

LEAN CONSTRUCTION AND THE “GOOD HOUSE” VALUE SYSTEM IN CHINA: DEVELOPING A SYNERGISTIC FRAMEWORK

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ABSTRACT

China has recently introduced the concept of “good house” and incorporated it into the government work report. Nevertheless, the construction sector still struggles with persistent issues including poor quality, low efficiency, and limited sustainability. This study addresses the gap between China’s “good house” policy and persistent industry challenges by pioneering the integration of Lean Construction principles into the good house value system, proposing a synergistic framework grounded in Transformation-Flow-Value (TFV) production theory and its extensions (TFV–Institutional Logic Perspective and TFV–Service-Dominant Logic Perspective). Through logical deduction and systematic mapping, the framework elucidates how Lean Construction principles contribute to key good house value indicators. It extends TFV theory beyond the production phase by integrating an institutional logic perspective (e.g., locational value) and a service-dominant logic perspective (e.g., operational co-creation value). The framework provides a conceptual basis for empirical testing and offers policymakers an actionable pathway to deliver user-centered good houses.

KEYWORDS

Lean construction, good house, quality housing, value, quality.

INTRODUCTION

In March 2025, the concept of “good house” was written into China’s government report, marking its elevation from an industry aspiration to a national strategy. This move is not a starting point globally; well before it, many countries had already made “quality housing” or “high-quality living” a core policy goal, and their definitions overlap almost completely with China’s “good house” values of safety, comfort, greenness, and smartness. Singapore’s housing policy, for instance, has always centered on high-quality public housing (HDB flats); its liveable city framework integrates building quality, community building, green ecology, and smart technology (Lim et al., 2021). The United Kingdom enacted the Building Safety Act and launched the “Building Better, Building Beautiful” initiative, requiring new homes to meet higher standards in design, quality, sustainability, and community integration. EU countries led by Germany embed their quality housing ideal in physical performance and long-term value (Kabisch et al., 2022). International bodies such as UN-Habitat have long promoted agendas for “sustainable, adequate, safe and affordable housing” (United Nations, 2016). All of these provide universally accepted reference points for constructing China’s “good house” value system.

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Despite the growing policy emphasis on “good house,” how to systematically achieve its multi-dimensional value remains theoretically underdeveloped. Lean Construction (LC), rooted in the Transformation-Flow-Value (TFV) theory of production (Koskela, 2000), has proven effective in enhancing efficiency and quality within the production phase (e.g., Ballard, 1993; Xing et al., 2021). However, the TFV theory has been primarily developed to explain and optimize the production process itself. China’s “good house” initiative has extended value dimensions beyond the production phase, redefining “quality” from mere engineering specifications to encompass experiential, social, and long-term values (as synthesized in Table 2). Existing LC literature has not yet systematically theorized how its principles can be mapped onto these value dimensions beyond production. This gap is not merely practical, but fundamental and theoretical. The explanatory power of TFV theory for value creation beyond production remains largely underdeveloped.

Therefore, this study extends TFV theory by integrating institutional logic and service-dominant logic perspectives. This extension constructs a synergistic Lean Construction–Good House framework articulating how LC principles contribute to production value, locational value, and operational co-creation value in housing. In doing so, it addresses a critical gap in LC theory regarding value creation across the housing lifecycle. Theoretically, it extends LC theory into the domain of good house value realization by expanding TFV theory. Practically, it offers policymakers a pathway to deliver user-centered good houses.

THEORETICAL FOUNDATION LINKING LEAN CONSTRUCTION TO GOOD HOUSE VALUE

The Transformation-Flow-Value (TFV) theory, originally developed by Koskela (2000), provides a foundational lens for understanding production in construction. It conceptualizes production through three complementary perspectives. TFV theory has been widely applied to improve efficiency, quality, cost, safety, and sustainability in the design and construction phases of housing (Martinez et al., 2019; Nahmens & Ikuma, 2012; Gartoumi et al., 2023; Fang et al., 2023; Fang et al., 2025). However, its application to housing value, particularly beyond the production phase, remains underexplored. This study extends TFV theory to the context of China’s “good house” initiative, recognizing that housing value is multi-dimensional and extends beyond the production phase. Accordingly, this study integrates two perspectives into the TFV framework: an institutional logic perspective and a service-dominant logic perspective.

