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Payment Issue in Malaysian Construction Industry: Contractors' Perspective

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Graphical abstract

Respondent's Age



Abstract

This paper research entitled "Payment Issue in Malaysian Construction Industry by Contractor" intends to investigate the causes of late and non-payment in the Malaysian construction industry. Payment problems are old age issues that permeate the Malaysian construction industry. So often, contractors and parties in the construction industry complain either not getting paid or payments have been unduly delayed by the employer. A preliminary study was undertaken of 100 samples of contractors. The findings of the research shows that the potential major causes of late and non-payment are local attitude, delay in certification by consultant and paymaster's poor financial management. Based on the factor analysis findings, there are three factors that should be taken care which are under factor management and documentation, communication and contract, and culture and attitude. Findings of this study may assist the government and relevant parties in addressing problems associated to late and non-payment in an effective and timely manner to create a win-win situation for all parties in the Malaysian construction industry. The findings will be used as a platform in establishing the payment scenario in Malaysian construction industry prior to Construction Industry Payment Adjudication Act (CIPAA).

Keywords: Payment; contract; dispute; delay; adjudication; arbitration

Abstrak

Kajian ini bertajuk "Isu Pembayaran di dalam Industri Pembinaan di Malaysia oleh Kontraktor" bertujuan untuk mengkaji punca isu pembayaran di dalam industri pembinaan di Malaysia. Masalah pembayaran adalah isu lama yang membelenggu pemain industri di dalam sektor pembinaan. Kerap terjadi di mana kontraktor dan pemain industri menyatakan bahawa mereka tidak atau lewat mendapat pembayaran oleh majikan. Kajian awalan telah dilakukan kepada 100 orang kontraktor. Hasil kajian mendapati punca utama kontraktor tidak atau lewat mendapat bayaran adalah kerana sikap pemain industri, kelewatan pensijilan oleh konsultan dan pengurusan kewangan yang tidak sistematik. Berdasarkan kajian analisis faktor mendapati ada tiga faktor yang perlu diatasi iaitu faktor pengurusan dan dokumentasi, komunikasi dan kontrak; dan budaya dan sikap. Hasil kajian ini boleh membantu pihak kerajaan dan pihak yang berkaitan di dalam menyelesaikan masalah pembayaran bagi mewujudkan situasi yang adil kepada semua pihak. Hasil kajian ini juga akan digunakan sebagai penanda aras untuk mengkaji scenario pembayaran di Malaysia sebelum pelaksanaan *Construction Industry Payment Adjudication Act* (CIPAA).

Kata kunci: Pembayaran; kontrak; pertikaian; kelewatan; adjudikasi; arbitrasi

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1.0 INTRODUCTION

The construction industry is an important segment of the Malaysian economy that contributes approximately 6% of the Gross Domestic Product [1]. It generates wealth, improves quality of life and creates work opportunities for many. It has an indirect multiplier effect on each other segments of the Malaysian economy. Though the Malaysian construction industry is a matured industry, it is

nevertheless plagued with problems. The problem of major concern is payment.

Payment problems are old age issues that permeate the Malaysian construction industry. So often, contractors and parties in the construction industry complain either not getting paid or payments have been unduly delayed by the employer. Problems in payment at the higher end of the hierarchy will lead to a serious knock on cash flow problems down the chain of contracts [2].

The issues of late and non-payment are paramount to the construction industry as compared to other industries. This is due to the following facts:

- Unlike many other industries, the duration of construction projects are relatively long;
- b) The size of each construction project is relatively large and each progress; payment sum involved are often relatively large;
- Payment terms are usually on credit rather than payment on delivery;
- d) Services are rendered before progress payment is made;
- e) Products become fixtures disabling removal

A failure of the contractor in getting regular and timely payment could result in project delay, reduced profitability and in the extreme case the company may go into liquidation. It will also have a knock-on effect on the entire construction value chain because when clients do not pay the main contractors on time, the sub-contractors, suppliers, hirers and everyone in the construction value chain will suffer.

In addressing the issues on payment in the construction industry, the government has introduced the Construction Industry Payment and Adjudication Act (CIPAA). CIPAA is expected to come into operations in early 2013. The act applies to all construction contracts made in writing and that which relates to construction work carried out wholly or partly within the territory of Malaysia. Under CIPAA, a statutory right has been created for unpaid parties to demand for payment for work done.

