A Review of Key Factors Influencing Extension of Time (EoT) Applications in Malaysian Institute of Architects (MIA) Contracts

Haifa Afieqah Hasbi[1]*, Zulhabri Ismail[2], Noorsaidi Mahat[1]*, Siti Suhana Judi[2], Mohd Iskandar Abd Malek[3]

[1]College of Built Environment, Universiti Teknologi MARA, Cawangan Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia

[2]School of Construction and Quantity Surveying, College of Build Environment, Universiti Teknologi MARA, 40450, Shah Alam, Selangor, Malaysia

[3]Faculty of Engineering and Built Environment, 43600, Bangi, Universiti Kebangsaan Malaysia

***Corresponding Author**

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ABSTRACT

The construction industry significantly contributes to a country's economic development, particularly in Malaysia, where it has evolved from a labour-intensive sector to a modernized one. Despite its growth, the industry faces challenges, especially in managing project timelines, leading to an increased demand for Extensions of Time (EoT) due to delays. This paper involves systematic gathering and analysing existing research findings related to EoT applications. This approach focuses on understanding contractual clauses, legal frameworks, and project management practices. By synthesizing insights from academic articles, the review identifies common challenges and gaps in research, such as unclear provisions or limited empirical data while highlighting areas for future investigation to improve EoT management in Malaysia's construction industry. This paper examines the factors influencing EoT applications within the framework of the Malaysian Institute of Architects (MIA) Standard Form of Contract 2018. It identifies common reasons for the rejection of EoT claims, including the failure to establish a cause-effect relationship, inadequate supporting documents, late submissions, non-valid reasons, non-compliance with contractual requirements, and insufficient breakdown of claim amounts. The paper also highlights reasons for the late submission of EoT applications, such as inexperience among site staff and poor paperwork control. Additionally, the research emphasizes critical success factors for EoT applications, structured around the CEES framework - Cause, Effect, Entitlement, and Substantiation, along with the importance of clear Presentation. The study concludes by presenting a comprehensive overview of both unsuccessful and successful EoT application factors, aiming to enhance understanding and improve EoT claim management in the Malaysian construction industry. By identifying these elements, the paper contributes to better project management practices and addresses the complexities associated with EoT applications, ultimately supporting the construction sector's role in national economic growth.

Keywords: Construction industry, Extension of Time, Construction Delays, Construction Projects, Private Projects, Key Factors

INTRODUCTION

The construction industry plays a vital role in a country's economy, reflecting its wealth, health, and quality of life. It significantly impacts various sectors, contributing to national Gross Domestic Product (GDP),

particularly in developing countries where it supports long-term development plans. Effective management of the construction sector can enhance the overall quality of life by promoting tourism, sustainability, job creation, and economic growth (Alaloul et al., 2021). Malaysia's construction industry showed GDP growth in early 2018, with expectations of continuous improvement (Al-Azad et al., 2019). Malaysia's construction sector has played a key role in the nation's rapid economic growth, evolving from a low-tech, labour-intensive industry since its independence in 1957 to a modern and advanced sector (Alaloul et al., 2021). However, this modernization has introduced new challenges, such as accurately estimating project timelines (Ting et al., 2021).

Project success in construction is measured by time, cost, and quality performance, with stakeholder involvement being crucial in setting project goals (Okereke et al., 2021; Mohamad Yusuwan & Adnan, 2013). However, construction projects are complex and involve many parties, which can lead to delays. Delays, especially in developing countries, often result in cost overruns and client dissatisfaction. The COVID-19 pandemic, which was declared by the World Health Organization (WHO), had a significant negative impact on Malaysia's economy, including the construction industry, as it caused project delays and hindered economic growth (Mohsen et al., 2021).

The construction sector saw a decline in the first quarter of 2020 due to pandemic-related lockdowns (Alaloul et al., 2021). Referring to Table 1, the quarterly GDP data for Malaysia's construction sector from 2019 to 2023 illustrates significant fluctuations that impacted construction delays. In 2019, the sector showed mild growth with some instability, but in 2020, the COVID-19 pandemic caused sharp contractions, particularly in Q2 with a -44.3% decline, which led to major project delays. Despite a brief rebound in Q2 2021, the sector continued to struggle with negative growth for most of the year. Recovery began in 2022, but the construction delays are still significant. It has been stated that there were 92 sick projects, were identified in 2022 by the Implementation Coordination Unit (ICU) of the Prime Minister's (Abdullah, 2022). Sick project is defined as construction projects that experience significant delays without any corrective measures being implemented (Mohd et al. 2021).

