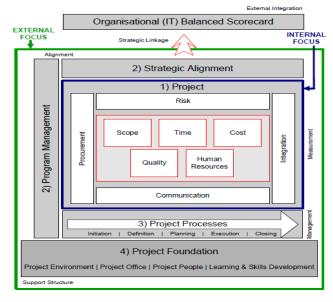


Fig 1: Approach of IT Project Management [13]

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### V. CHANGE MANAGEMENT

"Some people change when they see the light, others when they feel the heat" (Thomas Baekdal, 2006)[1].

Everything in this planet turn to change and nothing stays constant forever. Change is inevitable [15] issue that it must be faced and adopts it. As being witnessed the advancement and rapid evolution in every aspect of life and how our daily life gets affected with accelerated change around us, it becomes so hard to ignore and keep living and doing the same things in the same way.

Market pressures, competition among rivals become very brutal in the contemporary time. To survive in the market place, an effective new technique must be followed. One way to survive is practicing the concept of change and creates a dynamic organization that is willing and flexible to apply any necessary changes. Some individuals see change as an opportunity or obligatory to survive where others conceive it as a threat or disruption. Therefore, change is very critical that requires a proper change management to monitor and ensure the effectiveness of the change.[12]

Change means how to alter organization's work to obtain improvement, while the boundaries of project management are limited on knowledge, skills, tools and techniques to project activities to meet project requirements. Therefore, the impact of change will ultimately affect the organization's assets such as people, systems, processes, structure and business. "The change" is happened when an organization wants to move from current state to the desired new state with higher performance [12]. Thus, a change management plan is potentially required to describe how well the changes will be monitored and controlled.

Change management and project management incorporate together to achieve project move from current state to the future state through transition state as shown in fig (2)[11].

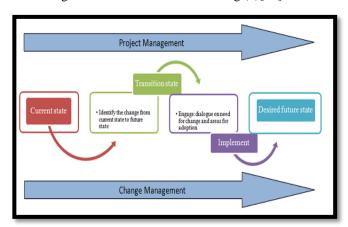


Fig 2: incorporation of Change Management and Project management [12][3]

As being stated by Tim Creasey in his article, change management is focusing on people side and how to manage their resistance towards the change to achieve the desired business outcomes [14?]. He added that several organizational tools are being exploited by change management process to facilitate and empower individuals to have successful personal transitions resulting in the adoption and realization of change [1].

Change management involves processes such as planning for change, managing change and reinforcing change. Change management provides tools to realize change for example, Individual change model, Communications, coaching, Sponsorship, Training, Resistance management. Each tool is trying to achieve its goal. All these tools should be integrated in project change and any altering in process in system, in organization's structure or job role need structure to manage technical side and people side [4][2].

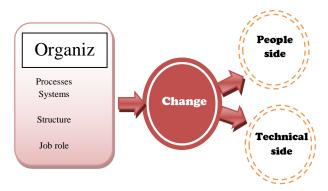


Fig 3: Change focuses on People and technical sides

There are several phases where change should go through to ensure the smoothness of change management implementation.

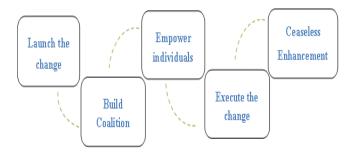


Fig 4: Change Management Framework

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### Phase one: Launch the change

The change must be recognized and its vision must be clarified. The need for the change should be exposed to the potential project participants and unveil its importance and impact on the organizational sustainability and success. Scope, time span and desired goals and objectives should be embedded with the change vision and shown clearly.

### Phase two: Build Coalition

Project mange should perform an effective communication skill and leadership to form and build potential project participants and gain their support such as top management, stakeholders and team members.

People are normally negative towards any changes, so mitigating the resistances of people and entice their attention by illustrating how well the change will participate in their success and future growth is critical responsibility put on the project manager shoulder. Project manager must ensure to obtain Top management, potential stakeholders and organizational support.

### Phase three: Empower individuals

Forming talent and skillful team members that are competent to handle the change effectively is very important. Therefore, required training and education should be provided to empower team members and increase their level of qualification. Additionally, project manager should ensure that team members are inspired and eager to take the action towards the change.

# Phase four: Execute the change

After perceiving the change and its importance and obtaining potential support and forming powerful team members, now it is the time where some actions must be taken and the change implementation should be placed.

This phase requires very effective communication and leadership skill to handle change process optimally and ensure the efficiency of each process involved in the change management process. It is encouraged to have short-term wins where the change is divided into small portions and after each portion being executed successfully, celebrating the victory and giving rewards are practiced.

#### Phase five: Ceaseless Enhancement

After the completion of change implementation, it is important to have a continuous monitoring and improvement over the project. It is advised to make the change as a part of the organizational culture and ensure that the change can be seen clearly in every aspect of the organization. It is very essential to make sure the continuity support and the cooperation among team members are exist all the time.



Fig 5: Communication and leadership is the heart of Change Management

# VI. WHY IS CHANGE MANAGEMENT IMPORTANT?

Misunderstanding for the concept of change can lead to ongoing and barriers issues. Perceiving the importance and beneficial impact of the change by people is more likely to participate in the change process and see that it is successfully carried out resulting less disruption in the organization [12].

