Volume: 14, Issue: 1
Page: 273-294
2022

International Journal of Science and Business

Journal homepage: ijsab.com/ijsb

A Study of Green Building Policy on Service Innovation Performance: Context in Assembled Building with Steel-Structure Developers

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Abstract

On the basis of dual innovation theory and service innovation theory, this paper takes Assembled building with steel structure developers as the research object, determines the research scale of green building policy, dual innovation and service innovation performance, and constructs the theoretical model of "green building policy dual innovation service innovation performance". This paper mainly uses the questionnaire survey method to conduct quantitative research. 548 valid questionnaires were distributed and recovered on the basis of pre-test. SPSS was selected for data analysis, Amos structural equation model was used to explore the relationship between the three, and the research hypothesis was verified. Through the research, it is found that green building policy and its dimensions have a significant positive impact on enterprise service innovation performance. The influence of supporting service policies is greater than that of incentive policies, and greater than that of mandatory policies; Dual innovation plays a part of intermediary role in the relationship between green building policy and its dimensions and enterprise service innovation performance. Among them, the intermediary effect of dual innovation in the overall impact of green building policies on enterprise service innovation performance accounted for 30.15%, the intermediary effect in the impact of mandatory policies on enterprise service innovation performance accounted for 18.92%, the intermediary effect in the impact of incentive policies on enterprise service innovation performance accounted for 21.64%, and the intermediary effect in the impact of supporting service policies on enterprise service innovation performance accounted for 15.93%; This study is committed to guiding Assembled building with steel structure developers to improve the performance of service innovation, and also provides a reference for the cross study of green building policy and service innovation performance.

IJSB
Accepted 17 October 2022
Published 18 October 2022
DOI: 10.5281/zenodo.7219823

Keywords: *Assembled building with steel structure developers, Green building policy, Dual innovation, Service innovation performance.*

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Introduction

In recent years, China's economic development has entered a new normal, achieving rapid economic development and a series of breakthroughs in the field of science and technology. However, the "China Collapse Theory" still frequently appears in Western society, occasionally mixed with the "China Threat Theory". In April 2018, the U.S. Department of Commerce announced that it would ban U.S. companies from directly or indirectly selling components, commodities, software and technology to Chinese company ZTE for a period of seven years. In May 2019, the U.S. Department of Commerce announced that it would add Huawei and its affiliates to the "entity list" of export controls, with the purpose of restricting its procurement of components and related technologies from U.S. companies. Compared with developed countries, developing countries have a late-mover advantage (Yang & Chen 2020; Sun et al. 2018). However, if developed countries block high-end core technologies and restrict access to developing countries, developing countries will lose their late-mover advantage due to lack of support for core technologies. Developing countries such as China can only avoid the substantial impact of the developed countries' containment by accelerating the research and development of key core technologies and building a complete industrial chain. At present, although China is in the forefront of the world in the number of patents, the number of design patents and utility model patents in China is far greater than the number of invention patents. There are still large gaps in the country. Although utility model patents have brought innovative experience accumulation and technological learning to late-developing countries, they cannot provide long-term growth impetus for the country to enter the high-income stage. China is faced with the "utility trap of the patent system for utility models" common in late-developing countries, with insufficient independent innovation capability and weak core technologies (Ding & Xu 2019; Zhang et al. 2021). To cope with these difficulties, China should speed up the transformation of its economic model, drive economic development through innovation, continuously carry out technological innovation, create its own core technologies, and improve the total factor productivity of enterprises. Total factor productivity is a comprehensive indicator to measure the production efficiency of enterprises. Innovation is an important means for enterprises to improve production efficiency. How to improve the total factor productivity of enterprises through innovation? What kind of innovation is conducive to the improvement of total factor productivity? What is the difference between the influence mechanisms of various innovation methods? These theoretical and practical issues have received long-term attention from academia. As an efficient and comprehensive innovation method, ambidextrous innovation is gradually accepted and adopted by enterprises. Ambidextrous innovation includes exploratory innovation and developmental innovation (Zhang et al. 2021). The purpose of exploratory innovation is to develop new technologies, open up new markets and form core competitiveness, while developmental innovation is to use existing knowledge and technology to re-innovate. Practice has shown that in the increasingly competitive market, there are extremely high requirements for the innovation ability of enterprises. If an enterprise wants to secure a place in the competitive market and contribute to economic development, it must enhance its own innovation ability and improve total factor productivity. With limited available resources, it is necessary for every enterprise to ensure a reasonable distribution among different innovation methods, and organize innovation activities flexibly to improve innovation quality and efficiency. So, what is the impact of different innovation methods on the total factor productivity of enterprises? Which innovative approaches are suitable for short-term development? Which innovative approach is suitable for long-term operation? How should companies balance? How should companies with different ownership structures, different scales, different industries, and different market competition positions find their own innovative models? How can innovation be transformed into substantive results faster, so as to provide new impetus for the improvement of the total

factor productivity of enterprises? Based on the above practical problems, this paper will theoretically discuss and empirically analyze the related issues of ambidextrous innovation and total factor productivity, so as to make suggestions for the development of ambidextrous innovation of enterprises and find their own innovation path. China's prefabricated construction industry is developing rapidly. In recent years, under the background of continuous policy promotion and continuous upgrading of construction technology, China's prefabricated building area and industry scale have ushered in rapid development (Wang et al. 2019). According to statistics, in 2019, 420 million m^2 of prefabricated buildings were newly started across the country, an increase of 45% over 2018, accounting for about 13.4% of the newly built building area. In 2019, the area of newly started prefabricated buildings nationwide increased by 45% compared with 2018, and the average annual growth rate in the past four years was 55%. At present, the research on prefabricated steel structure housing in China mostly focuses on product design, technology research and development, etc. The research on the cost-effectiveness of the housing system is still in a blank stage. Different countries have different understandings and practices of the residential system, but generally refers to the main project of the residence, different residential products formed due to the selection of different structural materials, structural types and construction methods, and constitutes a corresponding number of projects from design to construction. Complete set of technologies (Jin et al. 2021).

