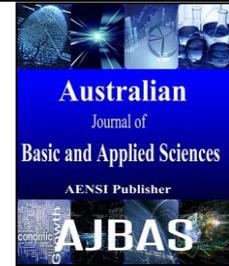




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Substantial Consequences and Factors Leading Towards Construction Project Success and Failure

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ABSTRACT

The phenomenon on the incompleteness of construction projects in Malaysia is something very common at the moment. But to a more positive note, there are also successful projects which has been established in a large scale over the years. When there is an existence of such success, yet the project failures are yet to be apprehended as well. Whether the most appropriate measures have been taken in curbing this problem is yet to be sure off, looking at the existence of project failures. Therefore, this paper gives an outlook on the current situation of abandoned projects in Malaysia, and also takes a look on the factors on both success and failures of projects, where the essential information on this was obtained from statistics provided by Ministry of Housing and Local Government, and also based on the comparison matrix that was established from the causes identified by researches from other countries, including Malaysia itself. Some of the information that was able to gather from this was the types of causes with its ranking from the most to the least, and other underlying factors and driving keys on the successful completion of projects. The outlook on the failures and success of a project could be an absolute strategy that could be implemented in the effort towards restoration of abandoned projects in Malaysia, and in other countries as well which are also experiencing the same adverse situation.

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INTRODUCTION

The Malaysian construction industry is known to be one of the contributors towards the Gross Domestic Product (GDP), in the country. Generally, the industry is divided into two fields, which is the general construction, comprising of residential construction, non-residential construction and civil engineering construction, and the other is the special trade works, consisting of activities of metal works, electrical works, plumbing, sewerage and sanitary works, refrigeration and air conditioning works, painting works, carpentry, tiling and flooring works and glass works, as reported in the Malaysian Institute of Economic Research, (2011). It could be described here that the Malaysian construction industry plays an important part in the growth of the country's economy.

The Malaysian construction industry has experienced proud moments and success throughout the years, and according to CIDB Annual Report (2010), this achievements was established in the spanning of 50 years. This success and proud moments could be linked with some of the construction projects developed along the years, such

as the existence of KLIA, EL, Monorail and the Klang Valley Rail Transportation System. There are also the establishment of some of the bridges in the country, such as Seri Perdana Bridge, Putra Bridge, Seni Wawasan Bridge, Bakti Bridge, Seri Saujana Bridge and Monorail Suspension Bridge. There are also the development and growth of other successful projects which has been highly noted by the public and the foreigners, and they are the institutional buildings and recreational amenities, such as Perdana Putra Complex, Putra Mosque, Putrajaya Independence Square, Seri Perdana, etc. Some other projects that are also worth mentioning here and was highly complimented, are the Putrajaya Federal Government Administrative Centre, the Karak Highway, the North-South Highway, self-contained modern townships, and the list goes on.

However, it must be noted that there is an existing issue which is plaguing the country from the past years up to the recent moment now, where most of the construction projects fail to complete on time. It is also not uncommon for construction projects to be delayed, or in the worst scenario even abandoned due to various reasons. An unfinished building is a building (or other architectural structure, as a

bridge, a road or a tower) where construction work was abandoned or on-hold at some stage or only exists as a design. It may also refer to buildings that are currently being built, particularly those that have been delayed or at which construction work progresses in an extremely slow phase. Many construction or engineering projects have remained unfinished at various stages of development. The work may be finished as a blueprint or whiteprint and never be realized of its existence, or be abandoned during the construction process.

Although, the country has seen many tremendous and overwhelming development when it comes to constructions and project developments, the Malaysian construction industry has also been criticised as well for the issue of abandoned projects, where it paints a negative image, and brings loss to the economy growth of the country.

There is no doubt that abandonment of a projects brings great effect to the construction industry which ultimately contributes to the downfall of the economic growth of a country (Doraisamy, Akasah and Yunus, 2014). There are steps that has been injected to revive the projects that has already been abandoned. Although there are abandoned projects that has been revived successfully, but there are projects that are still being revived or being considered to be revived. At the same time there are number of abandoned projects which has not yet come close to the consideration stage, due to some reasons such as the possibility of project revival is slim as there are no companies that are interested in investing on the revival of abandoned projects. When there is a fair success rate on project completion in the country, yet the issue of abandoned projects also exists with a disturbing percentage of its own. Any construction organization must have a strategic plan and vision that lead the way to achieving its goals. The key to achieving it lays in successful management, by identifying needs and goals the company wants to achieve (Najmi, 2011). Having a

look into the contributing factors on successful projects, and making a comparison between both situations, which will be the projects completed successfully and the ones abandoned, could give an understanding on the concepts and theories behind it, and these could be focused as an element on how far project restoration could be carried out and achieving zero abandoned projects in the country.