# VII. CRITICAL SUCCESS FACTORS TO CHANGE MANAGEMENT

To successful change management, there are numbers of critical factors that should be considered in change management as shown in fig (7) below starting with pressure of change at the top of the pyramid to the action at the base [9].

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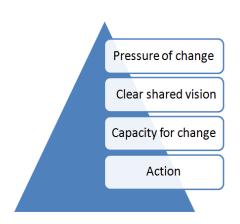


Fig (6): Success factors in change management.

# A. Pressure of change:

"Leadership is getting others to do what you want them to do, Because they want to do it" - Eisenhower

The call for 'Pressure for change' could be from senior management from the beginning, but it may have come from customers or clients in a supply chain [9]. Both senior management commitment and drive for change is substantial for effective and successful implementation. "Our character is what we do when we think no one is looking" – H Jackson Brown (Jnr)

The role of senior management is so prominent in change management. In fact, senior management supporting reflects by what they do and say. Consequently, the power of change can be lost when the senior management fails to remain fully supportive of project.

According to Duncan in 2011 he said in his paper that the leaders and corporate sponsors round up to develop the corporate vision. On the other hand, the team members concentrate on developing policies. [5]

### **B.** Clear shared vision:

"As a manager the important thing is not what happens when you are there,

But what happens when you are not there" - Ken Blanchard

For effective change, it is necessary to be implemented in all levels associated with the culture of an organization [8][9]. In order to achieve this goal you should understand how to motivate your teamwork and you should not forget that change is the

major cause of stress amongst the workforce. Here are some tips that can be used to motivate your team:

- 1. Pride: The performance of your staff can shrink significantly if they feel unappreciated or taken for granted. "Follow where your enthusiasm takes you"
- 2. Happiness: A caring approach with your staff can earn many benefits; because naturally when people feel with a lot of cares about them as individuals then that will reflect directly to their work and the same thing goes with employees. "A happy team is an effective team"
- 3. Responsibility: "It is amazing what you can accomplish if you do not care who gets the credits" Harry Truman
  Giving responsibility to people means giving them trust. To illustrate, when people is trusted by others conversely they will care more on their work.
- 4. Success: "Success in your life is not a single achievement. It's all that you do with others and for others". There are different views regarding success concept but there are common pointers of success as an example market profile, corporate reputation and product quality.

# 5. Recognition:

When the leader's work is done, the people say 'We did it ourselves' – Lau Tzu

One of the effective ways that employers can use it is to treat his employees as his most important and valuable customers. The employer provides activity of employment and wages as well, while the employees purchase these with their effort.

### 6. Security:

"You do not lead people by hitting them over the head—that's assault, not leadership"- Eisenhower

A lot of fear set in whenever change implemented. For example, losing of job security or losing of control. Similarity, honesty and opened communication are crucial here. Security is one of the best practices in the market and also become rigorous. [1]

7. Money:

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"I am not interested in money I just want to be wonderful"-Marilyn Monroe

Another superior motivator is money. A staff that is under paid is less likely to respond positively to change because it needs more efforts with little or no increase in pay or recognition or both. Consequently, financial rewards for employees are considered one of the motivated means to gain employee satisfactions. "It is not the employer who pays wages; he only handles the money. It is the product that pays wages"- Henry Ford

# C. Capacity for change (resources):

"More business is lost every year through neglect than through any other cause"- Jim Cathcart. This is staff responsibility to identify all resources that will be required before they proceed and make sure these are provided.

### D. Action:

It means the implementation on the change. "We are what we repeatedly do. Excellence then, is not an act, but a habit" - Aristotle



Fig (7): Essential methodology for the effectiveness of the change.[9]

## VIII. CONCLUSION AND FUTURE WORK

Success of IT projects is being very critical since most organizations moved towards ICT projects to step ahead and gain a competitive advantage over their competitors. Observing our present era, it surprises us how tremendous changes have occurred within short period of time compared to the past time. This rapid issue disquiets most organizations and makes the adaptation process hard.

Looking at this matter, there is no escape option from establishing projects and encountering the change where the

action should be placed against it. Therefore, an effective project management plus the need for optimal implementation for change management are strongly required for the sustainability and improvement of the organizations.

Educing from literature review, we have elicited several potential factors that contribute in the success of the project. Three elements must be provided which are money, machine and men. Skillful proactive participants (project manager and team members) can have a strong influence on project success. Meeting the common constraints, which are scope, time and budget, is the most highlighted criteria in judging the success of the project.

Additionally, understanding the nature of the project complexity plus the types of customers involved can have a potential contribution to the effectiveness of the project management and decision making process. Change management and project management are two main core appealed in our contemporary time where the competition is very brutal. Rapid advancement, globalization, customer demands complexity, survival needs all these critical issues have made the living with the usage of old ways clearly impossible. Therefore, to cope with these challenges, change should be conducted. Thus, an effective change management with proper project management is critically required to implement the change.

There are essential elements should be taken care to produce an optimal change process which are effective communication, empowering individual with skills, top management and stakeholders agreement and commitment, organization culture support, effective risk management to eliminate or mitigate the risk level may involve, and continuous improvement for the change. Success factors must be dealt with and taken in to account to avoid any unexpected unfavorable consequences.

A survey will be conducted among Malaysian Ministries departments and agencies to extract the actual factors they face in implementing project successfully and how well they manage to cope with the current way of life with all these challenges and competitions. Our main study is to know the most critical factors that may lead to project success from change management prospective.

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