CIPAA is a CIDB and industry collaborative effort, borne out of numerous recommendations and requests by the industry stakeholders to formulate a sustainable mechanism to address cash flow problems in the construction industry in particular during the construction stage. With CIPAA in place, the industry can breathe easier and fully concentrate on executing the projects, safe in the knowledge that should any payment issues arise, CIPAA provides statutory right to resolve these grievances such that it will not impede the smooth progress of the projects. (CIDB News, 2012).

Through the implementation of CIPAA, industry players stand to gain from regular and timely payments. Now that payment is more predictable, cost escalation and pricing of risks associated with delayed and non-payment can be better managed and controlled. This will further enhance the overall image of the construction industry. The present mechanism of resolving payment disputes, through court litigation and arbitration is not only costly but can also be lengthy.

The principal objectives of the CIPAA have remained 3pronged since conception, to wit:

- i. Facilitate regular and timely payment;
- ii. Provide a mechanism for speedy dispute resolution through adjudication; and
- iii. Provide remedies for the recovery of payment in the construction industry

CIPAA applies to all construction contracts relating to construction work. The scope and coverage can be gauged from four interrelated perspectives—in terms of geography, parties, type of work and contracts. That notwithstanding, there is an equally wide exemption provision contemplated to be utilized in special circumstances which have not been defined in the statue but left to the order of the Work Minister.

2.0 LITERATURE REVIEW

There are ten factors that contributed to the late and non-payment in construction industry which are:

i. Paymaster's Poor Financial Management

A delayed payment by a party who is involved in the process of payment claim may have an influence on the supply chain of payment in whole. According to the Construction Industry Working Group on Payment [3], problems in payment at the higher end of the hierarchy will lead to a serious knock-on cash flow problem down the chain of contracts. Based on the research done by Abdul-Rahman [4], there are eight (9) identified causes of late and non-payment includes Client's poor financial and business management, Withhold of payment by client, Contractor's invalid claim and etc.

The research by Hasmori *et al.* [6], has identified factors in paymaster's poor financial management. The factors are:

- Cash flow problems because of deficiencies in client's management capacity
- Client's ineffective utilization of funds
- Scarcity of capital to finance the project for instance, client's need money to roll
- Poor cash flow because of lack of proper process implementation
- Financial failure due to bankruptcy or winding up paymaster other business activities and
- Overlook the ripple effect of economic downturn on cash flow
- ii. Paymaster's Withholding of Payment

The previous research done by Hasmori *et al.* [6] stated that client's employees are wrongfully holding the payment and most of the time they do this to obtain some kind of "gift" from contractors once they pay out the payment. Hence, contractors have to tolerate this action to get their payments.

Besides that, the employer for the paymaster may withhold payment to the main contractor or sub-contractor for a variety of reasons. Such as major defects in construction works, dispute works, failure to comply with any material provision of the contract, third party claim field or reasonable evidence that the claim will be filed and failure to make timely payment for the project resources.

According to Yee and Abdul Rahman [7], identified clients deliberate delay for their own financial advantages, delay in releasing of the retention monies to contractor and wilful withholding of the payment for personal reasons are the cause of the paymaster's withholding of payment.

iii. Conflict among the Parties Involve

Hasmori *et al.* [6] indicated that payment not unexpectedly, has always been the main subject of disputes. It is anticipated that conflict if unsettle will escalate into dispute which can also cause late and non-payment.

There are also the difficulties in reaching settlement among the parties, disagreement of the valuation of the work, client's lack of trust with the consultant in certification of contractors progress claim and variation order and lake of understanding on client's requirement for variation work are cause of late or non-payment.

iv. The Use of Pay When Paid Clause In Sub-Contractor

A subcontractor is a person or a company hired by a general contractor to perform part of the work of a construction job. A literature review indicates that these issues include the timeliness of payments by general contractors, the process of selecting subcontractors, subcontractor bonding, construction insurance, safety issues on the construction site, partnering arrangements with various parties, and productivity issues [5].

For instance, the pay-when-paid clause often used in contracts agreement between main contractors and sub-contractors or between housing developers and main contractors. "Pay when paid" or also known as "back to back" method of payment is relevant especially in the case of nominated sub-contractor when the main contractor has not been paid by the Employer.

