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# The effect of Key factors to project management success

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### ABSTRACT

The importance of project management has become more and more significant today especially in today's market situation. The current economy and downturn as well as highly competitive market have made our market changed totally. For his reason in this paper about the effect of different factor to project successes has discussed. And the advantage and disadvantage of each factor has shown.

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### Introduction

Project management as a management discipline underpins much economic activity. In industries as diverse as manufacturing, projects drive business. Project management, therefore, is emphasized as the process of making decisions and operationalizing certain strategies and tactics to bring the project to success. According to [1], to increase the chances of a project succeeding it is necessary for the organization to have an understanding of what are the critical success factors, to systematically and quantitatively assess these critical factors, anticipating possible effects, and then choose appropriate methods of dealing with them. Once identified, the success of the project can be achieved. Large-scale engineering and construction projects have traditionally dominated the subject of project management and implementation. According to [2], the project implementation process is complex, usually requires extensive and collective attention to a broad aspect of human, budgetary and technical variables. In addition, projects often possess a specialized set of critical success factors in which if addressed and attention given will improve the likelihood of successful implementation. On the other hand if these factors were not taken seriously might lead to the failure of the project. Business today is operating under high level of uncertainty, projects implementations are open to all sorts of external influence, unexpected events, ever-growing requirements, changing constraints and fluctuating resource flows. This clearly shows that if projects are applied and steps are not taken in order to manage them effectively and efficiently, the chances of failure are high. Based on the statistics published by Malaysian Industrial Development Authority (MIDA) in August 2006, the number of approved manufacturing projects has increased by over 15% since year 2001. This approved manufacturing projects amounted to a total capital investment of over RM31 billion in 2005 and RM46 billion in 2006 from both local and foreign investments, an increase of 8% from the previous year. 51% were successfully implemented and mostly comprised production and machine installation projects, whereas 48.7% was in active planning stage (MIDA, 2006). As projects are being used widely in the manufacturing industry, it is therefore vital to identify factors that contribute to the successful

implementation of project [3]. This is also supported by an empirical study conducted by Belassi and Tukel [4] where manufacturing respondents accounted for 40.7% of the total respondents in which product development projects were most common.

### Importance of Project Management

The importance of project management has become more and more significant today especially in today's market situation. The current economy and downturn as well as highly competitive market have made our market changed totally. For example, if you look at the mobile phone market comparing the market 10 years ago with today, how many different models that you have 10 years ago comparing to now? How many colors did we have 10 years ago comparing to now? Of course, the answer is that we have only one or a few color and a few models to so many different models today that we lose count of them. Thus, it shows that we have moved from a low mix market environment to a high mix environment. When I mention mix is means mixture of models or products. When we are in a high mix market, it means that we have to introduce more and more products to be competitive. If we need to introduce more products, it means that we need to have more research and development or more innovation to develop and design new products or models for the market. And, all these innovations require project teams. Therefore, you can see that importance of project management has become more critical to the business. Before we go further, let us define project management. Project management is the discipline of planning, organizing and managing resources to bring about the successful completion of specific project goals and objectives as defined in Wikipedia. A project is a temporary endeavor, having a defined beginning and end (usually constrained by date, but can be by funding or deliverables), undertaken to meet particular goals and objectives, usually to bring about beneficial change or added value. The temporary nature of projects stands in contrast to business as usual (or operations), which are repetitive, permanent or semi-permanent functional work to produce products or services. In practice, the management of these two systems is often found to be quite different, and as such requires the development of distinct technical skills and the adoption of separate management

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. With today's highly competitive market, the life cycle of a product is also getting shorter and shorter. It sometimes or more often now is so short that it is considered a project by itself. Some product complete life cycle is so short that it may only be a few months. In this type of environment, managing the whole product life cycle from product development to launching to end of life is just like managing a project because the time frame involved is so short. Therefore, now you can feel the importance of project management especially to your managers, supervisors and engineers in your operations. If you would like to excel in your market, you must equip your personnel with the right project management skills and also aware the importance of project management in their work [5].