Projects gone wrong:

The Ministry of Housing & Local Government, (2009), has defined that there are several stages before declaring a project as non-completion or in other word abandoned. If a project has exceeded its' expected completion date by 10 %, it is then considered as a "late project". If a project is still delayed beyond 10 % - 30 %, it is then considered to be a "sick project". If a project has been stalled with no work being done or no workers present on site for over 6 months, it is then considered to be an "abandoned project".

The issue of abandoned projects is not something that is happening only in Malaysia, but in other countries as well. For instance, Nigeria is known to be one of the country with a noticeable high percentage of abandoned projects, and this issue has been existing for a long period of time (Doraisamy and Akasah, 2015). Osemenan (1987), has also stated in his report as long as 28 years ago, that the Nigerian construction industry at this moment has been labelled as the world's junk-yard of abandoned projects, with an estimation of billions worth. He further elaborated that a lot of potential could be seen in the construction industry of Nigeria, but yet surprisingly the country is experiencing such a magnitude of project abandonment.

The following tables shows the current statistics of unsuccessful projects, status of project revival and statistics of abandoned housing projects in Malaysia, which has been obtained from the Ministry of Housing and Local Government, 2014.

Table 1: Status of private housing projects according to states in peninsular malaysia.

STATES	SMOOTH DEVELOPMENT			LATE			SICK		
	TOTAL PROJECTS	UNITS BUILT	UNITS SOLD	TOTAL PROJECTS	UNITS BUILT	UNITS SOLD	TOTAL PROJECTS	UNITS BUILT	UNITS SOLD
JOHOR	620	84,839	65,716	19	3,999	2475	28	6,495	3,961
KEDAH	211	16,586	8,040	9	323	235	12	2,133	1,219
KELANTAN	159	9,520	5,322	4	330	284	12	1,066	768
MELAKA	160	21,747	10,463	0	0	0	2	145	135
NEGERI SEMBILAN	162	23,830	12,114	1	16	15	10	1,186	916
PAHANG	303	9,151	3,485	1	8	2	11	866	496
PERAK	482	23,387	16,457	2	421	343	44	4,018	2,417
PERLIS	30	1,914	391	1	21	19	0	0	0
PULAU INANG	372	33,470	17,717	2	29	8	15	1,123	977
SELANGOR	1,015	162,294	85,493	17	3,604	2,759	81	14,248	8,370
TERENGGANU	50	1,991	1,247	0	0	0	8	1,057	849
W.P.KUALA LUMPUR	209	45,019	29,517	7	2,369	1,592	3	903	461
TOTAL	3,773	433,748	255,962	63	11,120	7,732	226	33,240	20,569

(Source : Ministry of Housing and Local Government, 2014)

Table 2: Overall Status On Abandoned Housing Projects According To States In Malaysia , 2014

STATES	NUMBER OF PROJECTS			PROGRESS STATUS			
	CURRENT	NEW	TOTAL	PLAN	BUILD	COMPLETED	TOTAL
JOHOR	11	0	11	7	3	1	11
KEDAH	3	0	3	2	1	0	3
KELANTAN	1	0	1	1	0	0	1
MELAKA	1	0	1	0	1	0	1
NEGERI SEMBILAN	5	0	5	3	2	0	5
PAHANG	2	0	2	2	0	0	2
PERAK	6	0	6	4	2	0	6
PERLIS	0	0	0	0	0	0	0
PULAU PINANG	2	0	2	1	1	0	2
SELANGOR	24	1	25	13	12	0	25
TERENGGANU	0	0	0	0	0	0	0
W.P. KUALA LUMPUR	2	0	2	1	0	1	2
JUMLAH	57	1	58	34	22	2	58

(Source: Abandoned Projects Restoration Unit, MHLG, 2014)

Table 3: Total Of Abandoned Housing Projects According To States In Malaysia, 2014

STATES	NUMBER OF	TOTAL UNIT	TOTAL BUYERS
	PROJECTS	HOUSES	
JOHOR	11	4,104	3,084
KEDAH	3	860	209
KELANTAN	1	39	29
MELAKA	1	554	502
NEGERI SEMBILAN	5	1,165	999
PAHANG	2	414	299
PERAK	6	822	425
PULAU PINANG	2	1,550	1,337
SELANGOR	25	12,077	8,834
W.P. KUALA LUMPUR	2	1070	573
TOTAL	58	22,655	16,291

(Source: Abandoned Projects Restoration Unit, MHLG, 2014)

Studies that has been conducted by various researches over the years from different countries including Malaysia as well, has shown and identified many causes behind the abandonment of projects. Based on the comparison matrix for the causes of

abandoned projects put forward by Doraisamy and Akasah (2015), the following table shows the main causes that majority of the researches has identified to the least.