Pay when Paid, which defer the time when payment is due from a main contractor has received payment from the employer [6]. It could be cause late payment and not payment issue especially to sub-contractor.

v. Local Culture/Attitude

Bad attitude among contractors has gained attention from various personnel in the construction industry and one of them came from our YAB Prime Minister. He insists that any government servant with this kind of attitude to be charged [8]. The penultimate question facing the contractor is, after receiving the official certificate of payment from the contract administrator, how can he enforce it, i.e. how and when he can finally receive his payments? For contractors, the answer lies in the particular contractual provisions governing the fundamental issues of the honouring period and the remedies available to the contractor in the event of the employer's breach of the said obligation.

Based on result analysis by Yee and Abdul Rahman [7], contractors in Malaysia perceived that delay for few days less than 5 working days is acceptable and accepted late payment from the clients as they are always at the mercy of the clients. This could be due to the inherent culture of late payment in the Malaysian construction industry that the contractors perceived late payment for a few days were acceptable.

vi. Short of current year's project

It may happen when amount of work done exceed the allocated budget for the years. If this happens it may cause late payment especially in the government projects since the payment due to the contractor has to be postponed to the following year because of inadequate budget. The payment will be released only if the fund allocated for has been received by the related government's agency [6].

vii. Delay in certification

According to *Yee and Abdul Rahman* [7], delay in certification by parties involve in the project might also cause of late payment issues. The parties involve may delay in approving the application for payment claim due to certain reasons which may arise because of his own or other parties involve.

viii. Disagree on the valuation of work done

It is a normal in the construction industry where one of the contracting parties disagrees about the valuation of work done. The disagreement may cause delay in certifying the amount of work executed on site.

According to Mohamad et al. [9], contractors fail to agree with the valuation of work at site. This would then results in conflicts between clients and contractor and the claims would not be certified and consequently, late payment occurred. The same thing happens when a contractor did their job as per specified in Bill of Quantities (BQ) and the other factor that contribute to this late payment is when they took longer than stipulated time in contract to evidence the claim. The reason of this is might be because they have become increasingly subject to claims arising out of their design and construction administration services. The responsibility of the design professional to bring out payment certificates has long been a deadening and dreaded task and one that often creates numerous liability problems. Although real purpose of issuing payment certificates is to inform the owner or lender that the contractor is entitled to payment, these certificates are often used by potential claimants as a basis for many types of legal actions.

ix. Contractual Provisions

The Construction Act defines construction contracts. All design and construction contracts, including professional appointments, are likely to be construction contracts as long as they relate to "construction operations" [10].

Construction operations include a very wide range of construction operations and the most common forms of engineering operation-for example, civil engineering projects. However, some engineering projects such as mining, nuclear and power generation are expressly excluded, as are contracts with residential occupiers. There are cases where contract agreements do not bring any justice to both main contractors and sub-contractors. In a study reported in Odeyinka and Kaka [11], contractors were asked to give opinion on the extent of variability of time delays of payments from owners and to subcontractors. The sample surveyed is reported to give a consensus view that "time delays are usually controlled by contractual regulations and their variability tends to be fairly limited". However their variability conclusion is counter to the present authors' experiences and typical example project data presented confirm high variability, though it is admitted that there are some projects where payments do occur regularly.

x. Technical Problems

Reeves [13] in his work stated that the main reasons for late payment is when there are errors in submitting claims. This includes claims without adequate supporting documents, wrongly calculated claims and those submitted without using the right procedures and when this happens, contractors need to resubmit the claims and repeat the whole process after making necessary corrections. The payment of the tender awarded would commonly be based on the progress of the project.

The contractors need to submit the progress billing attached with the approve percentage of completion by the authorized person in charge. The general guideline is to honour payment within 14 days on submission of completed information and documentation with the Finance Department.

Most of the problems occur when contractors missing some necessary documents required. In order to avoid delay in paying the contractors, the payment officers have to make sure that documentation is complete.

3.0 SURVEY OBJECTIVE, METHODS AND SAMPLING

The contractor is employed by the client, on the advice of the architect or the architectural technologist. A contractor is responsible for providing all of the material, labor, equipment (such

as engineering vehicles and tools) and services necessary for the construction of the project.

Responsibilities of contractors may include applying for building permits, securing the property, providing temporary utilities on site, managing personnel on site, providing site surveying and engineering, disposing or recycling of construction waste, monitoring schedules and cash flows, and maintaining accurate records.