### **Eight Key Factors to Ensuring Project Success**

#### **Introduction:**

As the project manager you are ultimately responsible for delivering a successful project. The buck stops with you, so it is in your interest to ensure relevant tools and techniques are deployed to make this happen. Some of the following may sound obvious but I encounter these basic mistakes month in month out with project managers scratching their heads wondering how and why it all went wrong [6].

#### **Business Case:**

Ensure that there is a strong business case, with high level support, that everyone can buy into. The business case is the justification for the project and should list the expected benefits. This is something everyone involved in the project can focus on and the reason why the project is taking place. Projects move us from one state to another by deliver a change, product or other desired outcome, with the business case explaining why.

#### **Critical Success Factors:**

Define with the customer the Critical Success Factors that will make the project a success. Ensure that you make them measurable e.g. a 20% reduction in the cost of raw materials by the end of the year. Use these factors at the end of the project to measure your success. This is all that counts and the must have items that the project needs to achieve. All other issues are secondary to these as the Critical Success Factors effectively form your contract with the customer.

#### **Planning:**

Time spent planning is time well spent. All projects must have a plan with sufficient detail so that everyone involved knows where the project is going. A good plan provides the following benefits: -

- Clearly documented project milestones and deliverables
- A valid and realistic time-scale
- Allows accurate cost estimates to be produced
- Details resource requirements
- Acts as an early warning system, providing visibility of task slippage
- Keeps the project team focused and aware of project progress

To skimp on this area is likely to lead to problems. Ensure that you build in contingency to any estimate. I recommend between 10 and 15 percent. I prefer to be a little pessimistic and deliver early rather than too optimistic and deliver late. Be careful though, add too many contingencies and you could give the impression of being inefficient.

#### **Team Motivation:**

A motivated team will go that extra mile to deliver a project on time and to budget. Keep your team motivated by involving them throughout the project and by planning frequent milestones to help them feel they are making progress. Communication is

key here, so let your team know when they are performing well, not just when they are performing badly.

#### **Saying No:**

Believe it or not some project managers and some team members come to that, have a problem saying no. Never promise anything you know you can't deliver, you are just storing up problems for later. Stick to your guns no matter how senior or important the person is, they'll thank you for it later. If they don't perhaps you're in the wrong job. When saying no, be firm and prepared to justify the reasons behind your decision.

#### **Avoiding Scope Creep:**

Scope creep is one of the most common reasons projects run over budget and deliver late. Don't forget the customer will forget the extra work and effort you have put in, insisting that you have delivered what they asked for originally. Ensure that you set expectations correctly at the outset of the project and clearly define what is in and out of scope. Record it in the key project document. Don't assume the customer will read and understand this document. I recommend that you spend an hour with the customer to walk them through the project and ensure that they understand and agree the scope. Don't proceed without a firm agreement.

#### **Risk Management:**

Nobody likes to think about risks especially early on in a project. Avoid risk management at your peril. I recommend that you produce a risk log with an action plan to minimise each risk and then publish it to all the key stakeholders in your project. Knowing what action you will take, should the worst happen, will be a great comfort.

#### **Project Closure:**

Remember that projects have a finite life. A project that isn't closed will continue to consume resources. It's in the customer's interest to keep the project open so they can add new features and functionality as they think of them. At the end of a project be firm, agree with the customer that the Critical Success Factors have been met, the project delivered, tested, released and ask them to sign the project off. I like to use a Customer Acceptance Form that I lodge with the Project Office. At this point you may like to ask you customer to fill out a satisfaction survey. They may have valuable information that can help you and your team improve for future projects.

#### **10 Project Success Factors**

(Chaos Report, version 1995....for they changed over the years, as any list of factors like that will [7])

1. User Involvement -15.9%
2. Executive Management Support -13.9%
3. Clear Statement of Requirements -13.0%
4. Proper Planning - 9.6%
5. Realistic Expectations - 8.2%
6. Smaller Project Milestones -7.7%
7. Competent Staff -7.2%
8. Ownership - 5.3%
9. Clear Vision & Objectives - 2.9%
10. Hard-Working, Focused Staff - 2.4%

The % at the end of each item shows the percent of persons (out of 365 respondents based on their collective experience on more than 8000 IT projects) who listed this item as a success factor. According to this list, the No 1 factor is User Involvement ...so let's act on it 'Pareto style'. What's wrong with this approach is that it assumes that there is no causal relationship between these elements, which is a false assumption. As I look now at it 'Ishikawa style', the No.1 is No. 9 in the list: Clear Vision and

