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Study on Payment Problems in Private Construction Industry in Karnataka State: Analysis of Client based Issues

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Abstract

Construction industry is one of the major industries responsible for the overall development of the economy and society. However, construction industry face lots of challenges including manpower, materials, machines, minute and money. History of construction industry has witnessed a number of payment issues and finance related issues which has hampered many of the construction projects. Construction industry is dependent on local, regional, national and sometimes international finance market and stability. Payment problems in the construction industry may result due to the financial instability of the client and also due to unforeseen issues with the contractor. Payment problem in construction is a common phenomenon which leads to legal disputes. Clints play major role in the construction projects and their decision will be key for successful completion of project. Clients face unique payment challenges which impact their financial stability and also projection success. In this research paper the reasons for the delay in payment is analysed and the reasons are compared to each other. The findings of this research work will help the clients in the Karnataka state to mitigate or control the irregularities in the future construction works. Generally, construction projects are very large in scope ranging from Building projects, Civil engineering projects to Industrial engineering projects, but the causes of delay on these contracts remains virtually the same although it may be more in terms of cost or time implication in some than the other due to lack of complete certification and expertise. The study is focused on building construction projects in the state of Karnataka. Research is conducted through literature reviews and questionnaire surveys. In this research, clients are contacted get the inputs on delay in the construction project and delay in payment procedure by considering issues related to both client and contractor.

Keywords: Construction Management, Clients, Delay in Payment, Reasons for Delay, Payment Issues, Contracts Management

Introduction

Money/fund plays the important role in the construction process and the clients are the one who responsible for it. Clients in the construction industry face unique payment challenges, impacting both their financial stability and project success. Clients are responsible for managing large budgets, ensuring payment to contractors, and maintaining project momentum. Payment issues is the one of major problem



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in construction sector. Uninterrupted cash flow is required to complete project in time. But clients face many challenges due to unexpected situation or finance problems or contractor over pricing the work done. Client has to manage all the issues to balance the budget to complete the project successfully. If client fails there then he will face huge financial losses due to over budget. It is important for client to analyse all the potential problems he can face to find solution for those. It will help client to complete project without any delay or over budget. Here are common payment issues clients experience to address them:

1. Cost Overruns and Budget Management

Reasons: Unanticipated costs such as site conditions, scope changes, or market fluctuations in material prices can cause projects to exceed budgets. This can strain the client's cash flow and result in difficulty meeting payment obligations.

2. Delayed or Disputed Work Quality

Reasons: Clients may delay payments if they are dissatisfied with the quality of work, project progress, or if the work does not meet contract specifications. Disputes over what constitutes "complete" or "acceptable" work can also contribute to delays.

3. Complex Payment Terms and Administrative Delays

Reasons: Construction projects often involve complex, multi-stage payment terms, and delays can result from lengthy approval processes, paperwork, or miscommunication among project stakeholders.

4. Scope Creep and Change Orders

Reasons: During construction, clients often request changes or enhancements that extend beyond the original project scope. Without timely change orders, clients can face unanticipated costs that affect their ability to make payments.

5. Retention Policies and Disputes

Reasons: Retention is typically withheld by clients as a way to ensure that the work is completed to standard. However, disputes about the release of retention can arise if there is disagreement over whether the project has been fully completed or meets the required quality.

6. Contractor and Subcontractor Cash Flow Issues

Reasons: Clients may face payment issues if contractors or subcontractors encounter cash flow problems, affecting their ability to procure materials or pay laborers. This can cause project delays and increased costs.

Construction Delays and Reasons for Delays in Construction

Construction delays are extensions or interruptions in the project schedules that prevent work from being completed on time. Project delays can be caused by wide variety of factors, including weather, material shortages, and disputes between stakeholders and workers. While many delays were caused by uncontrollable forces and no one is to blame, there can still be significant financial and legal fallout when planned deadlines and budgets are not successfully met.

Reasons for Delays in Construction

Delays in the construction work can be due to many factors including weather issues, natural disasters, vandalism, environmental issues and other unforeseen issues can certainly lead to project schedule setbacks. But many types of construction delays are attributable to either the client or the contractor. Delays that are usually caused by contractor includes:

• Rework based on drawing misinterpretation and mistakes.



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- Safety violations or accidents that halt work for investigations.
- Inadequate resource planning leads to material or labour shortages.
- Communication lag between independent terms on the job site.
- Subcontractor delays caused by poor vetting or tracking processes.

Impacts of Payment Problems

Payment problems in construction projects can have significant negative impacts, affecting various aspects of the project and its stakeholders. These impacts can be categorized into financial, operational, contractual, and relational issues.

