

Planning Approval Duration and Regulatory Challenges in Housing Development in Sarawak: A Preliminary Review

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ABSTRACT

As Malaysia's population reaches approximately 34 million in 2023, the demand for housing continues to grow, pushing the government to develop the National Housing Policy and the state government's policy for housing. However, despite the urgency to build housing provisions, there appear to be delays in the planning approval process, affecting project timelines and governance efficiency. Prolonged approval durations can lead to cost overruns and inefficiencies in resource allocation, as well as weaken the developer's cash flow and confidence, ultimately impacting housing supply and urban development. Thus, efficient governance is essential to fulfilling housing policy objectives. While previous studies have examined regulatory inefficiencies and procedural barriers, many adopt a one-sided approach, favouring either government agencies or developers. This leaves a gap in understanding how governance structures, administrative processes, and inter-agency coordination contribute to discrepancies in approval durations. This research aims to critically analyse the approval timeline and regulatory challenges in Sarawak's housing development process, contrasting with Peninsular Malaysia's planning system, which is under the Town and Country Planning Act 1976 and streamlined by digital platforms like OSC 3.0 Plus. The specific planning framework and land administration in Sarawak, regulated by the Sarawak Land Code and Local Authorities Ordinance 1996, lead to an uncoordinated and often sequential approval process, causing delays in housing delivery and inflated development costs. A qualitative research approach will be employed, utilising document analysis and semi-structured interviews with key stakeholders, including local authority town planners and private developers. By assessing the governance and efficiency of approval processes, stakeholder roles, and decision-making mechanisms, this research aims to provide insights into similarities and differences in Sarawak and Peninsular Malaysia's planning frameworks to seek the best practice to enhance regulatory transparency. This research outcome will lead to producing evidence-based insights that are both diagnostic and prescriptive, derived from all the data gathered. This is crucial for assisting policymakers and regulatory bodies in improving approval efficiency and supporting the timely delivery of housing projects in the state.

Keywords: Planning Approval, Housing Development, Regulatory Challenges, Approval Duration, Sarawak

INTRODUCTION

As Malaysia's population reaches approximately 34 million in 2023, the demand for housing continues to grow, pushing the government to develop the National Housing Policy and the state government's policy for housing. However, despite the urgency to build housing provisions, there appear to be delays in the planning approval process.

Planning approval plays a crucial role in housing development, directly influencing project timelines, costs, and delivery. In Peninsular Malaysia, the OSC 3.0 Plus system has improved this process through digitalisation and inter-agency integration, leading to faster approvals and greater transparency (Bernama, 2023; Marzukhi et al., 2019). In contrast, Sarawak, however, uses its own legislative and administrative framework to operate, regulated by the Sarawak Land Code and Local Authorities Ordinance 1996. The State Planning Authority (SPA) oversees a hybrid system in which initial submissions are lodged through the e-SPA platform, but subsequent technical reviews, engineering plan approvals, and building plan approvals are processed manually

in sequential order. No centralised digital system and the involvement of multiple departments often lead to prolonged delays, uncertainty and regulatory challenges (Yusup & Arshad, 2012). Applications are reviewed at the Divisional Land and Survey Office (KPI: 25 working days), forwarded to HQ (KPI: 35 working days), and tabled for SPA decision (KPI: 45 calendar days). Despite KPI targets, the end-to-end process from planning submission to issuance of land titles can take around 480 days (16 months) due to multiple agency reviews, repeated documentation, and post-approval clearances (Land and Survey Department, 2025). These delays increase holding costs, extend financing schedules, and disrupt project delivery timelines.

Research in Malaysia predominantly focuses on Peninsular states, particularly on the impacts of OSC digitalisation in streamlining approvals (Bernama, 2023; Marzukhi et al., 2019). These studies demonstrate the benefits of digitalisation in enhancing inter-agency coordination, improving transparency, and reducing processing time. In contrast, Sarawak's planning approval system is underrepresented in the literature, with most studies being descriptive rather than empirical (Rosli Said et al., 2017; Yusup & Arshad, 2012). There is minimal comparative analysis of governance structures and procedural bottlenecks across regions. These vague governance and procedural implementations, as well as prolonged timelines create uncertainty for Sarawak developers, increase holding and financing costs, and ultimately slow down the delivery of housing needed to meet population demand (Gurran & Phibbs, 2013). Although partial reforms such as the introduction of e-SPA have improved initial submission processes (Land and Survey Department, 2025), the absence of fully integrated digital workflows and parallel processing continues to hinder efficiency.

Taking this into account, comparative research between Sarawak and Peninsular Malaysia remains scarce, resulting in a knowledge gap regarding how structural, legislative, and technological differences influence approvals timelines and regulatory effectiveness. Hence, by assessing the governance and efficiency of approval processes, stakeholder roles, and decision-making mechanisms, this research aims to provide insights into similarities and differences in Sarawak and Peninsular Malaysia's planning frameworks to seek the best practice to enhance regulatory transparency. This research outcome will lead to producing evidence-based insights that are both diagnostic and prescriptive, derived from all the data gathered. This is crucial for assisting policymakers and regulatory bodies in improving approval efficiency and supporting the timely delivery of housing projects in the state.