First, the TFV–Institutional Logic (IL) Perspective. This perspective recognizes that housing value is not solely determined by production processes but is also shaped by institutional arrangements, governance structures, and collective decision-making **mechanisms**. Locational value, for instance, emerges from planning systems, infrastructure investments, and community governance. These are factors that operate beyond individual production projects. This perspective aligns with institutional theories in urban studies (Healey, 2006), which emphasize how rules, norms, and governance frameworks shape urban development outcomes.

Second, the TFV–Service-Dominant Logic (SDL) Perspective. This perspective reframes value creation as an ongoing, interactive process rather than a one-time production outcome. Service-Dominant Logic posits that value is always co-created with users through use, which is **referred** to as “value-in-use” (Vargo and Lusch, 2004). This contrasts with the traditional “value-in-exchange” view, which assumes value is embedded in products during production. In the housing context, this means that significant value emerges during the occupancy phase through service delivery, user participation, and continuous adaptation to changing needs. This includes operational co-creation value such as smart services, responsive maintenance, and community engagement.

By integrating these two perspectives, we developed a conceptual model illustrating the extended **TFV** theory and good house value (see Figure 1).

(1) Production Value of the House (TFV Production Perspective): value embedded through **design** and construction, applicable to the production and construction phases.

(2) Locational Value of the House (TFV–IL Perspective): value shaped by **governance**, planning, and collective action, applicable to site selection and neighborhood development.

(3) Operational Co-creation Value of the House (TFV–SDL Perspective): value co-created with users through service delivery and participation, applicable to user engagement and service operation phases.

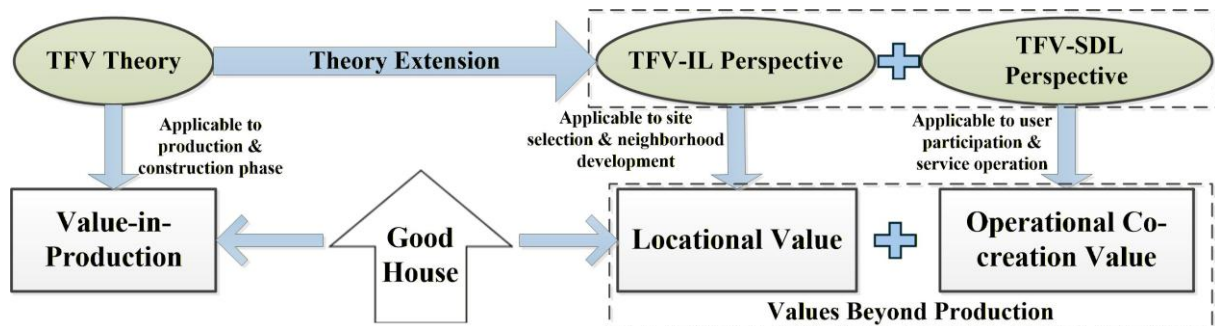


Figure 1: Extended TFV Framework for Good House Value Creation

This theoretical extension advances production theory by demonstrating how TFV’s core logic can be systematically mapped onto multi-dimensional housing value, while incorporating insights from institutional theory and service-dominant logic to explain value creation beyond the production phase. It provides a theoretical foundation for examining synergistic mechanisms between LC principles and the good house value system.

METHODOLOGY

The methodology of this study follows three steps: identifying core principles of LC and the good house value system, establishing their synergistic relationships, and visualizing the framework.