Problem Statement

The construction industry is a pillar industry for the development of China's national economy. According to statistics from the China Construction Industry Association, the total output value of China's construction industry in 2020 is 23,508.6 billion yuan, an increase of 9.9% over the previous year, accounting for 26% of the GDP of 1,015,986; The urbanization rate is 59.58%, compared with 80% in developed countries, and there is still 20% room for growth, which means that for a long time in the future, the construction industry will still have a large development market in China. However, China's construction industry has shown a brutal growth pattern of high growth and high leverage in the past. Most Assembled Building with Steel-structure Developers are only engaged in pure building construction and do not develop other businesses, especially construction services are rarely involved. With the transformation and adjustment of the industrial structure under the new economic normal, China has a clearer positioning of the industry attributes of the construction industry (Zhang et al. 2021; Jin et al. 2021). The industrial structure adjustment during the "14th Five-Year Plan" period redefines the products provided by the construction industry as "services accompanied by tangible objects", laying the foundation for the service attributes of Assembled Building with Steel-structure Developers. In the 14th Five-Year Plan, the Ministry of Housing and Urban-Rural Development specifically pointed out that the construction industry must rely on innovation capabilities to take the road of sustainable development. This means that Assembled Building with Steel-structure Developers has changed from simply providing building products to building services, and realizing the service innovation of Assembled Building with Steel-structure Developers has become an inevitable trend driven by national policies. At the same time, in order to better implement the structural transformation and adjustment of the construction industry and realize the sustainable development of the construction industry as soon as possible, the Chinese government has successively promulgated a series of green building policies to ensure its development. Among them, the "14th Five-Year Plan" especially emphasizes the technological innovation of housing and urban and rural construction (Zhang et al. 2021). Through research and development to create a green building database, relying on the improvement of innovation ability to drive its sustainable development. This leads to the question of this study: Can China's green building policies drive service innovations related to

Assembled Building with Steel-structure Developers? At the same time, in the process of policy implementation, it is first necessary to interpret and combine its content, and then convert it into innovative knowledge and capabilities that can be used in reality. As China's green building policies cover a wide range of content and scope, during the implementation process, existing knowledge and skills can be developed through these policies, thereby improving the existing service product quality and business model; It can also use it to attract talents in related directions, learn and develop new knowledge, so as to create new service products and business models. That is to say, the impact of policies on enterprise performance is often achieved through two innovations: utilization and exploration, which means that ambidextrous innovation plays a certain role in it (Jin et al. 2021). This leads to the relevant thinking of this study: what is the impact mechanism of green building policy on the service innovation performance of Assembled Building with Steel-structure Developers? Is its mechanism of action affected by ambidextrous innovation? How? This is what the research focuses on. In the current research on service innovation, foreign research is relatively mature, while domestic research in this area is mostly concentrated in the more traditional service industry and manufacturing direction, and lack of research on Assembled Building with Steel-structure Developers Research on service innovation. Since the promulgation and implementation of green building policy, its function mechanism and evaluation system have attracted extensive attention of domestic scholars, but there is a lack of cross-study in the field of green building policy and service innovation. (Ding & Xu 2019; Zhang et al. 2021). At the same time, the use of ambidextrous innovation as the mediating effect to study "antecedents - ambidextrous innovation - enterprise performance" is also a hot topic of recent scholars' research. However, most of these studies only focus on the overall enterprise performance, and do not specifically involve the field of service innovation performance. In view of this, there are still gaps in the theoretical research on green building policy and Assembled Building with Steel-structure Developers service innovation performance.

Research Question

Based on the above analysis of the practical background and theoretical background, the problems to be solved in this paper are extracted from the research background. First, the intersection of green building policy and Assembled Building with Steel-structure Developers service innovation remains to be studied. What is the impact mechanism?

Research Objective

The overall purpose of this study is to analyze the mechanism of green building policy on service innovation performance of Assembled Building with Steel-structure Developers, and the mediating effect of ambidextrous innovation in this process. Based on the overall purpose, the specific research purposes are determined as follows: To discuss the impact of green building policies on the service innovation performance of Assembled Building with Steel-structure Developers.

Research Scope

Based on the theory of ambidextrous innovation and service innovation, this study takes Assembled Building with Steel-structure Developers as the research object, and determines the research scales of green building policy, ambidextrous innovation and service innovation performance respectively, and constructs The theoretical model of "Green Building Policy - Ambidextrous Innovation - Enterprise Service Innovation Performance". On the basis of the pre-test, 548 valid questionnaires were distributed and recovered. First, SPSS was used to conduct relevant statistical analysis, and then Amos's structural equation model was used to discuss the path relationship between the three. Finally, the research hypothesis was verified

according to the results of the empirical analysis. This study aims to provide guidance for improving the performance of service innovation in Assembled Building with Steel-structure Developers. By analyzing the relationship between "green building policy - enterprise service innovation performance" and "green building policy - ambidextrous innovation - enterprise service innovation performance", the mechanism of action is explored, which can be helpful for Assembled Building with Steel-structure based on service innovation. Developers provide specific paths to implement service-based construction. It refers to the need to increase the intensity of the government's mandatory policies at this stage, actively publicize incentive policies, and vigorously give full play to the flexibility and freedom of supporting service policies.At the same time, it also enriches the relevant theories of service innovation, and provides a reference for the subsequent research on the intersection of green building policy and service innovation performance.

Literature Review

Assembled Building with Steel-structure

The prefabricated building of steel structure refers to the steel structure building produced by factory-produced steel structure components and assembled and connected at the construction site. The steel structure itself has the advantages of overall lightness, low cost, beautiful appearance, energy saving and environmental protection, plus the prefabricated template saving and short construction period, the advantages are even more prominent. Compared with prefabricated concrete buildings, prefabricated steel structures The building has the advantages of high standardization, fast construction, outstanding seismic performance, light weight, recyclability, and large usable area. Due to its obvious advantages, fabricated steel structures can be widely used in civil, industrial buildings, bridges, towers and other structures. It has obvious advantages in super high buildings and special-shaped buildings, which are not available in concrete structures. In the upstream supply of its industrial chain, raw materials account for 60%-80%, including various types of steel, steel plates, etc. In 1999, China has become the world's largest steel producing country, producing over 100 million tons of steel. At present, China's steel structure accounts for only 7.5% of steel production, and there is huge room for improvement from 20% of industrially developed countries. In addition, China's steel production capacity is seriously excessive. In recent years, the supply-side reform has eliminated outdated production capacity. Although the total output has declined, it has instead increased the output of high-performance steel used in prefabricated steel structures, which is good for the industry. The proportion of steel structure buildings in China is only 5%, which are mostly concentrated in public buildings such as office buildings and schools, and the proportion of steel structure residential buildings is even lower. Compared with the application ratio of steel structures in developed countries such as the United States (40%) and Japan (71%), China has a huge market space. According to supporting policies such as the "13th Five-Year Plan for Prefabricated Buildings", China's prefabricated steel structure buildings will account for 15% in 2025, and the market demand is expected to exceed 2 trillion yuan. In the downstream demand, the biggest problem affecting the promotion of steel structure is the cost. Compared with the traditional reinforced concrete structure, the cost of the steel structure will be 25-50% higher, which is a restricting factor affecting its large-scale promotion. However, from the perspective of the policy orientation of the Ministry of Housing and Urban-Rural Development, the application of prefabricated steel structures is strongly supported. The country mainly starts from the perspective of sustainable development, and sees that it has obvious advantages such as green environmental protection and recyclability. Its industry characteristics: ① The industry concentration is not high, the top five companies only account for 5.2% of the industry share, and the industry concentration needs to be improved. According to the national economic development, industrial adjustment policies and stricter supervision of the industry,