RESEARCH METHODOLOGY

This study adopts a Systematic Literature Review (SLR) utilizing bibliometric analysis with Visualisation of Similarities software (VOSviewer version 1.6.20) to identify research trends, thematic clusters, and knowledge gaps to determine the potential of the proposed research idea. The inclusion criteria covered studies on planning approvals, housing development processes, and governance frameworks. Bibliometric analysis was conducted using VOSviewer to generate keyword co-occurrence networks and thematic clusters (van Eck & Waltman, 2010).

Bibliometric Analysis with Visualisation of Similarities Viewer

Addressing the research gap identified in the literature review regarding planning approval duration and regulatory challenges in housing development in Sarawak, this study applies bibliometric analysis to map the relationships between major themes in the existing body of knowledge. The analysis focuses on identifying how keywords related to housing development, planning approvals, and planning systems are interlinked in academic literature, thus providing a structured overview of research trends, influential themes, and possible areas of under exploration (Aria & Cuccurullo, 2017).

In the preliminary stage of the literature search, a broad set of keywords related to housing development processes and governance was used in Scopus database. This initial search returned a wide array of publications. However, after filtering for relevance using keyword co-occurrence mapping in VOSviewer, two sets of bibliometric maps were generated to capture different aspects of the research focus (van Eck & Waltman, 2010).

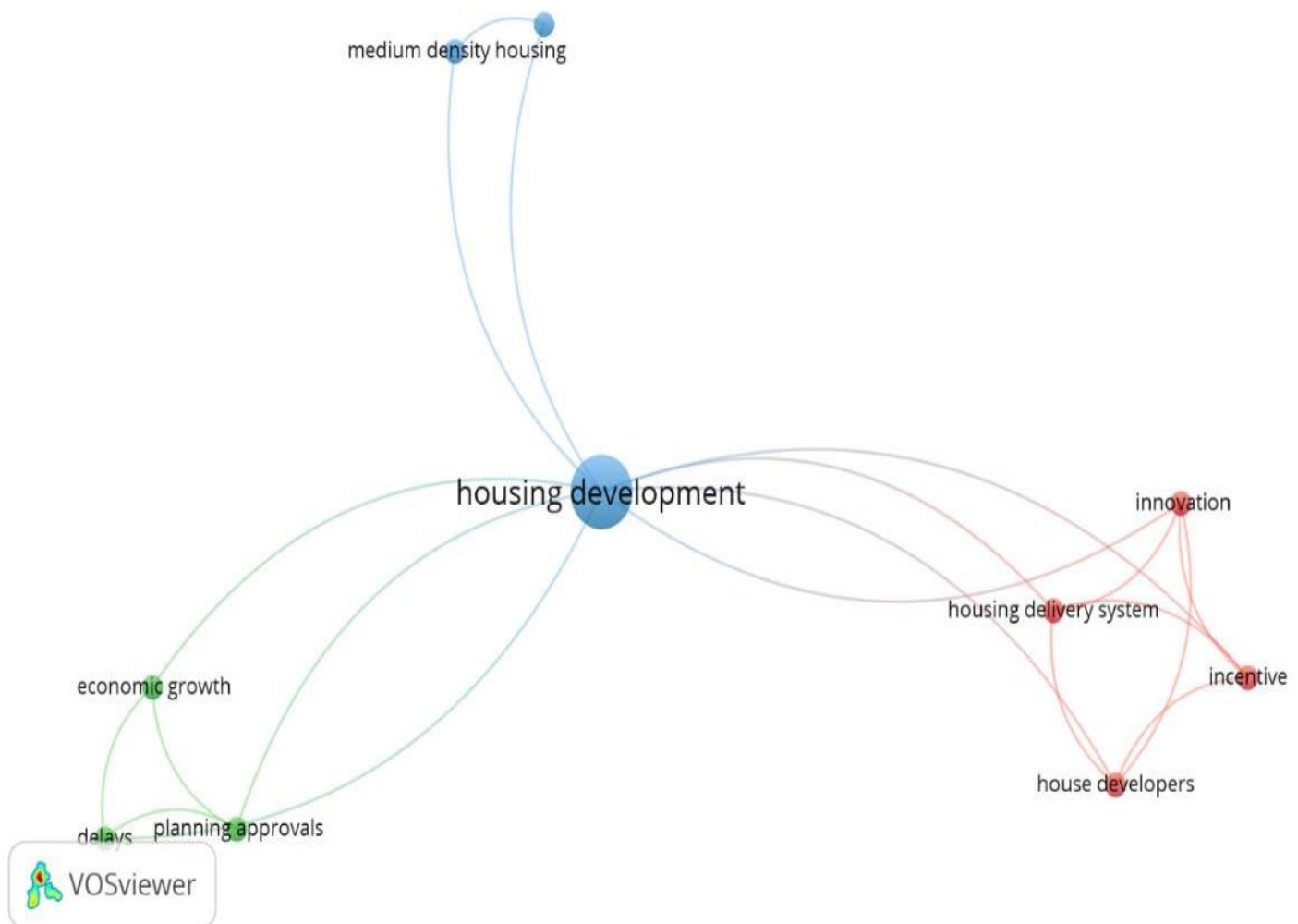
Keywords of Housing Development and Planning Approvals