Step 1: Identifying core LC principles and “good house” value indicators. Regarding the selection of LC principles, this study is grounded in TFV production theory (Koskela, 2000), which deconstructs production into three complementary perspectives: transformation (efficient task execution), flow (waste elimination and process smoothness), and value (fulfillment of customer requirements). These perspectives offer different lenses for observing the same production process. Based on this framework, principle selection followed two criteria. First, theoretical comprehensiveness required that selected principles systematically map onto the three TFV perspectives to enable comprehensive examination of housing production’s multi-dimensional value. Second, applicability to the housing context prioritized principles with clear theoretical relevance to good house value objectives or established applications in the residential sector. The resulting LC principles are presented in Table 1.

Regarding the selection of good house value indicators, this study follows TFV production theory and its two extended perspectives: institutional logic and service-dominant logic. The selection process involved three steps. First, the study systematically reviewed China’s three most representative good house policy frameworks and extracted all original indicators, while consulting academic literature on housing value and residential satisfaction to validate and supplement them. Second, based on TFV theory and its extensions (TFV-Institutional Logic Perspective and TFV-Service-Dominant Logic Perspective), the indicators were categorized into three core dimensions. Finally, within each dimension, indicators were consolidated, duplicates removed, and expressions refined to ensure mutual exclusivity and collective exhaustiveness. The resulting eight-indicator system (see Table 2) systematically captures the

full lifecycle value of good house, from production and location to operation, while maintaining clear theoretical alignment with TFV and its extended perspectives.

Step 2: Establishment and classification of synergistic relationships. Synergistic relationships between LC principles and good house indicators were mapped based on the authors’ logical deduction and interpretation from theoretical premises. The strength of each relationship is classified as: Strongly Supported (S), Conceptually Inferred (C), and Exploratory (E).

Step 3: Visualization of the framework. The relationships are presented in a synergy matrix (see Table 3) where each numbered cell corresponds to a specific logical explanation of the linkage. This structured presentation ensures that the theoretical underpinnings of every synergistic mechanism are transparent and traceable, thereby establishing a verifiable foundation for subsequent empirical validation.

LEAN CONSTRUCTION PRINCIPLES

LC applies lean production methods to the building industry to facilitate its transformation and upgrading (Hamzeh et al., 2021). Its core philosophy involves continuously reducing and eliminating waste throughout the entire life cycle of construction products, enhancing production efficiency, and maximizing value for all stakeholders (Dumrak & Zarghami, 2025). Womack and Jones (1996) first proposed the five Lean principles: value, value stream, flow, pull, and perfection. Sacks et al. (2010) introduced Lean principles tailored to the construction industry, including process optimization, value creation, problem-solving, and partnership development. Akanbi et al. (2019) categorized the fundamental principles of LC as six core pillars, namely waste reduction, a process focus in production planning and control, an end-customer focus, continuous improvement, cooperative relationships, and a systems perspective. Abdelhamid et al. (2008) noted that the core principles of LC are built upon the TFV (Transformation-Flow-Value) theory of production proposed by Koskela (2000), which views construction not merely as a traditional task transformation but, more critically, as a system aimed at achieving reliable flow and value generation. Within this framework, LC is ultimately oriented toward maximizing customer value. It ensures workflow reliability by systematically eliminating various forms of waste and reducing process variability, and optimizes processes through methods such as pull production, visual management, and continuous improvement involving all participants. The effective implementation of these principles relies on front-end cross-functional collaboration, value-based decision-making, and cooperative relationships built through relational contracting and integrated project delivery. This systematically reshapes traditional construction production and management models, enabling more efficient, higher-quality, and more economical project delivery.

Based on the TFV theory and relevant literature on existing LC principles, housing-specific LC principles were identified. It should be noted that within the TFV framework, a single LC principle may simultaneously serve multiple production perspectives. For example, the “variability reduction” principle serves the flow perspective by reducing process uncertainty while also serving the transformation perspective by ensuring consistency in task execution. Similarly, “pull-based management” serves the flow perspective by reducing waste through demand-driven processes while also serving the transformation perspective by avoiding overproduction, thereby contributing to cost control. This multi-functionality is not a theoretical flaw but rather reflects the integrative role of lean principles in production systems and the inherent complementarity among the TFV perspectives. Following this logic, this study ultimately identified eight core LC principles (see Table 1). Together, they constitute an integrated analytical tool capable of systematically examining the housing production process across the transformation, flow, and value dimensions.