Table 1: Quarterly GDP of Malaysia Construction Sector

Year	2019				2020				2021				2022				2023
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
GDP (%)	0.6	1.1	-1.4	1.3	-7.9	-44.3	-12.2	-13.7	-10.3	40.4	-20.5	-12.0	-6.1	2.5	15.3	10.1	7.4

Source: Department of Statistic Malaysia (2023)

Given its substantial contribution to the nation's GDP, the construction industry requires attention and support to continue driving national development (Hasmori et al., 2018). As a result, the need for extensions of time (EoT) has increased to accommodate project delays (Hwang et al., 2013; Mohamad Yusuwan et al., 2021). Therefore, the aim of this paper is to review and analyze the key factors influencing the application and approval of EoT in construction projects governed by the Malaysian Institute of Architects (MIA) standard forms of contract.

METHODOLOGY

This study employed a systematic literature review to explore the key factors influencing EoT applications in contracts governed by the Malaysian Institute of Architects (MIA). A comprehensive literature review from academic database, journal papers, conference papers, industry reports. Relevant data extracted from selected literature, focusing on the factors influencing EoT application. this research aims to contribute valuable insights to practitioners, policymakers, and scholars, ultimately promoting more effective management of EoT applications in the Malaysian construction industry.

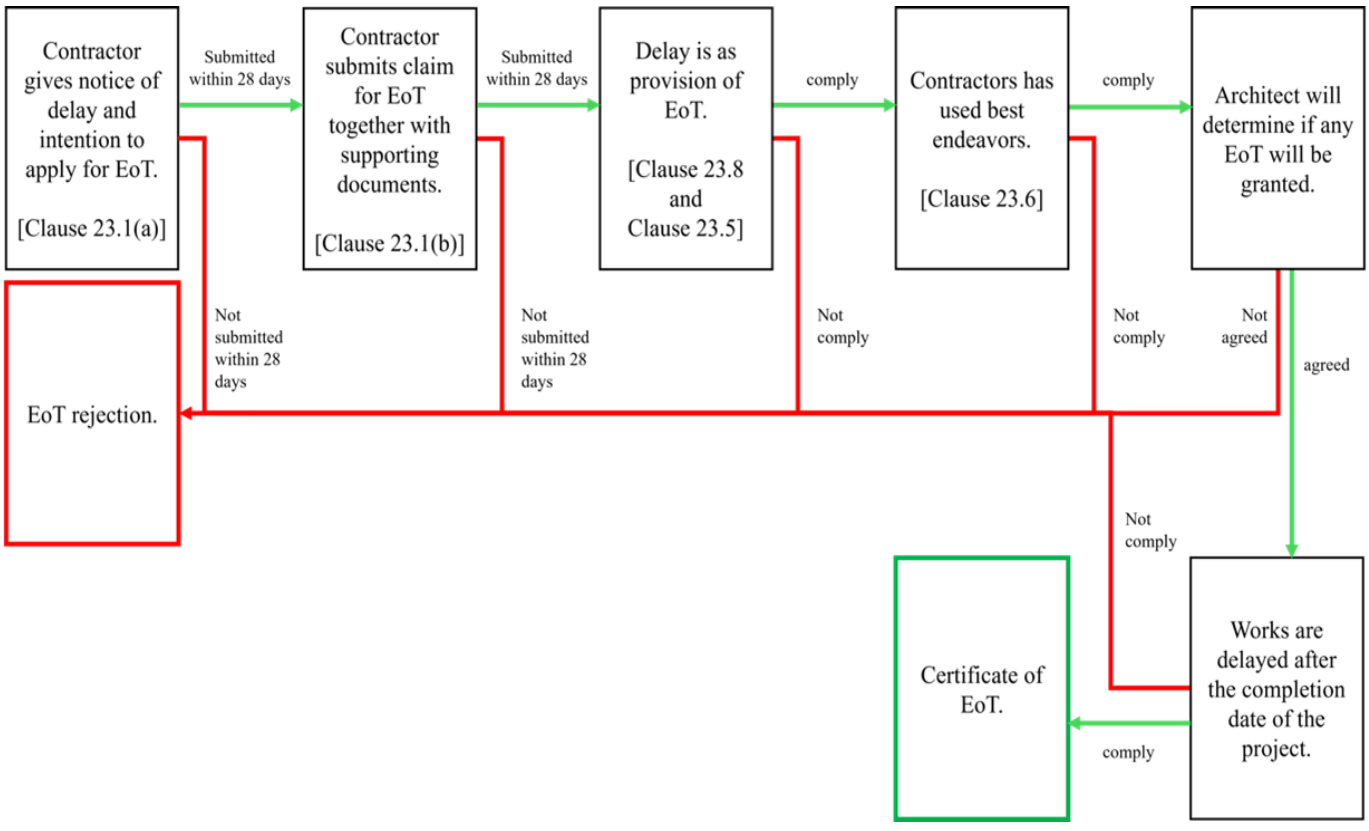
EoT AND ITS PROVISION IN MALAYSIAN INSTITUTE OF ARCHITECTS (MIA) STANDARD FORM OF CONTRACT 2018