Late or non-payment to contractors has been a major issue in the Malaysian construction industry. It has affected the performance of contractors and has caused several of them not being able to complete the work on time thus causing delay in the completion of the project. In the worse scenario, they are forced to abandon their project for lack of fund and some were on the brink of bankruptcy.

The objective of this survey is to identify the causes of late and non-payment issues. The respondents were also asked to identify the possible recommendation or solution on this matters based on their past experiences and their general perceptions. In this survey, one hundred (100) questionnaires were distributed among the contractors registered with Construction Industry Development Board (CIDB).

A total of one hundred (100) completed questionnaires were received and analysed. Most of respondent (41.38%) are between 25 to 35 years old, 37.93% are between 36 to 45 years old while 20.69% are 46 to 55 years old. This is a good indication which the respondent is expected to give a matured answer to the survey analysis, as shown in Figure 1.

Majority of the respondent (32.14%) is a top management which is good for an opinion survey analysis, as the respondents are more likely to portray the actual company direction. Senior Management indicates about 25%. This is also a good indication that the respondents are among the professionals and relevant to the survey, as shown in Figure 2.

G7 contractor are the majority of the respondent who answered the survey which are about 40% of the total respondent. Grade G7 is the highest contractor category in Malaysia where a contractor is capable of tendering for projects with no limits in terms of the contract value. The statistics of contractor's grade are as presented in Figure 3.



Figure 1 Respondent's age



Figure 2 Respondent's designation



Figure 3 Grade Registration with CIDB

4.0 RESULTS

The survey show that the most significant causes of late and nonpayment in Malaysian construction industry is local culture/ attitude which have mean of 4.13. Based on result analysis by Yee and Abdul Rahman [7], contractors in Malaysia perceived that delay for few day less than 5 working days is acceptable and accepted late payment from the clients as they are always at the mercy of the clients. This could be due to the inherent culture of late payment in the Malaysian construction industry that the contractors perceived late payment for a few days were acceptable.

Delay in certification by consultant also contributed to the late and non-payment issues in Malaysian construction industry. The parties involve may delay in approving the application for payment claim due to certain reasons which may arise because of his own or other parties involve. Besides that, the contractors also agree that the causes of late and non-payment in Malaysian construction industry is paymaster's poor financial management. The poor financial management could be caused by cash flow problems, ineffective utilization of funds, scarcity of capital, etc. The survey also revealed that an issue with regard to documentation error is not a significant cause of late and non-payment in Malaysian construction industry.

 Table 1
 Mean of causes of late and non-payment in Malaysian construction industry

No.	Causes of Late and Non-Payment	Mean
1	Local culture/ attitude	4.13
2	Delay in certification by consultant	4.07
3	Paymaster's poor financial management	3.97
4	Conflict among the Parties Involved in the Project	3.87
5	The use of "pay when paid" clause in the contract	3.87
6	Paymaster's Wrongly Withholding of Payment	3.7
7	Breach of contract term by parties involved in the project	3.6
8	Disagreement on the valuation of work done	3.5
9	Issues with regard to documentation error	3.4

A. Reliability Test

Reliability test is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of a measure. Based on theory provided by George and Mallery (2003), it is suggested that coefficients alpha of 0.80 to be considered as good, and a value exceeding 0.70 to be considered as acceptable. Thus, the Cronbach's Alpha value of 0.798 of nine items is to be considered as good. It is proved that the nine items in the questionnaire have stability and consistency which indicate that the questionnaire is good and reliable.

Table 2: Cronbach's Alpha value

Cronbach's Alpha	N of Items
0.798	9

B. Total Variance Explained

The "Total Variance Explained" table below shows the eigenvalues, which are the proportion of total variance in all the variables which is accounted for by that factor. A factor's eigenvalue may be computed as the sum of its squared factor loadings for all the variables. A factor's eigenvalue divided by the number of variables (which equals the sum of variances because the variance of a standardized variable equals 1 is the percent of variance in all the variables which it explains. The ratio of eigenvalues is the ratio of explanatory importance of the factors with respect to the variables. If a factor has a low eigenvalue (<1.0), then it is contributing little to the explanation of variances in the variables and may be ignored as redundant with more important factors.