Table 1: Lean construction principles

Core Principles	Specific Principles and Definitions	References
Value Focus	1. Define value from the end-user's perspective, and treat user satisfaction as the highest guideline for all decisions and activities (Value view).	Womack & Jones (1996); Akanbi et al. (2019); Koskela (2000); Sacks et al. (2010)
Systematic Process Optimization	2. Reduce variability to eliminate waste (Flow and Transformation view). 3. Shorten cycle times to eliminate waste (Flow view). 4. Foster a culture of continuous learning and optimization (Flow view).	Sacks et al. (2010); Abdelhamid et al. (2008); Akanbi et al. (2019); Koskela (2000)
Collaboration and Partnership	5. Build long-term collaborative relationships based on trust (Transformation view). 6. Achieve risk-sharing and benefit-sharing through relational contracting and integrated project delivery, moving away from traditional adversarial models (Transformation view).	Sacks et al. (2010); Akanbi et al. (2019); Koskela (2000)
Pull-Based Management and Decision-Making	7. Pull upstream activities based on actual downstream demand (information, materials, space) to reduce inventory and waiting (Flow view and Transformation view). 8. Make decisions as close as possible to the "last responsible moment" to preserve flexibility (Flow view).	Womack & Jones (1996); Sacks et al. (2010); Koskela (2000)

GOOD HOUSE VALUE SYSTEM

In China, research on "good house" values has evolved from an early focus on the physical attributes of buildings (such as structural safety and basic functionality) to a broader examination of diverse value dimensions, whose connotations have continuously enriched and deepened. This evolution is manifested at three levels. First, it meets the differentiated housing needs of different groups, with the core aim of enhancing residents' sense of fulfillment, happiness, and security (Wu, 2025). Second, it emphasises public value by fostering neighbourhood interactions, strengthening community cohesion, and creating age-friendly, ecologically liveable residential environments (Wang et al., 2024). Third, the "good house" initiative has been elevated to a national strategy that supports domestic demand expansion, promotes consumption, drives high-quality development in the real estate sector, and aligns closely with the "dual carbon" goals (Feng et al., 2025; Ye and Su, 2024). Current research trends indicate that scholars are actively working to operationalize and specify the grand vision of "good house," for instance, by constructing evaluation indicator systems, exploring value realization pathways for different building forms (such as three-dimensional ecological housing), and paying particular attention to its profound significance in safeguarding people's livelihoods, promoting social equity, and advancing green and low-carbon development.

Based on a comprehensive review of China's "good house" development philosophy, the industry has formed the following representative value system frameworks. The first is the "4+6" system proposed by China State Construction Engineering Corporation (CSCEC) under national ministerial guidance, centered on the core values of "safety, comfort, greenness, and smartness," which systematically addresses residential challenges through six pathways: integration, standards, design, materials, construction, and operations and maintenance (CSCEC, 2025). The second is the "Shenzhen Initiative," which constructs a five-dimensional value system encompassing location, product, service, community, and growth from a lifecycle perspective, emphasizing the full lifecycle value of housing and community development (The People's Government of Shenzhen Municipality, 2025). The third is the "365 Good House System" developed by the China Academy of Building Research, which integrates industry and public needs. It is built on three core pillars: "safety and durability, comfort and usability, and

affordability,” guided by six optimization goals covering layout, finishing, quality, environment, cost, and service, and supported by the five pillars of standards and norms, safety and resilience, health and comfort, green and smart, maintenance and renewal (Xu, 2025). While these three systems differ in focus, they collectively aim to enhance residential quality and respond to the people’s aspirations for a better life, providing a multi-level, actionable value guide for the development of “good house” in China.