The first bibliometric analysis was generated using the keyword “housing development” and “planning approval” and reveals three primary clusters as depicted in Figure 1. The blue cluster links housing development with medium density housing, highlighting research related to urban form and housing typologies. The green cluster connects housing development with planning approvals, delays, and economic growth, reflecting studies focused on governance efficiency and its economic implications. The red cluster associates housing development with housing delivery systems, innovation, and incentives, pointing to research that examines policy tools, technological adoption, and developer-driven solutions.

The relationships between these clusters suggest a systemic interdependence: urban form decisions (blue cluster) influence and are influenced by the efficiency of planning approvals (green cluster), while both are increasingly shaped by the technological and policy innovations (red cluster). Understanding these linkages is critical for regions such as Sarawak, where manual approval systems and fragmented processes can hinder the integration of sustainable housing typologies and innovation delivery mechanisms. By mapping these clusters, the bibliometric analysis highlights not only the breadth of the research on housing development but also the knowledge gaps in this context particularly where governance structures differ significantly from digitally integrated systems like OSC 3.0 Plus.

Figure 1: Bibliometric Analysis with integration keywords “Housing development and planning approvals”

(source: Bibliometric Analysis through VOSviewer software by authors)



Keywords Of Housing Development, Planning Approval and Planning System

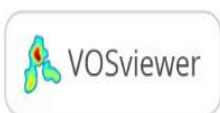
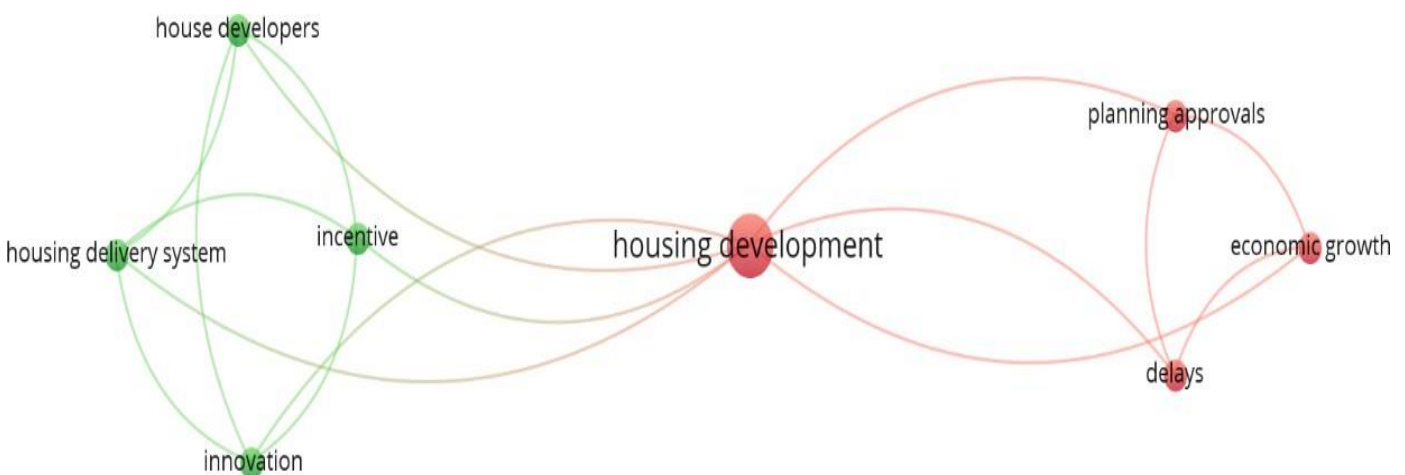
This bibliometric analysis further expands the scope by integrating keywords “planning system”, “approvals” and “housing development” as visualised in Figure 2. This visualisation strengthens the link between governance processes and stakeholder driven actions. The green cluster highlights implementation and stakeholder perspectives which include house developers, incentives, innovation, and housing delivery systems. The red cluster focuses on procedural and regulatory elements that consist of planning approvals, delays, and economic growth.