Objectives and, really, it is the No.1 of all lists claiming to uncover the key success factors of project management. Here how it really works. If we do not have No. 9 ('clear' meaning that all stakeholders see, understand and share the same vision and the same objectives), it will be impossible to:

- respectively or simultaneously get 3, 8, 2, 1 and 7;
- agree on 5, 4 and 6; and
- have 10 and succeed

So, I would suggest that project managers and other stakeholders forget about all those lists for now and concentrate on the one single ingredient common to the success of all projects: clear and shared common vision and objectives. This is the one project success factor 'list' that is universal and that I propose to follow. The remaining items are contextual and will vary from one project to another, so be prepared to do some analysis on your project to make it a success. No list will ever give you the recipe for success if no one is working on the same project. So start there and build, together with the other stakeholders, the list of things that you ought to do on THIS project to meet your common vision and objectives.

#### **The 10 Key Project Leader Skills**

1. Developing a grand vision,
2. Building the project management team and leading the team through the steps of the project management process
3. Leadership skills; leading the project team through the stages of team development
4. Managerial communication skills: verbal, both one-on-one and with a group, and written
5. People-management skills such as constructive feedback, conflict resolution, managing individual styles and personalities
6. Facilitation skills
7. Skills at interfacing across the organization and removing obstacles for the team
8. Ability to accept criticism, feedback, and input from others
9. Skills in using team-based tools such as brainstorming, organizing, decision making, project management, conflict resolution, and so on.
10. Selling skills. The ability to promote and sell the project both within and outside the organization. Presentation skills [8].

#### **Tipsof Project Resources Leveling**

As a Project Manager, would you like to spread work evenly across your team? This task is called "project resources leveling" and it's one of the hardest things you will have to do. To help you out, we've listed [9].

#### **Create a Bullet Proof Plan**

The first step is to create a Work Breakdown Structure that includes all phases, activities and tasks. The worst thing you can do is to level your resources and then find that you've missed critical tasks in your plan and have to start again. Once your task list is complete, list all resources that are allocated to the project. Miss no-one. If you later find you've missed someone, then it could play havoc with your leveling. Only with a complete list of tasks and resources are you truly ready to level your resources.

#### **Start with Critical Tasks**

Now, identify the most critical tasks in your plan and calculate the amount of effort required to complete them. Then allocate your best resources to completing these tasks and make sure that the effort allocated is sufficient.

#### **Perform Leveling**

Great - so every critical task has the resources needed to complete it. But in doing this, were any of your resources over-allocated? For instance, is Bob Smith allocated for 60 hours a week instead of 40? The process of reallocating people against tasks to even out their workload is called "resource leveling". To do it, take these steps: - Identify the number of hours that each person in your team has available for work. - Then calculate the number of hours they are allocated to tasks, in your plan. - If the number of hours allocated is greater than the number of hours they have available, then they are "over-allocated". If it's the reverse, then they are "under-allocated".- For any resources under or over allocated, you need to change the tasks they are allocated to, in order to try and perfectly fit their available hours against their allocated hours. - Only when you've completed this, are resources considered as "leveled".

#### **Tackle Non-Critical Tasks**

It's now time to perform all of the above steps for your non-critical tasks. This is a time consuming process, but by starting with your critical tasks first and your non-critical tasks second, you know that the project has a great chance of succeeding.

#### **Constant Surveillance**

Your Project Plan is a living and breathing document. It changes every time you complete a new task or finish an old one. You need to constantly monitor your resource utilization and make sure that your teams are allocated to tasks in the most efficient manner. This will give you the best chance of succeeding.

#### **Conclusion**

Project management as a management discipline underpins much economic activity. In industries as diverse as manufacturing, projects drive business. Project management, therefore, is emphasized as the process of making decisions and operationalizing certain strategies and tactics to bring the project to success. Applying to these techniques will help you avoid many common problems that befall many project managers. The key to good project management is communication with the project stakeholders. Never leave it too late to tell people what is happening, bad news only gets worse the longer you leave it

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