Based on the theoretical foundation and existing good house frameworks in China, a set of value system indicators for good house was developed, drawing on TFV and its extended perspectives. These indicators are categorized into three dimensions: production value (TFV theory), locational value (TFV-IL perspective), and operational co-creation value (TFV-SDL perspective), as shown in Table 2.

Table 2: China’s “good house” value system indicators

Core dimension	Specific indicator	Indicator explanation
Production Value of the House Itself (TFV Theory)	A. Safety & Durability	-Structural safety, fire safety, durability, earthquake and wind resistance, non-toxic materials, reliable equipment, and ease of maintenance.
	B. Comfort & Usability	-Comfortable acoustic, lighting, and thermal environments; rational spatial layout; smooth circulation; smart home features; age-appropriate design; convenient storage; and ease of maintenance.
	C. Quality benchmark	-Adoption of advanced technology and materials; promotion of construction industrialization and digitalization; enhancement of overall industry construction standards and quality levels.
	D. Sustainability	-Application of renewable energy, ultra-low-energy technologies, and green building materials; significant reduction in the entire building life-cycle carbon footprint; serving as a vehicle for green lifestyles.
Locational Value of the House (TFV-IL Perspective)	E. Location & Value retention	-Convenient transportation, complete amenities (education, healthcare, commerce), strong regional development potential, high value retention and appreciation, and the ability of the residential area to renew over time.
	F. Community	-Public spaces that foster neighborhood interaction, all-age-friendly activity facilities, rich community culture, harmonious neighborhood relations, and strong community cohesion.
Operational Co-creation Value of the House (TFV-SDL Perspective)	G. Affordability & Efficiency	-Reasonable purchase and operating costs; low energy consumption (water, electricity, heating); cost-effective property management fees; and high space utilization.
	H. Smart service & Operation	-Intelligent community security, smart property management, convenient logistics delivery, interconnected smart home systems, and digital community services.

LEAN CONSTRUCTION–GOOD HOUSE SYNERGY FRAMEWORK

This section examines how LC principles serve as an implementation pathway to enhance “good house” value indicators. Through systematic logical deduction, the analytical framework elucidates the potential synergistic mechanisms and theoretical connections between each LC principle and good house values (see Table 3). While some connections are directly supported by existing literature, others remain underexplored. This study pioneers the theoretical integration of LC principles with the good house value system, offering exploratory pathways for subsequent empirical investigation. In this process, the classification of synergistic relationships is determined based on their evidence strength and level of theoretical development: The **Strongly Supported (S)** category refers to relationships with direct empirical support from existing literature (e.g., Abbakyari et al., 2023; Roy et al., 2005). The **Conceptually Inferred (C)** category refers to relationships lacking direct empirical research but derived through logical extension, such as (i) extrapolating the “variability reduction”

principle from production to service standardization and (ii) extending the “flexibility” principle to urban planning and service design. The **Exploratory (E)** category refers to hypothesized relationships proposed in entirely new domains with weak theoretical foundations and intended to stimulate future research, such as extending the IPD model to incentive alignment in the operational phase.

Table 3: Synergy matrix of LC principles and “good house” value

Lean Principles	Production Value of the House (TFV Theory)	Locational Value of the House (TFV-IL Perspective)	Operation Co-created Value of the House (TFV-SDL Perspective)
Customer Satisfaction	1(S)	2(C)	3(S)
Variability Reduction	4(S)	nil	5(C)
Cycle Time Reduction	6(S)	nil	7(C)
Culture of Continuous Learning & Optimization	8(S)	9(C)	10(S)
Long-term Collaboration Based on Trust	11(S)	12(C)	13(C)
Relational Contracting & Integrated Project Delivery	14(S)	nil	15(E)
Pull-Based Management	16(S)	17(C)	18(C)
Flexibility	19(S)	20(C)	21(C)

Note: The numbered cells indicate identified synergistic mechanisms between an LC principle and a specific value dimension. Each number is followed by a letter code indicating the nature of the relationship: S = Strongly supported; C = Conceptually inferred; E = Exploratory/propositional. The corresponding explanations are provided below.