some small and medium-sized steel structure enterprises that lack innovation, relatively weak strength, lack of qualifications, and unsound management will be gradually eliminated in the competition, and have the advantages of technology, scale and brand. Enterprises with stronger comprehensive strength will further develop the market and gradually become stronger and bigger in the competition, which will play a role in promoting industry integration. ②It is a heavy asset industry. Due to the large initial investment, high technical requirements, and high entry barriers for external competitors, the industry has the characteristics of high debt ratio in the construction industry, and the industry average asset-liability ratio is about 60%. ③ Compared with the technology and consumer industries, the gross profit margin of this industry is relatively low, about 13%, but significantly higher than that of the traditional construction industry. As a green innovation structure, there is a large market space in this industry.

Green Building Policy

Green buildings are buildings that can achieve energy saving and emission reduction. In the whole life cycle, save resources, protect the environment, reduce pollution, provide people with healthy, applicable and efficient use space, and maximize the realization of high-quality buildings that harmoniously coexist between man and nature. With the continuous introduction of China's green building policies, the continuous improvement of the standard system, the continuous deepening of green building implementation and the continuous increase of the state's financial support for green buildings, China's green buildings will continue to maintain a rapid development trend in the next few years. In May 2012, the Ministry of Finance issued the "Implementation Opinions on Accelerating the Development of Green Buildings in China"; On January 6, 2013, the State Council issued the "Notice of the General Office of the State Council on Forwarding the Green Building Action Plan of the Development and Reform Commission and the Ministry of Housing and Urban-Rural Development"), proposing to complete 1 billion square meters of new green buildings during the "Twelfth Five-Year Plan" period; by 2015 At the end of the year, 20% of new urban buildings met the requirements of green building standards. In the past five years, the development of green buildings in China has doubled every year, and the number and area of green building projects in 2012 were equivalent to the sum of 2008-2011. Qiu Baoxing said: "The transformation of urbanization to a new type of urbanization means that, as the most basic cell of urbanization, human housing must be updated in form, from traditional buildings to green buildings. New concepts of ecological civilization such as carbon are integrated into the process of urbanization." Despite the rapid development of green buildings in China, it also faces some problems, such as unsatisfactory implementation of high-cost green technologies, disjointed green property management, and a few commonly used green building technologies that do not operate due to defects.To solve these problems, it is necessary to achieve the "five in place" of expert review institutions, government supervision, open and transparent social supervision, subsidy and punishment mechanisms, and green property operation and maintenance services, and strictly control the quality of green buildings. In order to cope with the challenges of global climate change, shortage of resources and energy, and deterioration of the ecological environment, human beings are following the concept of carbon cycle, taking low carbon as the guide, developing circular economy, building low-carbon ecological cities, and popularizing low-carbon green buildings.

Service Innovation Performance

Performance refers to the measurement of the completion of work objectives by individuals or groups in a specific organization under the conditions given by the actual environment, including the degree of task achievement and the overall completion efficiency. Compared with

the innovation performance measurement of tangible products, Johne and Storey (1998) believe that the existing service innovation research rarely considers the comprehensive environmental factors based on the characteristics of the target to determine the performance evaluation method. However, service innovation, as a multi-faceted concept with the characteristics of intangibility and inseparability of production and consumption, is not scientific enough to simply evaluate performance according to the specified dimensions. In the existing research on measuring service innovation performance, Cooper et al. (1994) based on the successful development of financial service innovation cases, proposed that the enterprise's service innovation measures have a positive impact on financial performance, relationship improvement and market development. Sun (2010) believes that service innovation performance can be described as the ability and level of enterprises to maintain their market advantages by updating or developing products and services according to their own needs, customer propositions, employee interests and other related party expectations. Zhang (2016) defined service innovation performance from the perspective of results as the achievement degree of enterprises to improve service innovation process and enhance service innovation effect. Although the research on service innovation performance has gone through a short period of time, many scholars have also proposed different evaluation indicators and dimensions through theoretical research. Cooper and Klein Schmidt (1987) think that it is necessary to consider the financial level, the development prospect level, and the market share level; De Brentani (1989) summed up detailed performance indicators such as market share, competitiveness, cost and other driving factors; Voss (1992) found that the effect of service innovation in the quality dimension, financial dimension and competitiveness dimension improved the efficiency of enterprises. Other studies on service innovation performance in the same period basically agreed that it can be divided into financial aspects such as corporate profits, sales revenue, and market share, the extent to which companies open up market opportunities, image reputation, competitiveness, business goals and potential and other market aspects, and new and old consumption. The influence of the user and other customer aspects are evaluated (Cooper, 1994).Based on this, Avlonitis scholars (2011) summarized service innovation performance into financial performance and non-financial performance. Based on the above literature analysis, this paper believes that the evaluation of service innovation performance must take into account the long-term development, and it is biased to only use the growth of corporate income and profit as well as cost reduction as the judgment criteria. The achievement of other long-term development goals such as strategic growth is closer to the real enterprise service innovation performance. Therefore, this paper defines service innovation performance as the process of developing new services or improving existing services, which brings obvious benefits to the financial, market development, social relations and other aspects of the enterprise.