The interplay between the green and red clusters illustrates a fundamental tension in housing development while regulatory processes are necessary to uphold planning standards, overly complex or inefficient systems can undermine the very goals they are meant to achieve. In contexts like Sarawak, where manual, sequential approval processes dominate, this tension becomes more pronounced, as procedural delays can offset the benefits of developer innovation and policy incentives. Conversely, streamlining approvals through digital platforms, as seen in Peninsular Malaysia’s OSC 3.0 Plus, has the potential to unlock efficiencies that directly benefit both stakeholders and the broader economy.

The visualisation therefore provides a conceptual bridge between governance reform and market performance, reinforcing the argument that improvements to the planning system must simultaneously address procedural bottlenecks and foster conditions for stakeholder-led innovation in housing delivery.

Figure 2: Bibliometric Analysis with integration keywords “Housing development, Planning approval and Planning system”

(source: Bibliometric Analysis through VOSviewer software by authors)



Comparative observation of both maps reveals that while planning approvals and housing delivery systems appear as significant themes, there is a lack of studies that explicitly integrate governance processes, inter-agency coordination, and the housing supply chain within the Sarawak context. This indicates a knowledge gap where existing literature often addresses these topics in isolation, rather than as an interconnected system.

Despite global momentum around digital planning, Sarawak is sparsely represented in empirical studies of end-to-end and e-planning reform, performance benchmarking or evaluations of processing time reductions. This gap justifies a focused inquiry into approval duration drivers and governance design in Sarawak, including what elements of OSC style digitalisation are transferable under Sarawak's legislative context (Yusup & Arshad, 2012). Hence, this SLR finding further supports the potential of this research idea and highlight the lack of research exposure particularly for Sarawak housing development and planning governance.

THEMATIC FINDINGS

Thematic analysis is defined as a systematic approach to identifying, organizing, and interpreting patterns or referred as themes within qualitative datasets (Braun & Clarke, 2006). Thematic analysis was selected because its flexibility and systematic approach are well suited to exploring the multifaceted procedural, regulatory, and governance issues in planning approvals. It enables the researcher to move beyond surface-level responses to uncover deeper insights into the cause of approval delays, efficiency gaps, and opportunities for process improvement (Nowell et al., 2017). In the context of examining the planning approval process for housing development in Sarawak, thematic analysis enables the systematic identification of procedural delays, coordination challenges, legislative differences, and opportunities for improvement, providing a deeper understanding of how these factors influence approval timelines and housing delivery.

The coding process for this study will combine both inductive and deductive approaches. The inductive approach will allow themes to emerge naturally from interview and document data, ensuring that findings are grounded in stakeholder's actual experiences and language (Nowell et al., 2017). The deductive approach ensured alignment with the study's research questions and conceptual framework, focusing on governance structures, approval timelines, and housing delivery outcomes (Castleberry & Nolen, 2018). The resulting thematic structure captures the essence of the data and provides an evidence-based foundation for discussing how current approval practices influence housing supply and what reforms could enhance efficiency in Sarawak.

Importance Of Planning Approval

Planning approvals serve as a gatekeeping mechanism to ensure that developments comply with spatial planning frameworks, environmental safeguard, and technical standards (Healey, 1997). Efficient approval processes are directly linked to timely housing delivery, reduced project costs, and improved governance outcomes (Booth, 2007). Delays in approvals, however, can cause cascading effects that will be affecting financing schedules, material procurement, and workforce mobilisation (Marzukhi et al., 2019). This process aligns development proposals with local plans, masterplans, and national policy objectives, while also safeguarding public interest in land use decisions (Booth, 2007; Cullingworth, B., & Nadin, 2006). Efficient approval processes are crucial for timely housing delivery, reducing project costs, enhancing governance, boosting investor confidence, facilitating infrastructure coordination, and supporting sustainable urbanisation (UN-Habitat, 2020). Conversely, delays can have cascading effects that are affecting financing schedules, increasing land holding costs, delaying material procurement, and disrupting workforce mobilisation (Marzukhi et al., 2019; Shafiei, E., Chhipi-Shrestha, G., & Hewage, 2021). In housing markets with high demand, such delays contribute to affordability crises by constraining supply and inflating prices (Gurran & Phibbs, 2013).

Development Approval System

In the context of peninsular Malaysia, the One Stop Centre (OSC) that was introduced in 2007 and later upgraded to OSC 3.0 Plus has reduced the approval timelines significantly (Marzukhi et al., 2019). The OSC model allows developers to submit the application online, which is then reviewed and tracked simultaneously by all relevant technical agencies. The OSC model has also improved the coordination of each agency and enhanced transparency (Marzukhi et al., 2019).

Unlike Peninsular Malaysia, Sarawak does not practice the OSC model. Sarawak operates a distinct manual

planning system under the Sarawak Land Code (Cap. 81), where central authority is held by the State Planning Authority and there are no specific statutory timelines for the approvals. As a result, approval durations can extend well beyond two years for example, the Program Perumahan Rakyat Seduan in Sibu had been delayed for 1,120 days as of December 2023 (LEE & AZIZ, 2024). Previous research shows that the delays for the development approval system come from multiple interrelated factors, such as overlapping agency functions, inconsistent procedures across local authorities, incomplete documentation needing to be resubmitted, and a lack of clear operating procedure standards (Rosli Said et al., 2017).