Table 4: Types of causes for Abandoned Projects.

Types of causes	Percentage (%)
Improper management	61
Financing	58
Material cost/shortage	45
Lack of risk assessment	45
Incompetent project manager	39
Improper project planning	35
Lack of communication goals	32
Inconsistent government policies	32
Timing	29
Incompetent contractor	26
Poor marketing strategy	16
Improper controlling & monitoring	13

(Source: Doraisamy and Akasah, 2015)

From the table, it shows clearly that improper management seems to be the main cause contributing towards abandoned projects, followed by other causes as shown in the table. Looking at the causes, there is a certainty which is fair enough to say that the clear link between the project and the organisation's key strategic priorities, including agreed measures for the project success has somehow lacked. It is indeed a problem when the full priority and scope of the project that has to be delivered is overlooked at any point of the construction stage. It

is also could be defined here that there is a lack of understanding on the consequences of slippage in cost and time, and failing to convey decisions made in case of adjustments in project works, creates miscommunications among involved parties resulting on the lack of quality of the project.

The key process in a project management include early, firm decision making and the ability, responsibility and the authority of the project owner to deliver the project and its tacked benefits (Rawlinson, 2006). The lack of clear senior

management ownership and leadership, may channel a complex communication situation, weakening the construction activities. There are other common causes that could be linked with improper

management, as it stands out to be the main cause for project abandonment. Those causes are summarized in the table below.

Table 5: Common causes for project failures.

Common Causes
Lack of effective engagement with stakeholders
Lack of skills and proven approach to project and risk management
Failure to break down projects into manageable steps
Consideration of projects on the basis of initial cost rather than whole-life value
Lack of client understanding and contact with the supply chain
Poor project team integration

There is definitely a scale of management challenges that has to be faced and handled by the project management team. There are also range of ways and methods in handling these challenges, which the project team and as well as the client should know and understand, which could subsequently leads to the improvisation of the project team's performances on the project. All recommendations and suggestions that has been laid out by various researches who have studied this issue in various countries, should be taken into consideration and viewed carefully as well (Doraisamy, Akasah and Yunus, 2014).

Successful construction projects:

Project success can be defined in many ways. In the construction industry, a project that is delivered on time and not going over the budget, and in fact fully generating its target capital value may be called a 100% successful project. Although the main target in a project is that it must meet to the cost, time and quality, thus broader success criteria need to be related to the project's primary objectives. A construction project is started with an objective of its' own, therefore the management process during the development stage of the project should establish an effective project team which is united with the

purpose and commitment to establish the intended objectives (Doraisamy, Akasah and Yunus, 2014). The delivery of the project should come along with a certain aspect that is providing the anticipated benefit. Taking account the nature of the building and how it is beneficial to the owners over the lifespan of that building, is the essential starting point for the assessment of any project success. In doing so, the value of the building once it is occupied should be taken into consideration, and this helps to ensure that the full impact of the project once completed has been thoroughly analysed.

In reality, the problems that affect many failing projects require a more systemic approach, proper diagnosis on how and why it is happening, and lastly the resolution. However, there are few projects, which are subjected to regular and structured project reviews that enable these issues to be tackled at an early stage. So according to Rawlinson (2006), as a result, the success of a project may be achieved more by either coincident or accident rather than by the design, where the client and the project team would have been working hard to achieve the best possible result. Rawlinson (2006), further elaborated there are some key driving factors on producing a good and beneficial project, as shown in the Table 6.

Table 6: Key Driving Value.