EoT is granted to contractors for delays beyond their control, preventing the imposition of excessive liquidated damages (El-adaway et al. (2020); Aryal & Dhakal, 2022). The Society of Construction Law (SCL) defines EoT as additional time to complete work without liability for delay-related damages. To secure an EoT, contractors must apply to the employer, aiming to reduce or avoid monetary compensation throughout the prolonged period which is called Liquidated Ascertained Damages (LAD), and potentially claim monetary compensation for the extended period. This requires identifying the relevant contract provisions and providing evidence that others, not the contractor, are responsible for the delays (Mohamad Yusuwan & Adnan, 2018).

Clause 23 of the 2018 MIA contract serves as a crucial framework for managing EoT in construction projects. By outlining the procedures, necessary documentation, and valid grounds for granting an EoT, it ensures that contractors have a clear understanding of their rights and obligations. The specification of conditions for awarding an EoT, along with defined timeframes for claim submission and decision-making by the architect, promotes efficiency and accountability within the construction process. This structured approach not only safeguards the interests of contractors but also facilitates smoother project management, ultimately contributing to the overall success of construction endeavours.

Clause 23.8 specifies the necessary circumstances that are appropriate for the EoT to be awarded. Based on MIA 2018 Contract, it specifies the timeframe within which a contractor's EoT claim must be decided and the timeframe within which the architect (contract administrator) must decide on the contractor's EoT claim. Referring to the MIA 2018 Contract, Clause 23.1(a) specifies that the contractor shall issue written notice of their intention to claim for EoT within 28 days from which the cause of delays as specified in Clause 23.8 and Clause 23.5 occurred, and within 28 days after notice had been issued to submit all supporting particulars (Clause 23.1 (b)). Figure 1 illustrates the EoT method as detailed in the MIA 2018 Contract.

Figure 1: Process of EoT in MIA 2018 Contract



Source: Authors (2023)

REASONS OF EoT APPLICATION REJECTED

In the construction industry, it is common for a contractor's EoT claims to be only partially or entirely unsuccessful. A successful claim can exempt the contractor from LAD and potentially provide compensation for delays, while an unsuccessful claim results in the imposition of LAD. In such cases, the contractor has two options: accelerate their work to minimize the number of delay days and consequently reduce the LAD or challenge the denial and assert their entitlement to an EoT (Mohamad Yusuwan et al., 2022). Six consistent reasons for the rejection of EoT claims are outlined below.

Failure to Establish Cause-Effect Relationship

Establishing a clear cause-effect relationship is crucial for presenting successful EoT claims, as contractors must demonstrate how the actions or inactions of other parties have affected project progress (Mohamad Yusuwan et al., 2022). A chronological account of events can effectively illustrate this relationship, and a detailed programme is essential for measuring the impact of delays. For a delay to influence the completion date, it must affect the critical path; delays that consume available float may not impact the timeline unless they exhaust all float, thus shifting affected activities onto the critical path (Hewitt, 2018). Additionally, literature underscores the importance of thorough documentation and analysis of project timelines in substantiating EoT claims, highlighting that effective time management can significantly reduce the risk of delays and disputes in construction projects (Okereke et al., 2021).