1. Financial Impacts

- Cash Flow Issues: Contractors and subcontractors may face difficulties in managing cash flow, leading to delays in purchasing materials, paying labour, or meeting other operational costs.
- Increased Costs: Late payments can lead to increased borrowing costs, penalties, or additional financing requirements for contractors to sustain operations.

2. Project Delays

- Work Slowdowns or Stoppages: Contractors may halt work or slow down progress due to the inability to pay workers or suppliers.
- Material and Equipment Shortages: Without timely payments, suppliers may withhold materials or equipment, disrupting construction activities.

3. Quality Issues

- Compromised Standards: Financial constraints caused by payment delays may lead contractors to cut corners, use substandard materials, or rush work to save costs.
- Rework and Defects: Quality compromises often result in defects, requiring costly rework that further delays the project.

4. Disputes and Legal Problems

- Contractual Disputes: Payment problems often lead to disputes over delays, claims for additional costs, or breaches of contract.
- Termination of Contracts: Contractors or clients may terminate agreements if payment problems persist, further complicating project completion.

5. Stakeholder Relationships

- Loss of Trust: Payment delays can damage relationships between clients, contractors, subcontractors, and suppliers, affecting future collaborations.
- Reputation Damage: A client or contractor with a history of payment problems may struggle to secure future projects or partnerships.

Objectives

The study focuses on payment issues with the client. The purpose of this study is to find various factors that cause payment problems in construction projects, their impact, and answers to issues. This research aims to identify the main causes of delays in payments by the client by collecting data from clients. The objectives of the study is to:

- 1. Find the reasons for the delay in payment
- 2. To determine the impact of the delay.



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3. Recommendations for minimizing or controlling delay in payment.

Literature Review

Abdurrahman, et al. (2023) explored the impact of delays in construction in terms of time, cost, and quality where Construction projects have different quality dimensions Involving users in quality planning process is important. Construction projects have different quality dimensions. The study explores various quality dimensions in construction industry perspective Focusing on the Malaysian construction industry using exploratory factor analysis.

Jagannath, Daripa. (2022) carried out research work and identified the major causes of construction delays, the effects of delays, and methods of controlling construction delays. In the research work, the effective methods of minimizing construction delays were explored where site management, site supervision and effective strategic planning were identified as the critical factors.

Sindhu Vaardini U et al. (2015) identified that Time overruns are the crucial problems faced in the construction industry. Since delays are considered to be a serious problem in the construction industry this study examines the factors that cause delay in construction projects. Based upon the relative importance index method the most critical factors ranked were Inaccurate construction planning, Owners delay in freeing the contractor financial payment, Improper scheduling resulting in poor judgment of time and resources, Shortage of construction materials at site and Contractors financial difficulty.

Methodology

First, a literature review was conducted to find factors causing construction project delays. This helped to conduct a survey to find out the causes related to the situation in Karnataka. Achieving these goals require a research methodology. Main stages for conducting this study are listed below.

- Identifying the problem
- Specifying research objectives
- Specifying research scope
- Data collection
- Literature research
- Questionnaire
- Data analysis
- Results
- Conclusion and Recommendation

Designing and collecting data through questionnaire survey

The questionnaire (consisting of 52 questions) was designed based on factors identified as majorly added to the causes of delay, the effects of delay and the methods to minimize delay with reference to the literatures reviewed and analysed. A questionnaire survey was adapted towards assessing the insight of contractors and clients of the relative importance of causes and effects of construction delay. Questionnaire survey was conducted as a source of primary data and cross-sectional survey method was chosen because of the time limitation of this study. Data collected through the literature review was used to generate questionnaire surveys.

The survey was conducted by using 'Google form', and this was forwarded to the potential or identified clients via email or WhatsApp to save time and money. Face-to-face interviews with clients were also



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conducted in few cases wherever the client was interested to give concrete response and feedback.

Data collection

We have forwarded the questionnaire to 58 clients across Karnataka. However, we have received the response from 35 clients (60.34%) regarding delay in the work and delay in the payment.

Rating scale

Each questions asked are rated on a scale from strongly agree to strongly disagree, starting with the rating system was given as follow;

Strongly Agree -5, Agree -4, Can't Say -3, Disagree -2, Strongly Disagree -1

Table 1: Questions asked to Clients

Q. No	Questions
1	Deficiency in planning and scheduling of project prepared by the contractor
2	Lack of experience of Contractor
3	Difficulties in financing the project by Contractor
4	Inappropriate construction method
5	Low productivity of labour
6	Poor site management and supervision
7	Restriction at job site (poor site access, traffic congestion)
8	Rework due to errors during construction
9	Excessive material wastages on site
10	Poor experience and competence of project managers
11	Impracticable estimates by the estimators
12	Poor risk management
13	Underutilization of plant and equipments
14	Poor contract administration and management by contractor
15	Poor evaluation of project cost and time
16	Poor contractor's performance
17	Dispute / Conflict between project parties / stakeholders
18	Unexpected ground conditions
19	Poor updating of cost management information system
20	Quality of project team
21	Poor Quality Assurance and Quality Control at work site
22	Shortage of work force
23	Increase in labour cost
24	Land dispute / Ownership title
25	Delay in work progress
26	Contractor's invalid claim
27	Contractor handles too many projects at the same time
28	Unqualified contractor underbidding the project cost