Key Driving Factors	Definitions
Exchange value	Simple financial value of an asset at the point of letting or disposal driven by the efficiency of the building, location and the quality of the space.
Operational value	Relationship between build and operational costs and value, with the perspective that value based on operational benefits is an essential success criterion.
Image and brand	Buildings can make a substantial contribution to an organisation's image, values and reputation, providing tangible evidence of business or organisational culture and creating a sense of identity among employees and building users.
Contingent value	The broader impact of the project upon its surroundings and the wider community. The impact of an investment upon its surrounding area – such as a catalyst to further development, through the creation of jobs or improved infrastructure – is a good example of contingent value.
Esteem value	The intangible benefit derived only by third parties from the positive effects of a development on its surrounding area through design quality, greater amenity

(Source: Rawlinson, 2006)

Langdon (2006), have mentioned that it is important to review the health of a project regularly, using a structured approach, to ensure that it is on course to meet its intended objectives. He suggested in his analysis that the suitable principles of approaching the management of a project here,

include 1) the exploitation of knowledge and experience gained from previous projects; 2) the use of structured review sessions; and 3) the availability of a consistent, high-level framework for the management of the project. These approaches are identified by him as the best to be used on projects

from the outset, but could also be applied as a diagnostic tool on projects that has already been started. It is a necessity to create conditions to obtain successful projects. Therefore, Langdon (2006), has

illustrated a checklist that could be used to diagnose the health of a project in order to gain success in it. The illustration of the checklist could be referred in Table 7.

Table 7: Project Health Diagnosis.

Project Questions	Answers Needed
<p>Why? Why a construction project is needed and is the purpose clear? Why is the solution appropriate? Has a thorough option appraisal been carried out and concluded this is the right choice?</p>	<p>Describing the client's need for the project. Need to establish the purpose. Focusing on the appraisal</p>
<p>What? What should the project deliver? Is the project definition comprehensive and unambiguous? What is the precedent for this type of building? Have exemplar projects and processes been researched?</p>	<p>Describing the facility and its performance. Proper definition needed. Knowing the precedent.</p>
<p>How? How is the project structured? Are the appropriate management arrangements in place? How well suited are the people chosen to deliver the project? How appropriate is the chosen procurement approach? How is the value of design quality to be realised? How is cost management to be made effective? How do programmes and plans contribute to project success? How are good communications achieved? How are risks identified and managed?</p>	<p>Describing the method of delivery. Type of management process conducted. Know the people involved. Type of procurement selected according to the suitability of the project. Factors in choosing type of design and its' quality on the project. Making sure the appropriate budget is chosen with the realistic of the project. Identifying realistic programming and resequencing during disruption on-site. Putting forward and planning needed actions in order to achieve the objective of the project, and also planning on methods of conveying progress/changes. Laying out a formal risk management process, and identifying the actions to be taken to mitigate potential risk exposure.</p>

(Source: Langdon, 2006)

A case study that was conducted by Connaughton, Potter and Dallas (2006), the phase one Eden Project in Cornwall, is a huge success story which is currently going into its fourth construction phase, is known to have complied with all the principles that has been mentioned here, where the project management team has applied all the principles in their project working system, resulting the delivery of the project according to its requirements two months earlier to its completion date as in the contract. An understanding could be established here, that is by applying these principles to projects over their full duration, clients and their project teams can help to ensure that there are no major areas of weakness that could derail the project, which ultimately could lead to the success of the project.

Conclusion:

As discussed in this paper, the current state of project abandonment in Malaysia shows a majority of housing projects that are facing this problem, as according to Ministry of Housing and Local Government (2014). Due to various reasons identified in past research and studies which has led to projects abandonment, it is therefore indeed clear to state this is situation is labelled as unsuccessful projects or project failures.

Malaysia has experienced a large number of success rates in project delivery, but yet it has also

experienced depression and still is, on the failure to deliver successful projects. As a result, many effects due to this had to be experienced by many parties, including the end-users who have invested a great deal in this projects.

The construction industry is always facing pressures from different aspects, such as, high expenditure, complex supply chains, and increasing demands for quality and esthetics. A project is known to be complex, un-routinely, an effort which is limited by time and budget, having limited resources and performance specifications which are designed to meet customer needs. Making attempts in understanding the causes of project failures or success, is seem to be an ongoing process for years, due to beneficial reasons. Projects are always in constant demand, which have driven our society into gaining quality in societal life and environment.

Project management on the whole has the responsibility to lead an organization from the inception point of a project that requires professional project managers to use their skills, tools and knowledge to plan, execute and control any type of project within the limited lifespan by meeting the intended specifications of the organization. Therefore, an acute focus and understanding on the factors towards project failures and as well as success, and the type of challenges in successfully executing a project, should be priorities before starting a projects. A suggestion that could be made

out from this is, mastering the factors in project failures and as well as project success, could not only contribute on successful deliveries of projects, but in fact could be also an advantage in the process of reviving abandoned projects.

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