Dual Innovation

Ambidextrous innovation belongs to a category of innovation, but it is different from the so-called innovation in that it takes both into consideration. As far as the classification of innovation is concerned, innovation can generally be divided into incremental and radical innovation, or imitation innovation and independent innovation, or mining innovation and exploratory innovation, etc. These different types of innovation are often relative and conflicting. Such as either imitation or autonomy; either progressive or radical. Ambidextrous innovation emphasizes the combination and coexistence of innovation activities by enterprises due to the needs of environmental changes: one is incremental and relatively low-risk innovation activities using existing knowledge and resources, and such innovation activities are short-term for enterprises. survival is important; The other category is breakthrough and risky innovation activities to explore new knowledge and resources, which are crucial to the long-

term development of enterprises. For companies to successfully compete and achieve sustainable competitive advantage, they need innovation in both of the above.

Previous Research

At present, the concept of service innovation is widely used in manufacturing and service industries, and different industries have different definitions of service innovation. Gallouj and Weinsten (1997) derived from economics as an early attempt to study service innovation. Tether (2005)'s paper outlines the descriptive understanding of service innovation in the European Community, while a few papers attempt to comprehensively describe service and manufacturing innovation (Coombs & Miles 2000; Drejer2004; Gallouj 1997. Therefore, in order to master the definition of service innovation, we need to have a certain understanding of the concepts of service and innovation. Only by comparing and analyzing the characteristics of service and the nature of innovation can we better grasp the connotation of service innovation. Services are becoming more and more dominant in the development of the world economy. Among them, the service industry accounts for 70% of the employment opportunities in OECD countries and 58% of the global GDP (Baltacioglu et al. 2007). The vast majority of successful enterprises have also completed the all-round transformation from manufacturing to service, including IBM, HP and other electrical companies (Mills & Snyder 2010), which have realized the transformation from a manufacturing organization to a service-oriented organization. Levitt (1972) first advocated the industrialization and modularization of services through standardized intensive processes in the manufacturing industry, which was the earliest source of service diversification. Gadrey (1995), starting from the core issue of providers and customers, believed that service activities were some operations that were adopted to meet customers' sense of use in response to customers' needs, and emphasized that service activities were the result of close cooperation between customers and providers. Vargo & Lusch (2004) held that for an entity and its own benefits, service is to change it according to professional capabilities (including knowledge and skills). In the argument that service is the core of an enterprise, they believe that the positioning of an enterprise should be "to provide customized services to consumers, not to manufacture and sell products". From the perspective of the above scholars, service activities are not only the provision of goods, but also the comprehensive reflection of capabilities (including knowledge and skills), which is the result of the cooperation between service providers and customers. Schumpeter first put forward the innovation theory in The theory of Economic progress in the 10s of the 20th century, defining innovation as a "re combination of production factors", that is, the new combination of production factors and production conditions was introduced into the original production system. Over the years, with the continuous research on innovation by scholars, innovation is usually defined as an activity that provides economic value by creating new products and services. As a key supporting force for social progress, innovation plays a unique role in promoting the new normal development of economy. As a pillar industry of China's national economy, the Assembled building with steel structure development enterprise urgently needs to introduce innovation to seek new development. Therefore, drawing lessons from the concept of service innovation in manufacturing and other industries, scholars have also carried out extensive research on the service-oriented construction mode of the construction industry, which coincides with the service innovation of Assembled building with steel-structure development enterprises. In the innovation activities of the British construction industry in 2000, some scholars pointed out that the integration of manufacturing and construction industry can be used to apply the advanced production management concepts and methods of manufacturing industry to the construction industry. For example, by learning to improve the lean production concept of manufacturing, to achieve lean construction of the whole life cycle of construction products; to learn the value engineering concept of manufacturing, to achieve

supply chain management and sustainable development of construction products.By analyzing the characteristics of Assembled building with steel-structure development enterprises, Shi Jingxin (2010) believes that service-oriented construction is a new construction mode that uses the internal capital of the enterprise to develop its industrial chain in the direction of service on the basis of traditional construction, and finally provides "construction + services" for customers and other stakeholders. Zeng Dalin (2013) and others follow the relevant theories of organizational change, pointing out that the current Assembled building with steel-structure development enterprises need to provide customers with comprehensive and innovative services to realize the "service-centered" development mode in order to accelerate the transformation and development, and accordingly put forward the idea of organizational change of "service center system. Starting from the basic situation of China's current construction market, Zhang Mengmeng (2014) believes that service-oriented construction is a new integration of construction and service formed around customers with the ultimate goal of realizing product value-added. This is actually a kind of service innovation. Based on the research of previous scholars, Tang Xiaoying (2018) and other scholars define that the service innovation of Assembled building with steel-structure development enterprises is to integrate the human resources, industry and other capital within the enterprise to provide construction services to customers and improve the interests of stakeholders. Wang Yin (2018) pointed out that the service innovation of Assembled building with steel-structure development enterprises is essentially customer-oriented and brings high-quality service experience to customers by giving full play to the service nature of enterprises. To sum up, this paper believes that Assembled building with steel-structure development companies need to maintain strengths in the industry competition, while paying attention to the quality of its own products, it is also necessary to understand the needs of customers and form a "service + construction" model centered on customer needs, that is, to realize the full life cycle service innovation of Assembled building with steel-structure development enterprises. The essence of Assembled building with steel-structure to develop enterprise service innovation performance is actually a kind of enterprise performance. Its fundamental purpose is to improve its core competitiveness in the service industry through the reform of service innovation for Assembled building with steel-structure development enterprises. Therefore, this paper is based on the basic theory of service innovation and enterprise performance and the characteristics of Assembled building with steel-structure development enterprises. It believes that Assembled building with steel-structure development of enterprise service innovation performance is aimed at improving the competitiveness of enterprises. By providing customers with Assembled building with steel-structure development of enterprise life cycle system services, the realization effect or effect of bringing multiple benefits to enterprises.

Methodology

Research Design

Based on the existing scholars' research, and based on the service innovation theory and the characteristics of assembly steel development enterprises, this study establishes a research model between "green building policy (independent variable) - Dual innovation (Mediator variable) - - service innovation performance (dependent variable)" of assembly steel development enterprises. -This study explores the relationship between green building policy and service innovation performance of assembly steel development enterprises, and the mediating effect of dual innovation in this relationship. Based on the dual innovation theory and service innovation theory, this study identifies the scales of green building policy, dual innovation and service innovation performance, and constructs a theoretical model of "green building policy-dual innovation-enterprise service innovation performance", taking assembled steel structure development enterprises as the research object. The theoretical model of "green

building policy-dual innovation-enterprise service innovation performance" was constructed, and a total of 548 valid questionnaires were distributed and collected on the basis of the pretest. Firstly, SPSS was used for the statistical analysis, and secondly, Amos' structural equation model was used to explore the path relationship between the three, and finally, the hypotheses were verified based on the results of the empirical analysis.