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Table 2: Questions asked to Client and Contractor

Q. No	Questions
29	Accident during construction activities
30	Changes in government regulation and laws
31	Delay in approval of submittals, drawing, shop drawings and sample materials etc.
32	Financial stability of sun-contractor
33	Delays related to sub-contractor's work
34	Force majeure (earthquake, etc.)
35	Increased operation cost in the project
36	Inflation and escalation of material prices
37	Lack of experience of sub-contractor
38	Poor communication and coordination with other parties
39	Shortage of construction materials in the region
40	Failure of equipment or plants or machineries
41	Unforeseen or unexpected site conditions
42	Unsafe practice at site
43	Variations / design changes during the construction
44	Material theft on sites
45	Shortage of skilled personnel
46	Increased cost of machinery and equipments
47	Additional work not mentioned in the contract
48	Late delivery of materials and equipments
49	Delay in the work dur to pandemic (COVID – 19)
50	Delay in the work execution due to migration of labor force
51	Difficulties in getting loan from financiers / banks
52	Breach of contract / Contract terminations / Suspensions

Result and Analysis

Table 3: Result Analysis Chart

Q. No	Number of clients 5 & 4 (Agree)	Number of clients 3 (Can't Say)	Number of clients 1 & 2 (Disagree)
1	31	0	4
2	2	0	33
3	33	2	0
4	31	0	4
5	30	0	5
6	26	0	9
7	15	0	20
8	23	0	12
9	30	0	5
10	15	0	20
11	15	0	20

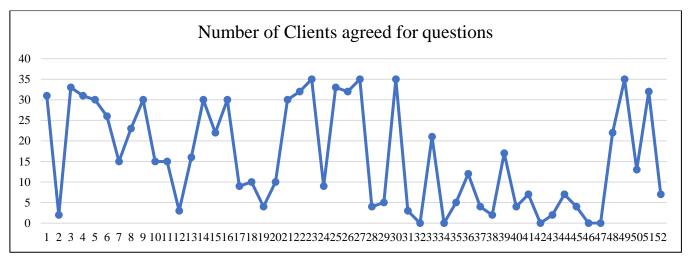


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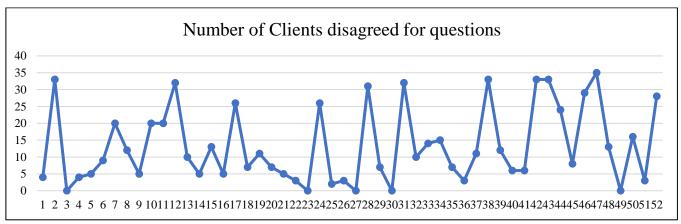
12	2	0	22
12	3	0	32
13	16	9	10
14	30	0	5
15	22	0	13
16	30	0	5
17	9	0	26
18	10	18	7
19	4	20	11
20	10	18	7
21	30	0	5
22	32	0	3
23	35	0	0
24	9	0	26
25	33	0	2
26	32	0	3
27	35	0	0
28	4	0	31
29	5	23	7
30	35	0	0
31	3	0	32
32	0	25	10
33	21	0	14
34	0	20	15
35	5	23	7
36	12	20	3
37	4	20	11
38	2	0	33
39	17	6	12
40	4	25	6
41	7	22	6
42	0	2	33
43	2	0	33
44	7	4	24
45	4	23	8
46	0	6	28
47	0	0	35
48	22	0	13
49	35	0	0
50	13	6	16
51	32	0	3
52	7	0	28



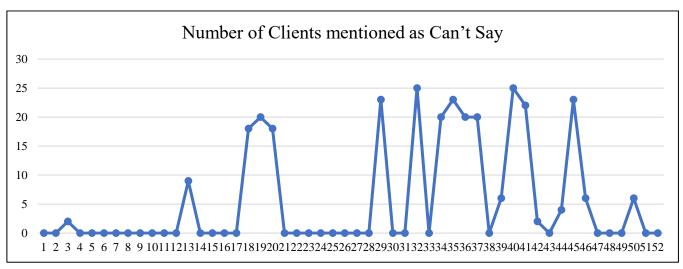
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Graph 1: Number of clients agreed for questions