Inadequate Substantiation Documents

Preparing) EoT claims is a complex process that requires a thorough examination of extensive project documentation to identify significant delays (Mohamad Yusuwan et al., 2022). Proper documentation is crucial for effectively resolving contractual disputes, as highlighted by Gibbs et al. (2013), who noted that while records are essential for analysing and substantiating delay claims, retrieving this data can sometimes be challenging. Mohamad Yusuwan et al. (2019) emphasize that claimants must provide comprehensive and detailed evidence to support their claims, as the success of an EoT claim hinges on the credibility and sufficiency of the evidence presented. Without reliable evidence, a claim is unlikely to succeed, as the evidence serves as the foundation for argumentative support.

Late Submission

To facilitate the evaluation process, it is advisable for contractors to submit EoT claims promptly after the occurrence of delay events (Mohamad Yusuwan et al., 2022). Most construction contracts, including MIA 2018 contract, specify a deadline for submitting EoT claims. Specifically, Clause 23.1(b) states that contractors must submit their final claim for an EoT within twenty-eight days after the delay's conclusion, along with all supporting documentation. This requirement emphasizes the contractor's obligation to provide a comprehensive application within the specified timeframe to assist the contract administrator in assessing the claim effectively.

Non-valid Reasons

A thorough understanding of contract clauses is essential for effective project and contract management, as it helps prevent unnecessary disputes. Misunderstanding the contract terms can lead to non-compliance and the forfeiture of rights to assert claims. Most common contract types include clauses addressing time-related issues, making it vital for contractors to clearly define the basis for their EoT claims. To ensure clarity for both the claimant and the assessor, the claimant must explicitly identify the relevant Clause or Sub-Clause of the contract that supports their entitlement to an extension of time.

Non-compliance with Contractual Requirements

Being fully aware of the contract's conditions, terms, and clauses is crucial for managing claims effectively. A thorough analysis of the contract's substance in relation to project realities—such as changes in scope, cost,

time, and quality—is necessary to assess its legal robustness. One frequently overlooked aspect regarding EoT claims is the requirement for claimants to submit notices or details related to delays (Mohamad Yusuwan et al., 2022). Failure to comply with such notice provisions can constitute a breach of contract, allowing the contract administrator to deny the EoT claim. However, if the administrator overlooks this non-compliance, the contractor may benefit, though claims might still be limited or rejected if it is determined that timely notice could have mitigated the delays. Thus, it is essential for all parties involved to understand and adhere to the contract terms to avoid potential disputes.

Insufficient Breakdown of Claim Amount

The failure of claimants to allocate specific amounts for each delaying event can jeopardize their claims. A global claim, as defined by the Society of Construction Law (SCL) Delay and Disruption Protocol (2017), occurs when a contractor seeks compensation for multiple Employer Risk Events without demonstrating a direct link between the incurred losses and each event. This typically involves presenting a single claim that aggregates all reasons for the delay, rather than itemising how each event contributed to the financial losses (Lord et al., 2011). While such a method is not common, especially with multiple distinct claims, there are instances where submitting a global claim is necessary, as indicated by various court cases. Whether such claims will succeed often depends on the circumstances. While courts may not entirely dismiss a global claim, any awards are likely to be modest. A global claim can be acceptable if the events are sufficiently intertwined, but it must be compelling enough to convince a judge or arbitrator (Mohamad Yusuwan et al., 2022; Linares, 2013).

REASONS OF LATE SUBMISSION OF EoT APPLICATION

The contractor must submit an EoT application promptly to allow the contract administrator to assess the claim effectively. Under Clause 23.1(a) of the MIA 2018 contract, the contractor is required to provide written notice of any delay to the architect, along with an initial EoT estimate and supporting details for the delay. According to Clause 23.1(b), the contractor must then submit the final EoT application, complete with all necessary supporting documents, within 28 days to enable proper assessment by the contract administrator.

Research by Yoke-Lian et al. in 2012 identified common reasons for delays in submitting EoT applications in Malaysia, Table 2 lists down the reasons for delays in submitting the details of EoT application with the descriptions.