Population/Sampling/Unit of Analysis

(1) Form of questionnaire distribution. Considering the busy nature of the enterprises, the return rate of the paper-based questionnaires and emails sent to the enterprises was very low, and it was difficult to ensure the validity of the questionnaires. Therefore, this study specifically used two ways to collect data: field distribution of paper questionnaires and online research.
(2) Subjects of the questionnaire. According to the purpose of the study, considering that the object of this study is the assembled steel structure development enterprises, therefore, in order to guarantee the validity of the data and the reliability of the results, the enterprises of the Steel Structure Association of China Construction Metal Structure Association were selected as the specific research subjects, and the staff of the assembled steel structure development enterprises in these enterprises who have some understanding of the green building policy and service innovation, as well as those who are engaged in green building policy research and relevant experts and scholars in the field of building service innovation research as the questionnaire respondents.
(3) Area of questionnaire distribution. Considering the universality of the research results, the possibility of recovery and the limited resources of personal networks, one to two provinces in Northwest, North, Central, Southwest and East China were selected for the distribution of the questionnaire. Inner Mongolia Autonomous Region was selected in Northwest China, Shanxi Province and Hebei Province in North China, Henan Province in Central China, Sichuan Province and Chongqing City in Southwest China, and Anhui Province and Zhejiang Province in East China. Among them, the most questionnaires were distributed and collected in North China, and the least in Southwest China.
(4) Time of questionnaire distribution and collection. Firstly, the pretest analysis was conducted, and a total of pretest questionnaires were distributed in this study during June 2021. Based on the pretest, the official questionnaire was distributed and collected from July 2021 to November 2021.
(5) Voluntary nature of the questionnaire. In order to ensure the voluntary nature of the questionnaire, this questionnaire was designed to support respondents to voluntarily leave their contact information via email so that they can continue to be informed of the results of this study. This means that the problem of bias caused by respondents' reluctance to fill out the questionnaire has been better controlled in the research design process, thus ensuring the voluntary nature of the questionnaire.

Instrumentation

The variables involved in this study include three main aspects: green building policy, dual innovation and service innovation performance of assembly steel development companies. In addition, in terms of the way the variables are measured in the study, according to the research theory of Ming-Lung Wu (2000), the five-point scoring method is the most accurate. He argued that if there are less than five options, it is difficult to accurately express the amount of variation among variables; while if there are more than five options, respondents have difficulty in accurately discerning the degree of differentiation among options. Therefore, the five-point Likert scale was chosen to measure the variables in this study.

Green Building Policy Scale

The independent variable of this study is green building policy, which is the key element to promote the sustainable development of assembly steel structure development enterprises in China. According to the previous literature analysis of China's current green building policies, it can be seen that China's green building policies can be divided into three categories: mandatory policies, incentive policies and supporting service policies. Mandatory policies are usually based on national and regional mandatory laws and regulations, which are strictly binding and are a strong guarantee for promoting the development of green building in China. Incentive policies are usually based on the government's incentive mechanism, including monetary subsidies, green channels and green building labels. Supporting service policies mainly involve the direction of green building development planning, green building talents and green technology innovation, which are the necessary auxiliary and guarantee measures for green building development. Therefore, this study uses the contents of policies and regulations to determine the corresponding topics of each policy as indicators of green building policies. The final green building policy indicators include 9 topics in 3 dimensions, as shown in Table 3-1 below.

Table3- 1 Green Building Policy Volume Table

Dimensionality	Title item
Mandatory Policy	MDP-1. Government penalizes buildings that do not meet energy efficiency requirements MDP-2. Government imposes mandatory energy efficiency standards in planning and design plans MDP-3. Government implements market access system for green building materials products
Incentive Policies	IP-1. Government imposes monetary incentives for green buildings IP-2. The government implements a floor area ratio incentive policy IP-3. The government implements the award mechanism for green buildings
Supporting service policy	SSP-1. The government formulates and implements local green building development plans SSP-2. The government increases the training of green building related talents SSP-3. Government encourages green technology innovation in assembled steel structure development enterprises

Dual innovation Scale

Dual innovation is the mediator variable in this study, which is specifically defined in this study as: focusing on the initiative of the organizational strategy of the assembled steel structure development enterprise, which can develop existing skills and improve the quality of existing construction products and business models through existing theories and knowledge; and attracting more construction-related talents to learn and develop new skills through new knowledge, so as to bring the assembled steel structure development enterprise Create new products and business models, and bring new profit and development to the assembled steel structure development enterprises. Jansen (2005) divided the scale of dual innovation into two dimensions: exploratory innovation and exploitative innovation, and included eight items. product categories, opening up new markets, entering new fields, improving the performance of existing products, improving the adaptability of products, reducing production costs, increasing output or reducing the consumption of raw materials. It can be seen that the content of HE and Wong's scale is very similar to Jansen's scale. The difference lies in the terminology of the items, as He and Wong's study is process-oriented, focusing more on dual innovation as a process and measuring the criticality of these items in the development of the firm, while Jansen's study is outcome-oriented, preferring to measure the results obtained in terms of these items. innovation, both exploratory and exploitative output behaviors can ultimately be measured from the perspective of the innovation process.

Since the impact of policy on firms' duality innovation in this study is mainly process-oriented, the scales used in the study for exploratory as well as exploitative innovation were selected from He's (2004) study. Since the original scales are in English, this study requires a translation method: first, a graduate student translates the English scale into Chinese from the original text, then another student translates the translated Chinese scale into English, and finally, together with the teacher, the translated English scale is compared with the original He's English scale to select a more accurate translation. According to the actual situation of this study, we mainly referred to the studies of He & Wong (2004), Jansen, Bosch & Volberda (2006), Li Yi et al. (2008), and Li Jianli (2011), and the final dual innovation scale consisted of 8 items in 2 dimensions, as shown in Table 3-2 below.