Osc 3.0 Plus in Peninsular Malaysia

The OSC system, introduced in 2007 and upgraded to OSC 3.0 Plus in July 2019, was developed by the Ministry of Housing and Local Government (KPKT) in collaboration with MAMPU, CIDB, and Putrajaya Corporation to streamline planning and building approval processes across Peninsular Malaysia (Marzukhi et al., 2019; Woon Fatt, 2021). This platform allows Principal Submitting Persons (PSP) such as certified architects, engineers, town planners, and surveyors to submit development applications online, make payments digitally, and have the applications reviewed simultaneously by all relevant technical agencies.

OSC 3.0 Plus is currently implemented in 89 local authorities across the Peninsula and integrates technical agencies (e.g., Planning Building, Engineering, and Landscape departments) with external agencies (e.g., Land and Mines Office, State Water Authority, IWK, JPS, BOMBA, DOE, TNB, JKR) into a single parallel processing workflow. This integration enables real-time tracking of application status, online communication between stakeholders, and reduced dependency on physical meetings.

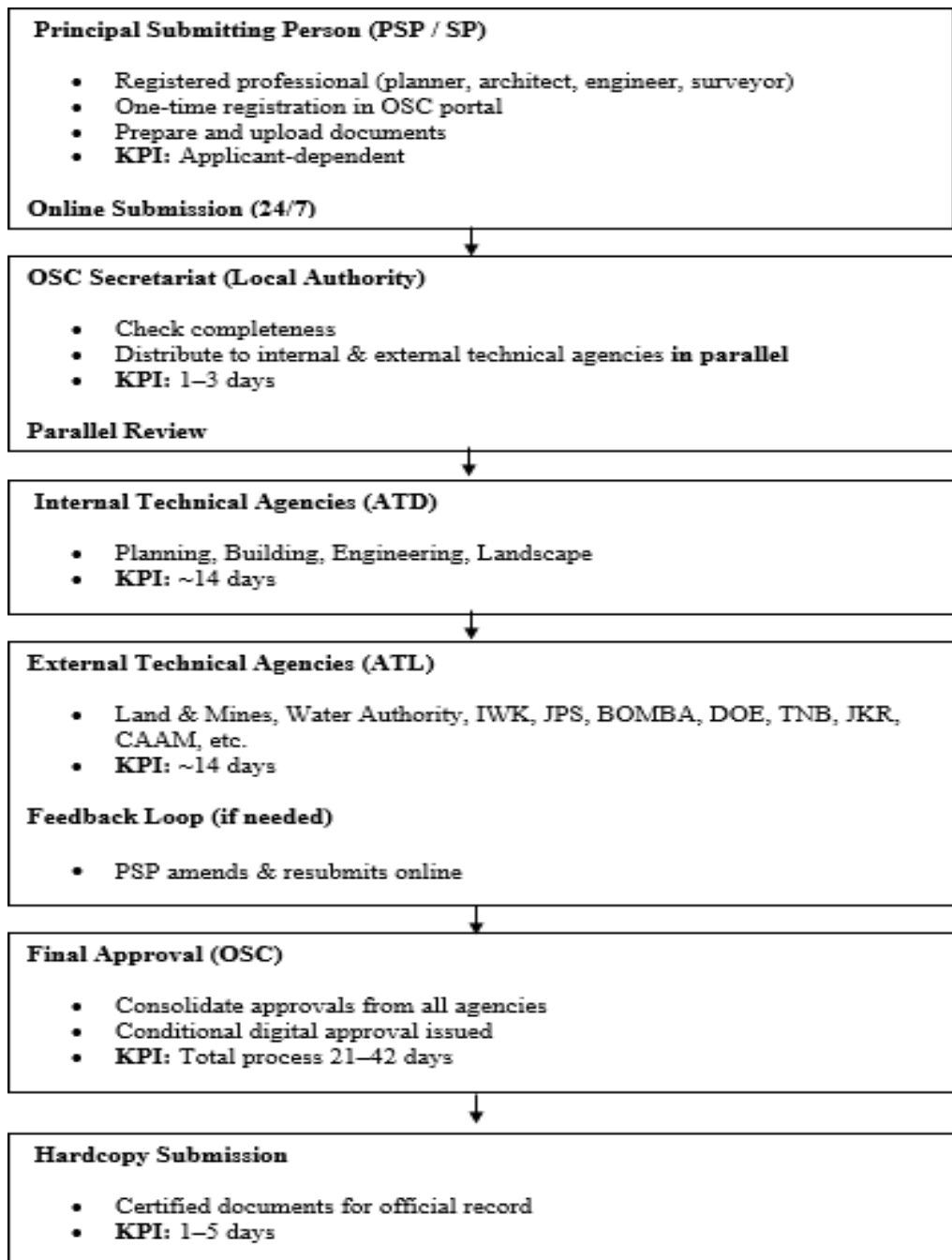
The system delivers six key benefits that collectively enhance governance efficiency. It improves the speed and effectiveness of government service delivery while minimising reliance on hardcopy submissions through paperless operations. Moreover, the platform offers remote access allowing applications to be submitted, reviewed, and coordinated at any time and from any location. In addition, the one-time registration process enables applicants to submit proposals to any participating local authority without repeated registrations. This is especially beneficial for developers that have multiple projects. Real-time monitoring features allow applicants to track progress and respond promptly to agency feedback, while all transactions are digitally recorded to ensure proper documentation, transparency, and audibility (Woon Fatt, 2021).