1. Conduct in-depth research from the design phase to understand users’ true needs for safety, comfort, affordability, and sustainability, ensuring the built product precisely matches requirements (Abbakyari et al., 2023).
2. By incorporating feedback from current and potential residents into regional planning (transportation, amenities), locational utility can be better aligned with evolving needs, thereby enhancing the long-term value of the location.
3. The allocation of community services and facilities should be guided by residents’ actual usage patterns and satisfaction feedback, not just design assumptions (Jiboye, 2012; Mao et al., 2020).
4. Improve consistency in housing quality through standardized design, modular construction, and quality control systems. This reduces defects, enhances safety and durability, and forms the foundation of affordability through predictable performance (Roy et al., 2005).
5. By standardizing property services and community management processes (e.g., maintenance protocols, smart service delivery), service variability is reduced, ensuring fairness, predictability, and a consistent resident experience.
6. Shorten the design-to-delivery cycle through lean methods (e.g., concurrent engineering, just-in-time delivery). This reduces financing costs and market risks, directly contributing to affordability while enabling rapid response to personalization needs (Aziz and Hafez, 2013).
7. By responding rapidly to service requests and maintenance needs, service recovery is accelerated, which enhances perceived quality and minimizes disruption to residents’ daily lives.

8. Drive continuous improvement in safety, comfort, and affordability through systematic waste elimination and process optimization. Foster participation of designers, contractors, and suppliers through collaborative planning (e.g., Last Planner System), and ensure continuous optimization of production processes through the PDCA cycle (Bajjou and Chafi, 2025).
9. By encouraging community participation in planning and governance, and continuously improving standards and regulations, urban development becomes more livable and sustainable; this logic extends to optimizing regional strategies through renovation and adaptive reuse.
10. Optimize operations and services through resident feedback and service management. Additionally, use post-occupancy evaluation and satisfaction tracking to achieve continuous improvement and foster resident co-creation and governance (Lahti et al., 2022; Jiboye, 2012).
11. Long-term trust among developers, designers, contractors, and suppliers ensures material quality, workmanship precision, and reduces transaction costs—fundamental to delivering better housing products (Sarhan et al., 2019).
12. By fostering trust-based partnerships among public agencies, developers, and community organizations, neighborhood development becomes more stable and social cohesion is strengthened.
13. Long-term trust between residents, property managers, and service providers creates a foundation for open communication and mutual commitment, enabling value to be co-created for community well-being.
14. The IPD model aligns incentives of all production-phase parties with the project’s final value (Tillmann et al., 2012), optimally integrating resources to control costs while pursuing quality targets.
15. Extend relational contracting to facility management and service provision, aligning service provider incentives with long-term resident satisfaction rather than short-term cost reduction.
16. Design and produce according to validated demand to avoid over-design and construction waste. This is fundamental to affordability and resource efficiency in production (De Ridder and Vrijhoef, 2007).
17. By planning community facilities and infrastructure based on actual demographic trends and resident needs (“pull”) rather than speculative supply (“push”), resource allocation becomes more efficient and responsive to real demand.
18. Services and operational activities are based on residents’ actual needs (“pull”) rather than administrative convenience (“push”), avoiding resource waste and enhancing relevance.
19. Adopt open building systems and SI (Support and Infill) systems to enable spatial adaptability. This enhances long-term usability and affordability while reducing waste from future demolition and renovation (Mlote et al., 2024).
20. By making urban planning and zoning more resilient—anticipating future uncertainties in population, technology, and climate—cities can better adapt to change and sustain long-term value.
21. By building flexibility into community operation and service design, the system can adapt to future changes in resident demographics and lifestyle preferences, ensuring continued relevance and effectiveness.

DISCUSSION

This section discusses the theoretical implications of the synergy framework, its contextual boundaries, and its implications for various stakeholders.