Table3- 2 Duality Innovation Scale

Dimensionality	Title item
Exploratory Innovation	RI-1. Introduction of new products or services production methods RI-2. Adding a new product or service category RI-3. Opening up new market areas RI-4. Entering a new technical field
Exploitative Innovation	TI-1. Improving the quality of existing products or services TI-2. Improving the adaptability of existing products or services TI-3. Reduce the production cost of existing services TI-4. Improve the quality of existing services or provide additional services

Service innovation performance scale for assembled steel development enterprises

As the dependent variable of this study, the service innovation performance of assembled steel structure development enterprises is defined as the effect or effect of achieving multiple benefit returns for enterprises by providing systematic services to customers throughout the life cycle of assembled steel structure development enterprises with the purpose of improving enterprise competitiveness. Unlike service innovation in manufacturing or information industries, service innovation in assembled steel structure development enterprises gathers on the basis of construction building, and realizes system services for the whole life cycle of assembled steel structure development enterprises by increasing the proportion of service elements in the process of building planning, design, construction and operation. A dissection of the literature on service innovation performance shows that it is often divided into two dimensions, financial and non-financial, when measuring service innovation performance. The scale developed by Storey and Kelly (2001) and Hsueh (2010) is more representative and is widely used by most scholars. This study draws on the scales of Storey and Kelly (2001), Avloniti (s2001), Hsueh (2010), Sun Ying (2010), and Chen Jianhong (2013), and combines the characteristics of assembly steel development companies themselves and the relationship between green building policies and duality innovation and service innovation performance in this study, in terms of financial performance, A total of nine questions were measured in three dimensions: financial performance, customer performance, and market performance, as shown in Table 3-3 below.

Table3- 3 Service innovation performance scale of assembled steel structure development enterprises

Dimensionality	Title item
Financial Performance	FP-1. The services provided by the company drive sales FP-2. Services provided by the company drive profitability of other products FP-3. The services provided by the company promote the return on investment
Customer Performance	CP-1. The services we provide enhance the loyalty of existing customers CP-2. The services we provide attract new customers on a large scale CP-3. Our services increase customer satisfaction
Market Performance	MP-1. Our services have created a good market image MP-2. Our services have received positive market feedback MP-3. The service products we provide have a large market share

Validity and Reliability Test

Confidence Test

Reliability analysis is a test of the reliability and consistency of the sample data. In this study, the alpha reliability coefficient method is used to express the reliability of the sample, and the Cronbach's alpha value of each dimension is calculated using SPSS18.0 to analyze the internal consistency among the question items in the questionnaire, and the specific judgment criteria of Cronbach's alpha value have been explained in the previous chapter. In this study, the minimum criteria were Cronbach's α value of 0.7 and CITC of 0.4. The results are shown in Table 3-4 below.

Table3- 4 Reliability analysis table

Dimension		Title item	CITC	Cronbach's αafter item has been removed	Dimension Cronbach's α
Green Building Policy	Mandatory Policies	MDP-1	0.819	0.877	0.912
		MDP-2	0.836	0.862	
		MDP-3	0.814	0.881	
	Incentive Policies	IP-1	0.761	0.796	0.866
		IP-2	0.740	0.815	
		IP-3	0.732	0.822	
	Supporting Service Policy	SSP-1	0.755	0.838	0.879
		SSP-2	0.766	0.828	
		SSP-3	0.776	0.819	
Dual Innovation	Exploratory Innovation	RI-1	0.866	0.923	0.942
		RI-2	0.862	0.924	
		RI-3	0.862	0.924	
		RI-4	0.857	0.926	
	Utilization Innovation	TI-1	0.870	0.941	0.952
		TI-2	0.888	0.936	
		TI-3	0.897	0.933	
		TI-4	0.878	0.938	
Service innovation performance of assembled steel structure development enterprises	Financial Performance	FP-1	0.882	0.924	0.946
		FP-2	0.886	0.921	
		FP-3	0.892	0.917	
	Customer Performance	CP-1	0.891	0.889	0.936
		CP-2	0.850	0.922	
		CP-3	0.865	0.910	
	Market Performance	MP-1	0.810	0.854	0.902
		MP-2	0.808	0.856	
		MP-3	0.795	0.867	

From the above reliability analysis Table 3-4, we can see that the correlation of total items (CITC) of all dimensions of the questionnaire is greater than 0.4, the Cronbach's α value after the items have been deleted is greater than 0.7, the Cronbach's α coefficient of each dimension is between 0.866 and 0.952, and all of them are greater than the Cronbach's α value after the items have been deleted. The Cronbach's α values of each dimension are between 0.866 and 0.952, and all of them are greater than the Cronbach's α values after the dimension items have been deleted, which indicates that the overall reliability of the questionnaire is good, and all of the question items are set reasonably and meet the requirement of internal consistency.

Validity test

Validity analysis refers to the degree of matching between the research content and the research purpose, and is used to indicate the validity of the questionnaire, which often includes content validity, structural validity, convergent validity and discriminant validity. Content validity refers to the validity of the designed questionnaire in terms of content. In this study, based on the literature review and combined with the characteristics of this study more for the assembled steel structure development enterprises, we modified and integrated the existing

mature scales, and summarized the scales of green building policy, dual innovation and service innovation performance respectively, so it has good content validity. The structural validity indicates the structural validity of the designed questionnaire and is often analyzed by exploratory factor (EFA). In this study, the structural validity of the three scales of green building policy, dual innovation and service innovation performance was tested using SPSS, principal component analysis for extraction and maximum variance method for factor rotation, respectively. The KMO and Bartlett sphericity tests were used to determine whether the structural validity of the scales met the criteria. Based on the findings of Kaiser and Wu, the minimum criterion for the KMO test is 0.7 and the minimum criterion for the Bartlett sphericity test is p less than 0.001.

Findings and Discussion

Profile of Respondents

In view of the definition of the research object, first of all, select the fabricated development enterprises of the Real Estate Chamber of Commerce of the China Federation of Industry and Commerce and the Steel Structure Association of the China Building Metal Structure Association as the specific research objects. Secondly, in consideration of the universality of the research results and the possibility of recovery, the specific areas of distribution of the questionnaire include Inner Mongolia, Shanxi, Henan, Hebei, Sichuan, Chongqing, Anhui and Zhejiang. The middle and senior managers who have a certain understanding of the green building policy and the service innovation of prefabricated steel structure development enterprises in these enterprises were selected for a questionnaire survey. The formal questionnaire of this study was issued and collected from July 2021 to November 2021. Wu Minglong (2000) thought in SPSS Statistical Application Practice that the number of questionnaires should be 10~15 times of the items in the questionnaire. Therefore, a total of 660 questionnaires were distributed in this study, and 608 were eventually recovered, with a recovery rate of 92.12%. By eliminating invalid questionnaires, 548 questionnaires were finally used, with an effective rate of 90.13%. First, the basic information of the valid questionnaires collected is summarized and analyzed, including the years of establishment of the respondent's organization, the respondent's position and the nature of the organization. See Table 4-1 for details.