Table 2: Reasons for Delays in Submitting the Details of the EoT Application

No.	Reasons for Delays in Submitting Details	Description
1	Site staff inexperienced in contract procedures and task undertaken by head office expert who needs time to understand claim situation	a) Documentation tasks are handled by head office personnel who possess limited understanding of the actual conditions and challenges experienced at the construction site (Yoke-Lian et al., 2012, Mohamad Yusuwan et al., 2022). b) Lack of understanding of the contract among site staff, leading to incomplete or improperly documented claims (Mohamad Yusuwan et al., 2022).
2	Inclement weather	a) Require contractors to gather site records, weather data, and other supporting documentation to substantiate their EoT claims, which can be a time-consuming process (Okereke et al., 2021).
3	Contract Administrator requests additional details	a) Require further clarification due to lack of supporting documents or details, resulting in time consuming processes to gather the necessary information (Mohamad Yusuwan et al., 2013).

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No.	Reasons for Delays in Submitting Details	Description
		b) The complexity of compiling evidence and records from the site adds to the time taken to submit a complete claim (Ting et al., 2021).
4	Poor paperwork control by the contractor	a) Project documentation must be thoroughly organized and consistently maintained from the outset to ensure efficient and prompt substantiation and evaluation of claims. b) Inadequate record keeping will not only make the assessment process more complicated but also extend its duration, as verifying and investigating evidence and facts is a time-intensive endeavour (Mohamad Yusuwan et al., 2013, Carmichael & Murray, 2006).
5	Requirement to submit global claims can cause delayed submissions	a) A simplified approach to seek an extension of time for delays caused by multiple events, where contractors request a time extension based on an overall assessment rather than detailing each contributing factor separately (Mohamad Yusuwan et al., 2018). b) The complexities involved in collating comprehensive documentation and evidence that supports the claims. Project teams may struggle to provide the necessary details promptly, as they may be dealing with multiple variables affecting project timelines, such as unforeseen site conditions, coordination issues, and communication gaps among stakeholders (Yoke-Lian et al., 2012, Mohamad Yusuwan et al., 2022).
6	Failure to determine the actual delay until the end of delay or construction	a) Stakeholders often overlook the need to document and analyse delay causes in real-time, leading to complications when claims are eventually filed (Yoke-Lian et al., 2012). b) When the actual causes of delays are not identified promptly, it can result in a backlog of unresolved issues, making it difficult for contractors to substantiate their EoT claims effectively (Mohd Yusuwan et al., 2022).
7	General lack of details	a) Lack of specificity can result in misunderstandings and conflicts over the legitimacy of the claims, making it difficult for project managers and consultants to assess the situation accurately (Mohamad Yusuwan et al., 2013 & Mohamad Yusuwan et al., 2022).
8	The unforeseeable event is ignored until the project is delay	a) Site personnel may fail to recognize or report these events in a timely manner, resulting in delays in preparing and submitting the necessary documentation (Mohamad et al., 2021). b) Contractors also struggle with providing adequate evidence and detailed justifications for the delays when the events are finally acknowledged, contributing to further setbacks in the EoT approval process (Mohamad et al., 2021).
9	Lack of staff to deal with EOT claims	a) Insufficient or poorly trained personnel are responsible for claiming documentation, particularly when the expertise lies within the head office rather than the actual site team. Staff at the head office, although skilled, often lack firsthand experience with the on-site conditions, making it difficult to prepare accurate and timely documentation for EOT claims (Mohamad Yusuwan et al., 2018).

Source: Author (2024)

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LIST OF REQUIRED RECORDS FOR EoT APPLICATION

The success of EoT applications relies on thorough record-keeping. Okereke et al. (2021) emphasised the importance of contractors establishing and maintaining strong documentation control. This ensures that the planning team, project managers, and contract administrators can access a substantial amount of both hard-copy and electronic data. Table 3 outlines the necessary records and documents needed to create well-supported EoT requests.

Baseline Schedule

A baseline schedule is a fixed project timeline that cannot be altered once established. This schedule encompasses the entire project scope and outlines how the contractor plans to complete all tasks. Additionally, it must clearly identify the actions that form the project's critical path, which are essential for timely completion (Ahmed & Jamal, 2022). A baseline schedule is a critical document in the EoT application process, serving as a primary record to measure any deviations or delays from the planned timeline of a construction project. It forms the foundation for assessing delay events by comparing the actual progress against the originally agreed schedule. Without an accurate baseline schedule, it becomes challenging to substantiate claims for time extensions, as there is no benchmark to evaluate the impact of delays.