The OSC 3.0 Plus platform has successfully improved the planning and building approval process by significantly reducing approval times to as low as 21 days for certain applications (Bernama, 2023). The platform also supports data transparency by enabling applicants to monitor progress and respond promptly to requests for additional information. However, despite its advancements, some local authorities still require hardcopy submissions for official documentation due to statutory requirements, limited recognition of digital signatures, and reliance on physical filing systems. These practices create duplication and reduce the full efficiency gains of OSC 3.0 Plus.

Figure 3 shows the streamlined OSC 3.0 Plus process, where a registered Principal Submitting Person (PSP) uploads documents via the 24/7 online portal after a one-time registration. The OSC Secretariat checks completeness and distributes the application in parallel to internal (planning, building, engineering, landscape) and external agencies (e.g., Land & Mines, BOMBA, TNB), each with a KPI of about 14 days. This parallel review, supported by an online feedback loop for amendments, enables faster communication and consolidation of approvals, allowing conditional digital approval within 21-42 days. Although certified hardcopies are still required for official records, the system's one-time PSP registration, 24/7 access, parallel review, and clear KPIs significantly improve efficiency and transparency.

Figure 3: OSC 3.0 Plus Workflow: Integrated Parallel Processing with KPI Timelines

Source: (Woon Fatt, 2021)



Hybrid Approval Planning in Sarawak

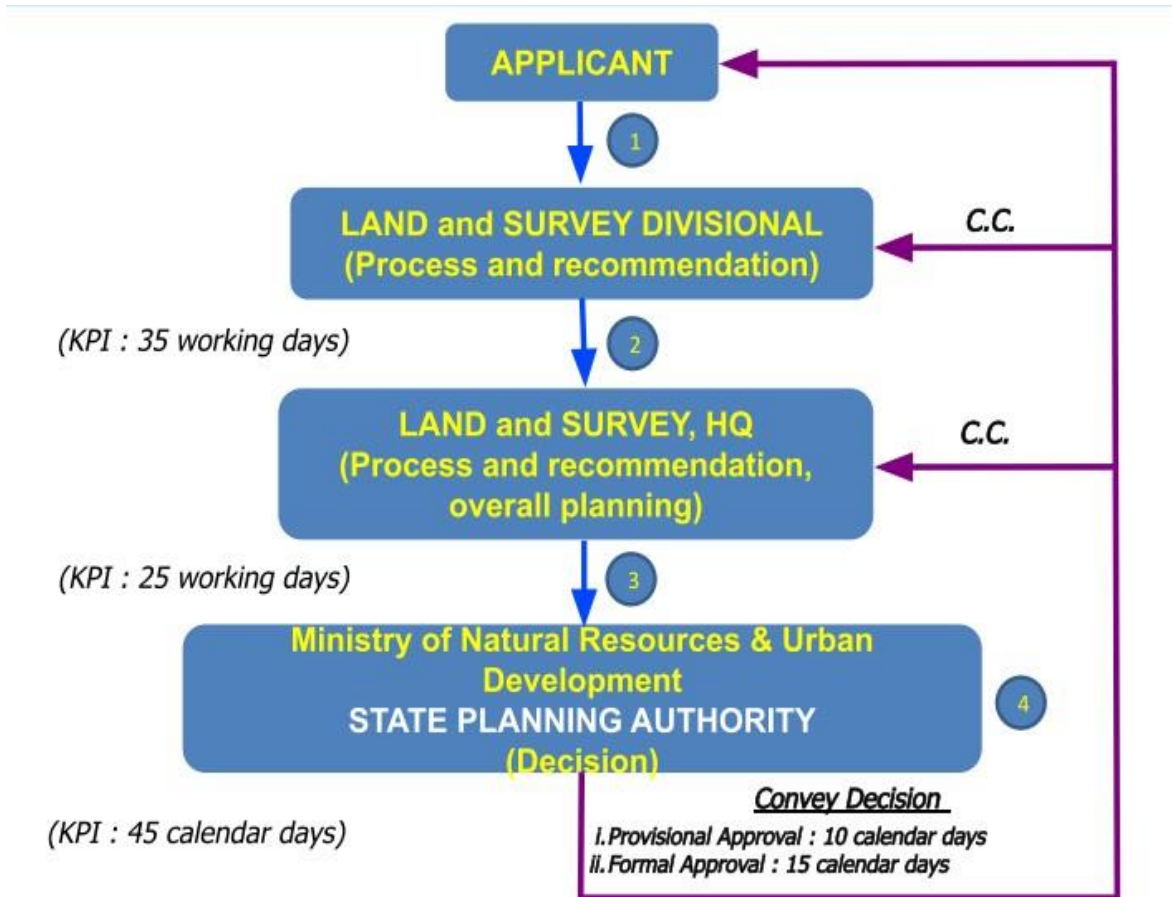
Sarawak's development control system is governed primarily by the Sarawak Land Code and administered by the State Planning Authority (SPA) in coordination with the Land and Survey Department. Unlike in Peninsular Malaysia, where local authorities hold significant planning powers, in Sarawak, planning approval decisions are centralised under the SPA, creating a unique administrative structures (Junaidi et al., 2014; Ong, 1998).