In terms of theoretical implications, this study extends the conceptual boundaries of LC. The TFV framework, traditionally rooted in the Transformation-Flow-Value theory of production (Koskela, 2000), has largely confined the value perspective to capturing and fulfilling customer requirements during the design and production process. By integrating institutional logic and service-dominant logic, this study expands this framework. The TFV–IL Perspective reveals that LC is not merely a set of production techniques but also a potential paradigm for fostering collaborative governance in urban development. This extends LC theory beyond the project site to the field of institutional analysis. Furthermore, the TFV–SDL Perspective illuminates how LC principles enable value-in-use. This extends LC theory to encompass value creation throughout the building’s full operational lifecycle, reframing residents as active participants in an ongoing value creation process rather than passive recipients of a finished product.

The applicability of this framework is not universal but contingent on specific contextual conditions. Acknowledging these boundaries is crucial for theoretical precision and practical relevance. First, the framework is most applicable in institutional environments that support collaborative governance. Extending LC principles to locational value requires participatory planning mechanisms, transparent regulatory processes, and trust-based partnerships between public and private stakeholders. In highly fragmented or adversarial institutional contexts, pathways for achieving locational value through LC principles may be significantly constrained. Second, the realization of operational co-created value depends on the active participation of residents and service providers. The framework’s propositions regarding user feedback, post-occupancy evaluation, and co-governance (e.g., Cells 10, 13, 18) assume a certain level of resident engagement and a service provider culture oriented toward continuous learning and adaptation.

Despite these boundary conditions, the framework offers a robust analytical tool for diverse stakeholders. For **policymakers**, it provides a roadmap for aligning regulatory incentives with LC-informed governance to foster both locational and operational value. For **developers and planners**, it highlights the long-term payoff of investing in flexible designs and trust-based supply chains. For **delivery teams** (i.e., design, construction, and supply chain actors), it underscores the importance of extending lean thinking from the construction site to the community. For **residents**, it positions them as essential co-creators of value rather than passive consumers of a finished product.

Although this study is inherently theoretical and exploratory, some propositions within the synergy framework are already being tested in practice. The ongoing CSCEC Ideal City project in China illustrates this potential (China Real Estate News Official Account, 2025). This project embodies LC principles not only by rigorously controlling structural safety and construction details to ensure production value, but also by extending these principles to address persistent residential pain points—such as leakage, sound insulation, and odor control—thereby enhancing the post-occupancy living experience. This indicates that LC practice has begun to transcend the production phase, aligning with the long-term user experience value central to the “good house” vision, and thus provides real-world validation for our theoretical framework.

CONCLUSION AND FUTURE RESEARCH

This study constructs a theoretical framework that systematically explains the synergistic relationships between LC principles and the multi-dimensional values of “good house,” leading to the following theoretical contributions.

First, it introduces LC theory into the “good house” value system, clarifying their logical connections and establishing a conceptual foundation for empirical research. Second, it extends TFV theory by integrating institutional and service-dominant logic, expanding LC’s value creation from production to locational and operational domains, including community governance and user participation. While context-specific to China, the framework’s methodological approach, expanding from production to institutional and service perspectives, offers transferable insights for other countries or regions facing similar housing quality challenges. However, application requires consideration of local institutional environments and market maturity, as well as contextual adaptation.

Practically, this study provides stakeholders with an actionable implementation pathway. The framework clarifies specific pathways for realizing core values such as “safety, comfort, greenness, and smartness” through LC, guiding enterprises to make targeted improvements across design, construction, and operation phases, thereby advancing “good housing” from concept to reality.

Future research could delve deeper in two directions. First, quantitative studies should measure the impact of LC principles on good house values, complemented by case study analysis to explore contextual mechanisms and validate practical implementation frameworks tailored to specific project contexts. Second, scholars should identify and examine the structural and contextual barriers faced by LC in realizing good house values. For instance, Martinez et al. (2019) have pointed out that in Latin America, factors such as insufficient policy incentives, inefficient government collaboration, and fragmented industry structures severely hinder the promotion of LC and its potential to enhance the overall value of housing. Therefore, research on barrier mechanisms within specific institutional and market environments will be crucial for translating theory into practice.

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