Table4- 1 Sample Characteristics

Sample characteristics		sample size	percentage
Years of establishment of the respondent's organization	2 years and below	82	14.96%
	3-5 years	60	10.95%
	6-10 years	42	7.67%
	11-15 years	126	22.99%
	16 years and above	238	43.43%
Position of interviewee	Department Head	130	23.72%
	Project leader	194	35.40%
	Vice President and above	116	21.17%
	other	108	19.71%
Nature of respondent's organization	private enterprise	228	41.61%
	state-owned enterprise	168	30.66%
	Central enterprises	94	17.15%
	other	58	10.58%

Characteristics of the years of establishment of the respondent's organization. From the perspective of recovery, 82 respondents whose organizations have been established for 2 years or less, accounting for 14.96% of the total sample; There are 60 people aged 3-5 years, accounting for 10.95% of the total sample size; 42 persons in 6-10 years, accounting for 7.67% of the total sample size; There were 126 people in 11-15 years, accounting for 22.99% of the total sample size; 238 people were 16 years and above, accounting for 43.43% of the total

sample size. Characteristics of the respondent's position. In terms of recycling, 130 respondents were department heads, accounting for 23.72% of the total sample size; 194 respondents were project leaders, accounting for 35.40% of the total sample size; 116 respondents were vice presidents and above, accounting for 21.17% of the total sample; 108 respondents were from other positions (such as commissioners, section staff, etc.), accounting for 19.71% of the total sample. The nature of the respondent's organization. From the perspective of recycling, 228 respondents were from private enterprises, accounting for 41.61% of the total sample; There are 168 state-owned enterprises, accounting for 30.66% of the total sample; There are 94 central enterprises, accounting for 17.15% of the total sample size; There are 58 people in other units (such as public institutions), accounting for 10.58% of the total sample size. It can be seen that the respondent's unit has a long history and a large scale, and has a relatively mature policy implementation and innovation capacity, so the research is of certain value. Therefore, the sample data of this questionnaire can represent the characteristics of the respondent's unit, and can be used for empirical analysis. Descriptive statistical analysis was conducted on the collected valid questionnaires. The results are shown in Table 4-2 below. Since the absolute values of kurtosis and skewness of the sample data are close to 0, the sample data meets the requirements of normal distribution and is suitable for structural equation analysis.

Table4- 2 Descriptive Statistical Analysis

dimension	Item	N	mean value	standard deviation	kurtosis		skewness	
					statistic	Standard error	statistic	Standard error
Green building policy	MDP-1	548	3.18	1.106	-0.693	0.293	-0.130	0.147
	MDP-2	548	3.20	1.112	-0.696	0.293	-0.042	0.147
	MDP-3	548	3.22	1.111	-0.563	0.293	-0.135	0.147
	IP-1	548	3.15	0.922	-0.011	0.293	-0.125	0.147
	IP-2	548	3.24	0.975	-0.149	0.293	-0.276	0.147
	IP-3	548	3.29	0.938	0.012	0.293	-0.498	0.147
	SSP-1	548	3.44	1.068	-0.313	0.293	-0.491	0.147
	SSP-2	548	3.38	1.052	-0.341	0.293	-0.400	0.147
	SSP-3	548	3.44	1.051	-0.260	0.293	-0.360	0.147
dual innovation	RI-1	548	3.04	1.114	-0.622	0.293	0.112	0.147
	RI-2	548	3.08	1.154	-0.618	0.293	0.179	0.147
	RI-3	548	3.10	1.121	-0.562	0.293	0.219	0.147
	RI-4	548	3.12	1.067	-0.335	0.293	0.097	0.147
	TI-1	548	3.36	1.166	-0.576	0.293	0.219	0.147
	TI-2	548	3.37	1.222	-0.668	0.293	0.224	0.147
	TI-3	548	3.36	1.213	-0.552	0.293	0.453	0.147
	TI-4	548	3.41	1.189	-0.575	0.293	-0.468	0.147
Assembled building with steel-structure-Service innovation performance of development enterprises	FP-1	548	3.36	1.166	-0.331	0.293	-0.494	0.147
	FP-2	548	3.45	1.201	-0.433	0.293	-0.505	0.147
	FP-3	548	3.53	1.205	-0.338	0.293	-0.443	0.147
	CP-1	548	3.69	1.238	-0.263	0.293	-0.516	0.147
	CP-2	548	3.54	1.217	-0.341	0.293	-0.601	0.147
	CP-3	548	3.65	1.195	-0.129	0.293	-0.803	0.147
	MP-1	548	3.52	1.073	-0.121	0.293	-0.550	0.147
	MP-2	548	3.54	1.089	-0.253	0.293	-0.524	0.147
	MP-3	548	3.58	1.100	-0.322	0.293	-0.514	0.147

Research Objective Analysis Of The Relationship Between Green Building Policy And Service Innovation Performance Of Assembled Building With Steel Structure Development Enterprises

(1) Analysis of the relationship between the overall green building policy and the service innovation performance of the assembled building with steel structure development enterprise First, verify the total effect between the overall green building policy and enterprise service innovation performance. In this study, the structural model diagram between the two is

constructed, and Amos 17.0 is used for structural equation model operation. The total effect between the overall green building policy and enterprise service innovation performance is shown in Figure 4-1 below. The fitting indexes are: CMIN/DF=3.551, GFI=0.968, CFI=0.950, TLI=0.906, which are all within the range of reasonable fitting degree. RMSEA=0.097 is slightly higher but acceptable, indicating that the model has good fitting degree.