Records of Works to be Executed by Sub-contractors

Subcontractors often play a vital role in delivering specific tasks within the broader scope of the project, and their delays or disruptions can directly affect the main contractor’s ability to meet project deadlines (Sarpin & Ramesh, 2024). For EoT applications, it is essential to maintain accurate records of subcontractors' activities, including progress reports, site instructions, work orders, and any correspondences related to delays. These records serve as evidence when justifying claims for extensions due to subcontractor issues. Such delays due to subcontractor is appointed or nominated by the Client is relevant for the Contractor to claim for time extension, which is also specified in Clause 23.8(i) MIA 2018 Contract.

Manpower and Machineries Schedule

Manpower and machineries schedule provide a detailed breakdown of the labour and equipment allocated to specific tasks over the project’s duration. By maintaining accurate schedules, contractors can substantiate their EoT claims, showing how delays impacted labour deployment and machinery usage. Without these schedules, it becomes difficult to quantify the delays caused by resource constraints, leading to disputes or rejection of claims (Okereke et al., 2021). Ensuring timely and detailed record-keeping of resource usage not only supports EoT applications but also improves project time management and mitigates the risk of penalties for delays.

Updated Programmes

During the construction phase, a project is subject to various changes, and stakeholders typically require accurate status updates on performance to monitor progress and anticipate any deviations from the original plan. Alnaas et al. (2014) highlighted that reliable programme updates allow project managers to evaluate the effects of changes or unexpected events and take corrective actions promptly to minimize or prevent their impacts. When a project's history is well-documented, conducting delay analysis becomes easier. This analysis helps to pinpoint the causes of delays, assess each party's responsibility for those delays, and quantify the resulting impacts.

Notice for Delay

Research has highlighted that the preparation of delay notices is often seen as a crucial step in submitting a proper EoT claim. It allows all parties to review and agree upon the facts before they escalate into disputes. Recent studies point out that delay notices are also beneficial in improving the coordination between site teams and project managers, reducing the ambiguity of when and why delays occur (Yahya, 2021 & Yoke Lian et

al, 2012). In MIA 2018 Contract, it is required that a delay notice be issued promptly to ensure that the delay is recorded and analysed. Without timely submission, contractors risk losing their entitlement to EoT claims. This process provides transparency, accountability, and mitigates potential disputes.

Revised Programmes

The revised programme includes the changes and requires resources, and new completion is stated. Considering the duration of construction projects, frequent changes in scope, and delays that may arise during execution, the initially approved baseline programme often becomes inaccurate and requires regular updates. These revisions are necessary to reflect changes, adjust the logic and sequencing of tasks, and integrate mitigation strategies aimed at minimizing disruptions to the project's timeline (Mohamad Yusuwan et al., 2019 & Alnaas et al., 2014). The revised program should be developed to justify and support if any changes may result the completion date is beyond the contractual completion date.

Delay Analysis

Delay analysis refers to the systematic examination of project delays to determine the causes, impacts, and responsible parties for those delays. Properly conducted delay analysis relies on accurate and comprehensive records, such as progress reports, daily logs, correspondence, and project schedules, to evaluate the reasons behind project delays and to substantiate claims for time extensions (Mohamad Yusuwan et al., 2020 & Sepasgozar et al., 2019).

Time Impact Analysis

Time Impact Analysis (TIA) is a delay analysis method that evaluates the effects of delays on the project's completion date by comparing the planned schedule to actual progress. involves adding delay-related events (often referred to as "fragnets") to the project schedule to simulate the impact of delays. These added fragnets help illustrate how specific delays influence project activities and their critical path, thus showing whether they lead to a delay in the overall project completion (Fan, 2012). By modelling the effect of these delays, TIA provides a strong evidentiary basis that can be used in dispute resolution and to substantiate claims (Nee et al., 2022).

Cause and Effect Analysis

This analysis not only identifies how delays affect the critical path but also evaluates the significance of each delay event based on factual records. By providing clarity on the linkage between delay causes and their consequences, it ensures that EoT applications are backed by objective data, thereby reducing potential disputes and ambiguities in contract claims (Mohamad Yusuwan et al., 2022 & Mohamad et al., 2021).