The table shows nine factors, one for each variable. However, only the first three are extracted for analysis because, under the Extraction options, SPSS was told to extract only factors with eigenvalues of 1.0 or higher. The first and second factors explain 40.56% and 22.59% of the total variance respectively while third factor explained about 14.76% of the total variance. All the factors combined explain 77.91% of the variation.

Table 3 Extraction sum of squared loadings

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumul -ative %	Total	% of Varian -ce	Cumul -ative %
1	3.65	40.56	40.56	3.65	40.56	40.56
2	2.033	22.587	63.147	2.033	22.587	63.147
3	1.329	14.763	77.91	1.329	14.763	77.91
4	0.698	7.75	85.66			
5	0.45	5	90.66			
6	0.337	3.739	94.4			
7	0.23	2.559	96.958			
8	0.211	2.343	99.301			
9	0.063	0.699	100			
Extraction Method: Principal Component Analysis.						

C. Factor Analysis

The purpose of Factor Analysis is to describe covariance relationships among many variables in terms of a few underlying but unobservable, random quantities called factors. Factors consist of variables that are highly correlated among them. Each group of variables represent a single underlying construct or factor.

As referred to Table 4, the Rotated Component Matrix contains all values that are calculated after rotation. Factor loadings less than 0.30 have not been displayed due to consistency matters. There are three factors extracted from the nine items in the questionnaire. Factor 1 contain three loadings, Factor 2 consist four loadings while Factor 3 contain two loadings.

The component can be grouped as shown in Table 5. There are three factor extracted from the items loadings which are Factor 1 (management and documentation), Factor 2 (communication and contract) and Factor 3 (culture and attitudes)

Factor 1 consists of three items related with documentation error [6, 11], breach of contract [13] and poor technical management [14], which are interrelated in managing the documents cause by the initial error created by client, consultants, contractors or subcontractors.

Factor 2 involves with five items regarding conflict between parties involved [4, 6], "pay when paid" clause [14, 15], delay in certification [7, 17] and wrongly withholding of payment [6, 7, 18]. Under these themes, the conflict involved cause the negative communication in obtaining the payment and restricted under the rules payment of 'pay when paid' and delay in payment claim which may contribute the misconception in wrongly withholding payment.

Factor 3 includes two causes of payment issue which are local culture and attitude [6, 7, 19] and disagreement of volunteer of work done [20, 21]. Mutual understanding among the parties involved is vital in order to tackle and able to work together based on different characteristic background players and interest which drive the success of the project.

Rotated Component Matrix ^a			
Causes of Late and	Component		
Non-Payment	1	2	3
Issues with regard to documentation error	.896		
Breach of contract term by parties involved in the project	.874		
Paymaster's poor financial management	.792		
Conflict among the Parties Involved in the Project		.867	
The use of "pay when paid" clause in the contract		.656	
Delay in certification by consultant		.641	
Paymaster's Wrongly Withholding of Payment		.587	
Local culture/ attitude			.882
Disagreement on the valuation of work done			.781

 Table 4 Rotated component matrix

Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization

Table 5 Factor's group

Factor	Name of Factor	Causes of Late and Non-Payment
Factor 1	Management and Documentation	 Issues with regard to documentation error Breach of contract term by parties involved in the project Paymaster's poor financial management
Factor 2	Communication and Contract	 Conflict among the Parties Involved in the Project The use of "pay when paid" clause in the contract Delay in certification by consultant Paymaster's Wrongly Withholding of Payment
Factor 3	Culture / Attitude	 Local culture/ attitude Disagreement on the valuation of work done

5.0 CONCLUSION

The findings shows that majority of the respondents is come from Grade G7 contractor and a top of management in the company. The research proved that the main causes of late and non-payment in Malaysian construction industry are local culture or attitude. Besides that, delay in certification by consultant also contributed to the late and non-payment in Malaysian construction industry. Paymaster's poor financial management seems also a cause of late and non-payment in construction industry. The three factors that have been highlighted in this paper are management and documentation, communication and contract and culture/ attitude. The level of awareness of effect on late and non-payment should be developed and increased through adjudication and arbitration approach. The financial institution also should give support on financial matters in order to help contractors sustain the supply chain in construction industry. By highlighting the three factors extracted, the payment issue in the Malaysian construction industry could be solved successfully together with CIPAA implementation.

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