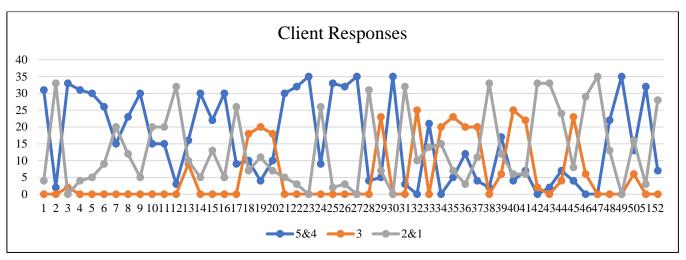
Graph 2: Number of Clients mentioned as Can't Say



Graph 3: Number of Clients disagreed for questions



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Graph 4: Graph showing pattern of agree, disagree and can't say mentioned by clients

Conclusion and Recommendations

After analysing the data and above-mentioned tables of 52 questions, we can categorise all the questions in the following 5 areas:

- Quality Assurance and Quality control
- Finance/Fund
- Labour/Manpower
- Materials and Machineries
- Contract Issues

In each of the above-mentioned area or category, I have listed few parameters for which majority of the clients have expressed their willingness which will reflect in the collective opinion regarding the delay in the project completion and payment related issues:

Quality Assurance and Quality Control: Majority of the clients have agreed with below mentioned 7 parameters which affects the quality assurance and quality control and hence the project was delayed.

- Q1- Deficiency in planning and scheduling of project prepared by the contractor
- Q4- Inappropriate construction method
- Q6- Poor site management and supervision
- Q8- Rework due to errors during construction
- Q16- Poor contractor's performance
- Q21- Poor Quality Assurance and Quality Control at work site
- Q25- Delay in work progress

From the analysis we have observed above mentioned 7 points which clearly indicates that the delay in the project is due to issues related to quality assurance and quality control. This has resulted in the payment issues. These issues can be controlled with the better planning and scheduling, effective construction method and high quality of work supervision and effective site management which speed up the work.

Finance/Fund: Majority of the clients have agreed with below mentioned 4 parameters affect the finance related issues and hence the project was delayed.

- Q3- Difficulties in financing the project by Contractor
- Q23- Increase in labour cost



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- Q26- Contractor's invalid claim
- Q51- Difficulties in getting loan from financiers / banks

It is observed that in many of the projects contractors face problem with getting loan from the banks which deviates the cash flow. Also due to the shortage of labour, they were hired with higher wages which again deviates from the manpower financial planning done by the contractors in the beginning. It was also observed that contractors claim were invalid which has resulted in the payment problems. Hence, effective manpower planning and financial planning are very much important before starting any construction project.

Labour/Manpower: Majority of the clients have agreed with below mentioned 7 parameters affect the manpower issues and hence resulted in the payment issues.

- Q5- Low productivity of labour
- Q6- Poor site management and supervision
- Q8- Rework due to errors during construction
- Q9- Excessive material wastages on site
- Q22- Shortage of work force
- Q23- Increase in labour cost
- Q25- Delay in work progress

Non availability of the skilled labour resulted in labour cost, poor workmanship, low productivity, slow rate of construction, and reworks due to errors. Hence, it is very much essential to identify the skilled labours before starting the project work, if not the duration of the project will prolong which increases manpower cost and overall project cost. Due to this client many not release money to the contractor.

Materials and Machineries: Following issues related to materials and machineries / equipments will result in the payment problems / delay in the payment.

- Q39- Shortage of construction materials in the region
- Q48- Late delivery of materials and equipments

It was also observed that there was shortage of construction materials when required and the materials and equipments were delivered late which has resulted in payment issues. Hence effective materials planning and machines planning are necessary.

Contract Issues: It was observed that below mentioned contract related issues have resulted in the payment issues.

- Q14- Poor contract administration and management by contractor
- Q15- Poor evaluation of project cost and time
- Q25- Delay in work progress
- Q26- Contractor's invalid claim
- Q27- Contractor handles too many projects at the same time
- Q30- Changes in government regulation and laws
- Q33- Delays related to sub-contractor's work
- Q49- Delay in the work dur to pandemic (COVID 19)

It has also observed that clients have pointed out at the poor contract administration and management by the contractors as they were handling multiple projects at the same time. Clients have also mentioned about poor coordination between contractor and subcontractor. In addition to this, the contractors and the clients have mentioned that the pandemic situation has affected the progress of the construction work.



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Clients have mentioned about invalid claim by the contractors beyond the clauses mentioned in the contract. Hence there is a need of better contract between contractor and subcontractor by involving the client. Also, the invalid claim by the contractor should be minimized or controlled.

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