Productivity Analysis Report

Productivity analysis is a critical aspect of substantiating EoT claims in construction projects. It involves collecting detailed records of workforce efficiency, equipment usage, and overall project output to demonstrate how delays have impacted productivity. These records, such as timesheets, performance data, and cost information, help contractors link delays to specific project disruptions, thus justifying EoT requests (Adebowale & Agumba, 2023). Accurate and comprehensive documentation of productivity helps prevent disputes by providing verifiable evidence of the delay's impact on project timelines (Okereke et el., 2021).

Minutes of Meeting

These records are critical for EoT claim administration because they provide factual evidence, including dates, agreements, and instructions that are necessary to support a contractor's claim for time extensions. In complex multi-stakeholder projects, regular and detailed record-keeping, including minutes from daily, weekly, and progress meetings, is essential to validate the claim process. These minutes document the agreement or disputes over issues such as delays, work variations, and disruptions. As such, they are invaluable when

justifying why an EoT should be granted or denied based on contractual obligations and project realities (Okereke et al, 2021 & Yoke-Lian, 2012)

Changes of Work Notice

Change of work notice are modifications to an existing construction or engineering contract, made after the agreement is in place. These revisions typically involve adjustments to the project's scope, cost, or timeline. They allow the parties involved to address changes or unforeseen conditions that arise during the project, ensuring that the contract remains aligned with the updated project requirements (Prieto, 2022). A change of work notice serves to formally document any alterations in the project scope, which often leads to delays. Maintaining these records ensures a strong basis for evaluating the legitimacy of the claim (Okereke et al, 2021 & Alnaas et al., 2014).

Progress Reports

These reports often include detailed documentation of project milestones, unforeseen events, and any delays that could potentially justify an EoT claim. Properly maintained progress reports help project stakeholders, both contractors and contract administrators, to assess the validity of a delay claim, as they provide a timeline and evidence of the delays experienced on site. In addition, they establish a factual basis for determining whether the delay was within the contractor's control or caused by external factors (Ting et al., 2021 & Mohamad et al., 2021).

Financial Claim Register

A financial claim register for EoT applications is a record-keeping tool used to track the submission, review, and approval process for claims related to delays in construction projects. It helps contractors and project managers monitor the financial implications of delays and ensure that claims are submitted in accordance with contract provisions. This register typically includes information on the amount claimed, the reasons for the delay, and the status of the claim, ensuring that all financial impacts are accounted for as projects progress (Naveen, 2020).

Delay Event Log

Delay Event Log (DEL) provides a chronological account of delay events, including their causes, impacts, and the corresponding dates they occurred. By maintaining a detailed DEL, contractors can effectively track and manage delays, making it easier to compile claims for EoT based on factual evidence. According to Mohamad Yusuwan & Adnan (2019), a well-maintained DEL allows project stakeholders to establish a clear connection between delayed events and the resultant impact on the project schedule.

SUCCESS FACTORS FOR EoT APPLICATION

A strong EoT application must clearly demonstrate the claimant's innocence while rationally attributing fault to the other party, using fact-based and convincing arguments (Mohamad Yusuwan et al., 2021). It is important to consider the contract administrator, the claim's end user, and provide them with the necessary information to make a fair judgment. The claim document serves as an opportunity for claimants to defend their rights, and should tell a clear, understandable, and memorable story (Alnaas et al., 2014). The claimant's recovery theory must be strongly supported by relevant facts and evidence. To ensure the success of the claim, or at least minimize the chances of rejection, Hewitt (2011) identified four critical factors using the acronym CEES: Cause, Effect, Entitlement, and Substantiation. These elements, explained in more detail by Mohamad Yusuwan (2016), provide the foundation for a well-constructed claim.

Cause (C)

According to Batch (2022), the first step in submitting EoT application is determining whether there is a "qualifying cause of delay." Delays in construction can occur for various reasons, but an EoT will only be

granted if the delay is due to an unforeseen event specified in the construction contract (Contract Specialist, 2023). The causes must be identified as excusable delay events in the contract. Since both parties often blame each other, claimants must prove that they are not responsible for the delay and that another party, such as the employer, their representatives, or an "Act of God," is at fault (Mohamad Yusuwan, 2019; Alnaas et al., 2014). Additionally, Chaudary & Whealy (2022) emphasized the importance of identifying issues that have impacted the baseline work.