The current approval system adopts a hybrid format, where the first round of submissions is made digitally via the e-SPA platform, but subsequent reviews, endorsements, and decision making remain predominantly manual and sequential. Developers need to obtain endorsements from multiple departments, including land administration, drainage, road works, and utilities. Each agency conducts its review in turn rather than concurrently, which prolongs timelines (Yusup & Arshad, 2012). The absence of statutory timelines further delays, and developers often face repeated documentation resubmissions due to inconsistent requirements

across different local authorities (Rosli Said et al., 2017). Junaidi and Salleh (2014) note that the lack of coordination between state-level and local-level planning is a persistent challenge. This fragmentation results in duplication of tasks, inconsistent interpretations of development control standards, and prolonged communication loops between technical agencies.

Figure 4: Work Flow For Application Of Development/ Avtc/Subdivision/Alienation Of Land/Strata (Submission Through System E-Spa)

Source: (Land and Survey Department, 2025)



The complexity of Sarawak’s hybrid development approval process is evident in its multi-tiered structure. In figure 4, the process begins with the developer submitting the application via the e-SPA system to the Land and Survey Divisional Office for processing and recommendation, which is targeted to be complete within 35 days. The application is then referred to the Land and Survey headquarters for further processing and an overall planning review, with a key performance indicator (KPI) of 25 working days. Next, it is forwarded to the Ministry of Natural Resources and Urban Development for deliberation and decision- making by the State Planning Authority, a process that is targeted to be approved in 45 calendar days. Finally, the decision is conveyed to the applicant, either as a Provisional Approval within 10 calendar days or a Formal Approval within 15 calendar days.

While the State Planning Authority Manual (1999) and Development Control Standards (1998) aim to standardise procedures, the stages following the initial e-SPA submission continue to rely on physical file transfers, in person endorsements, and departmental reviews. These manual components limit the efficiency gains expected from digital submission and highlight the need for process re-engineering. Implementing full end-to-end digitalisation, introducing statutory timelines, and enabling parallel agency reviews could significantly improve inter-agency coordination, transparency, and timeliness in Sarawak’s development control process.

Comparative Analysis Of Development Approval System

While peninsular Malaysia demonstrates the benefits of digitalisation, parallel processing, and integrated communication channels, Sarawak's reliance on manual processes creates bottlenecks and reduces predictability for developers. A comparative analysis of development approval system as outlined in the following Table 1 suggest that adopting an integrated digital system could significantly reduce delays and improve inter- agency coordination (Yusup & Arshad, 2012).

Table 1: Comparative Analysis of OSC 3.0 Plus (Peninsular Malaysia) and Sarawak's Manual Approval System