Effect (E)

After identifying the cause of a delay, the contractor must demonstrate its effect on specific works. Delays that do not impact the project schedule cannot qualify as relevant events for an EoT application (Chaudary & Whealy, 2022). Proving the impact of delays, especially when multiple delays occur, is challenging (Hewitt, 2011; Ndekugri et al., 2008). The claimant must provide a work plan showing how the delay was calculated and how it affected the project schedule or development (Mohamad Yusuwan, 2016). Only delays affecting critical path activities and impacting the project's completion date can be considered for EoT (Chaudary & Whealy, 2022; Mohamad Yusuwan, 2016).

Entitlement (E)

To secure an EoT, the contractor must carefully review the contract clauses that grant the right to an EoT for specific events. Failure to establish a clear entitlement may delay compensation and hinder the resolution of contractual claims (Inaler, 2021). The contractor must clearly reference the relevant contract provisions and provide the legal basis for the EoT claim (Alnaas et al., 2014). Only events explicitly outlined in the contract qualify for an EoT application (Mohamad Yusuwan, 2016). Generally, the project completion date can be extended if allowed by the contract. Therefore, it is crucial for the contractor to thoroughly review the contract terms, as EoT provisions may vary depending on the type of contract used (Mohamad Yusuwan et al., 2021).

Substantiation (S)

Substantiation refers to the process of proving that something is accurate and factual (Hewitt, 2011; Mohamad Yusuwan, 2016). To support a claim, it must include solid evidence that is comprehensive, legally valid, and could be used in court (Bakhary et al., 2017). Proper maintenance of project records is essential not only for management but also to support contractual claims. A well-documented claim strengthens the chances of a successful EoT application (Mohamad Yusuwan et al., 2022). According to Alnaas et al. (2014), it is the contractor’s responsibility to demonstrate that the delays were both excusable and compensable by using reliable critical path analysis.

Presentation (P)

In addition to the key CEES components for a successful EoT application, attention must also be given to the proper submission of the claim. The contractor must submit a detailed, well-supported claim within the contract’s required timeframe, including a narrative and supporting documents (Mohamad Yusuwan, 2016). The claim document should be well-organized and easy to follow to assist the assessor in reviewing it efficiently (Mohamad Yusuwan et al., 2021). A user-friendly structure with clear arrangement and labelling is essential, especially when the narrative references other documents (Mohamad Yusuwan et al., 2019). Hewitt (2011) outlined seven key aspects for presenting and documenting a claim, such as clear writing, user-friendliness, and ensuring the claim can stand alone, assuming the reviewer has no prior project knowledge. Similarly, (Oyegoke, 2006) proposed organizing claims into four sequences: introduction, contractual basis, complete assessment, and supporting data. Yang & Xu (2011) identified essential components of a claim as the general portion, contract citations, financial and time computations, and claim evidence.

LIMITATION AND FUTURE RESEARCH DIRECTIONS

The study acknowledged its limitations, including the reliance on secondary data and the potential for publication bias. Future research directions will be proposed, emphasizing the need for empirical studies to validate the identified factors and explore practical solutions for enhancing the EoT application process.

CONCLUSION

This study provides a comprehensive overview of the factors influencing EoT applications within the MIA Standard Form of Contract 2018. It highlights the complexities and challenges faced by stakeholders in the construction industry, particularly concerning the management of project timelines. Through systematic gathering and analysis of existing literature, this paper identifies common reasons for the rejection of EoT claims, including the failure to establish a clear cause-effect relationship, inadequate supporting documentation, late submissions, non-valid reasons, and insufficient breakdown of claim amounts. Moreover, it sheds light on the systemic issues leading to late EoT submissions, such as inexperience among site staff and poor documentation practices.

The research emphasizes the significance of critical success factors for EoT applications, framed within the CEES framework—Cause, Effect, Entitlement, and Substantiation—while underscoring the importance of clear presentation. By addressing both unsuccessful and successful EoT application factors, this paper contributes to a deeper understanding of EoT claim management and offers valuable insights for improving project management practices in the Malaysian construction sector.

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