Aspect	OSC 3.0 Plus (Peninsular Malaysia)	Hybrid Approval System (Sarawak)
Submission method	Fully online submission via OSC 3.0 Portal (Woon Fatt, 2021)	Initial submission via e-SPA system followed by mandatory hardcopy lodgment to Divisional Land & Survey Office. (Land and Survey Department, 2020, 2025)
Processing Workflow	Parallel processing documents are reviewed simultaneously by relevant agencies ; one time	Sequential review: applications processed at divisional level, then headquarters and after that SPA. The local authorities issue
	registration for applicants (Woon Fatt, 2021)	Occupation permit only after SPA's approval.(Junaidi et al., 2014; Land and Survey Department, 2020)
Inter-agency communication	Integrated digital coordination between internal and external technical agencies (JKR, DOE, BOMBA) (Woon Fatt, 2021)	Manual correspondence, often requiring physical meetings or letters.(Junaidi et al., 2014)
Tracking & transparency	Real-time status tracking, centralised digital audit trails, and command dashboards for applicants and agencies (Woon Fatt, 2021)	Limited tracking; applicants rely on follow-up calls or visits. Transparency mechanisms are minimal. (Junaidi et al., 2014; Land and Survey Department, 2020)
Document Management	Digital storage of all transactions by PSP/SP authorities, and technical agencies. Allows one-time registration that reduces redundancy (Woon Fatt, 2021)	Paper-based filing; prone to duplication and misplacement (Junaidi et al., 2014; Land and Survey Department, 2020)
Processing Time	Reduced due to simultaneous review and automated notifications. Significant improvements; approval period cut from 42 days to just 21 days and also the agency involved reduced from 19 to 5.(Bernama, 2023)	No statutory timeline and takes longer due to sequential reviews and manual follow-ups. Planning approvals often take at least 230 working days, depending on resubmissions and clearance delays. (Junaidi et al., 2014; Land and Survey Department, 2020)
Policy & Legal Framework	Supported by national planning legislation (Town & Country Planning Act), strategic federal coordination through KPKT, MAMPU, CIDB and PPj.(Woon Fatt, 2021)	Governed by Sarawak Land Code (Cap.81), SPA Manual, and related ordinances. The legal framework is state-specific and lacks digitalisation mandates. (Sarawak, 2019)
Known Bottlenecks	Largely mitigated via digital efficiencies and streamlined agency coordination (Bernama, 2023).	Persistent issues including centralised SPA referrals, resubmissions of documents, asynchronous local authority procedures, delays in Occupational Permit and title issuance (Junaidi et al., 2014; Land and Survey Department, 2020).

The comparative analysis of development approval system also compares the operational features of the OSC

3.0 Plus in Peninsular Malaysia with Sarawak's manual approval system. The contrast underscores the planning approval duration and regulatory challenges for Sarawak governance and ponders the potential efficiency Sarawak could achieve through digitalisation and process integration. In Peninsular Malaysia, the Town and Country Planning Act 1976 provides a uniform legal framework for approvals, supporting the streamlined processes of OSC 3.0 Plus. In contrast, Sarawak operates outside this framework, with the State Planning Authority exercising centralised decision-making power (Yusup & Arshad, 2012), a structural difference that contributes to slower approval times and limits the immediate adoption of integrated digital systems.

Furthermore, across Malaysia planning literature, digitalization consistently emerges as a lever for faster, more transparent approvals and better inter-agency coordination. The OSC

3.0 Plus framework formalises online submissions, parallel technical reviews, and end-to-end status visibility, which together shorten processing cycles and reduce uncertainty for applicants (Bernama, 2023; Marzukhi et al., 2019). In 2023, the federal government announced streamlining measures under OSC 3.0 Plus, including cutting standard approval windows from 42 to 21 days for specified application classes and rationalising referral agencies with clear signals of policy intent to improve the whole system.

In the other hand in Sarawak, planning still operates under a distinct legal administrative regime centered on the State Planning Authority, with manual submissions, sequential inter agency processing, and the absence of statutory timelines in many cases. Studies note fragmented roles across authorities, inconsistent documentation requirements, and paper-based correspondence which all lengthen the cycle time and complicate tracking for developers (Rosli Said et al., 2017; Yusup & Arshad, 2012). These structural features translate into prolonged approvals and lower transparency relative to digital models observed in Peninsular Malaysia.

CONCLUSION

The approval review of planning approval duration and regulatory challenges in housing development in Sarawak highlights the significant disparities in planning approval processes between Sarawak's hybrid, sequential system compared with Peninsular Malaysia's digitally integrated OSC 3.0 Plus model. While the latter demonstrates the efficiency gains of parallel processing, inter-agency integration, and real-time transparency, Sarawak continues to face prolonged approval durations due to fragmented coordination, paper-based submissions, and the absence of statutory timelines. These inefficiencies not only delay housing delivery but also inflate development costs, weaken investor confidence, and hinder the fulfilment of housing policy objectives.

The findings underline the critical need for process re-engineering in Sarawak's planning approval framework. By adopting elements of digitalisation, introducing statutory timeframes, and streamlining inter-agency communication, Sarawak can significantly improve governance efficiency and housing delivery timelines. Comparative insights from Peninsular Malaysia's OSC 3.0 Plus provide a practical benchmark for reform, though adaptations must consider Sarawak's unique legislative and administrative context. Bridging this gap will require collaboration between state authorities, local governments, and industry stakeholders to align procedural reforms with long-term housing development goals.

Ultimately, addressing approval duration and regulatory challenges in Sarawak is not merely a technical exercise but strategic imperative for sustainable urban development. The outcomes of this research will offer evidence-based recommendations to policymakers, enabling them to enhance transparency, accountability, and coordination in the planning system. Such reforms are essential to ensure that housing provision keeps pace with population growth, supports economic development, and aligns with broader national and state-level policy objectives.

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