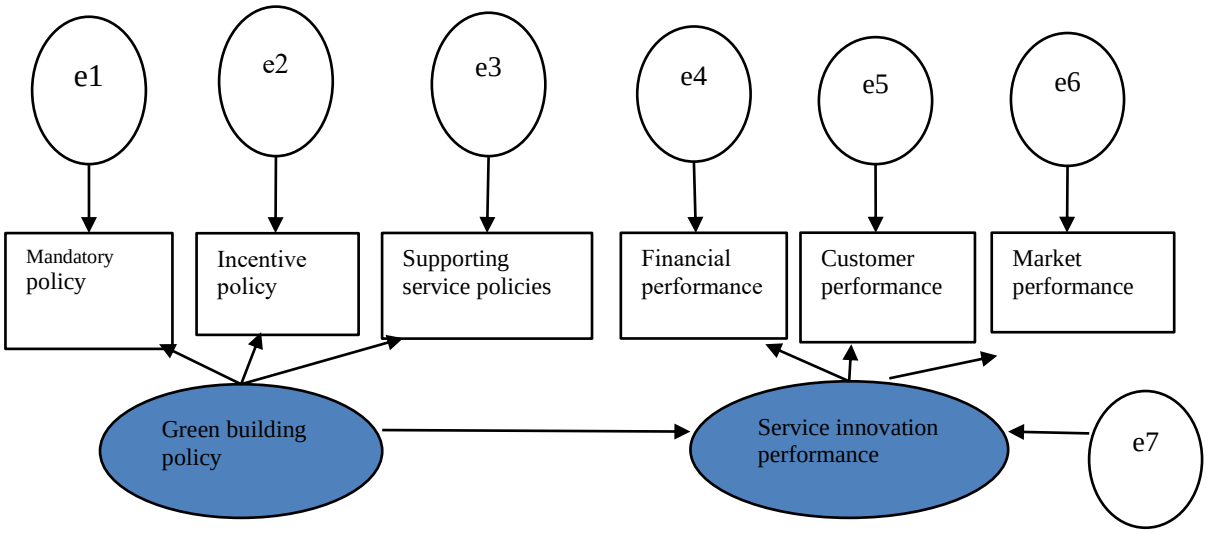

Figure4- 1 Structural model between overall green building policy and enterprise service innovation performance

Fitting index:CMIN/DF=3.551、RMSEA=0.097、GFI=0.968、CFI-0.950、TLI=0.906Note 1: The path coefficient is a standardized path coefficient, and * * * means significant at the p=0.001 level.

Table 4-3 Hypothesis test of total effect of green building policy and service innovation performance of assembled building with steel structure development enterprises

Variable relation	Normalized coefficient	path	P value	Effect	conclusion
Green building policy → service	0.33		P<0.001	Positive significance	H1 supported

(1) It can be seen from Figure 4-1 and Table 4-3 above that the standardized path coefficient between green building policy and service innovation performance is 0.33, and it is significantly valid at the level of p=0.001. Therefore, green building policy has a significant positive impact on enterprise service innovation performance, assuming that H1 is valid.

(2) Analysis of the relationship between the dimensions of green building policy and the service innovation performance of the assembled building with steel structure development enterprise Further analyze the overall effect between each dimension of green building policy and enterprise service innovation performance. According to the sub hypothesis of H1, the structural model diagram between the mandatory policy, incentive policy and supporting service policy of green building policy and the enterprise service innovation performance is constructed, as shown in Figure 4-2 below. Among them, the fitting indexes are: CMIN/DF=2.768, RMSEA=0.080, GFI=0.929, CFI=0.958, TLI=0.942, all within the reasonable fitting range of the fitting degree, indicating that the model has a good fitting degree.

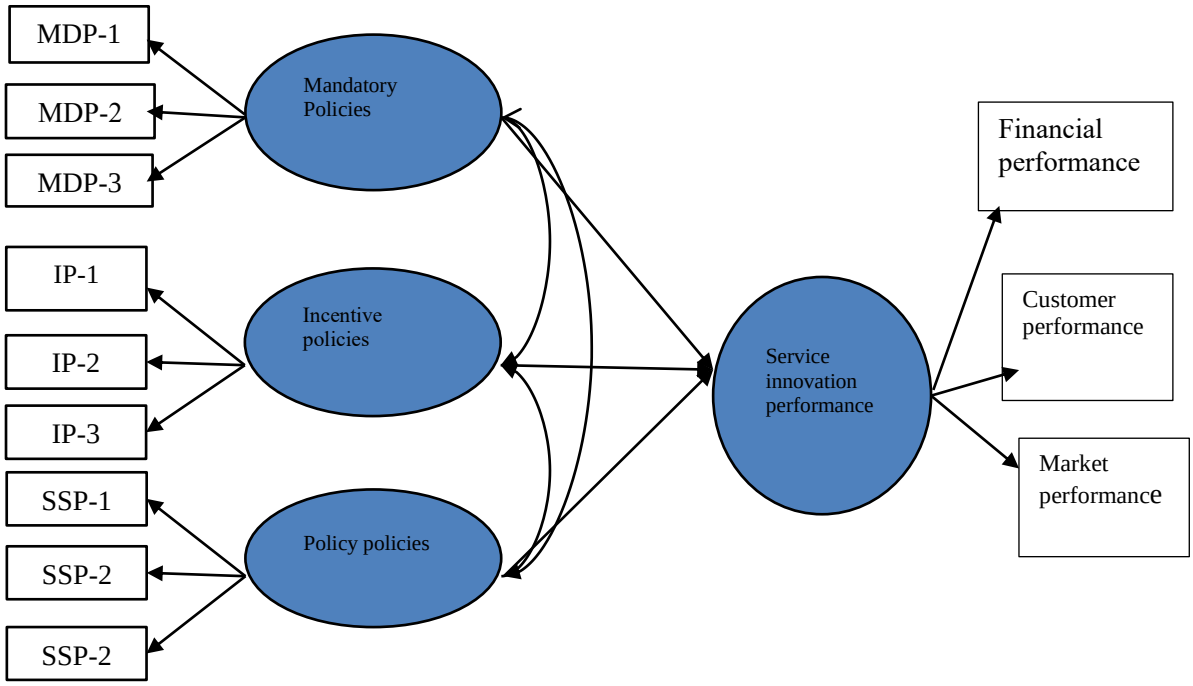

Figure4- 2 Structural model diagram between the dimensions of green building policy and the performance of enterprise service innovation

Fit indicators: CMINDF=2.768, RMSEA=0.080, GFI=0.929, CFT=0.958, TLI=0.942
Note 2: The path coefficient is a standardized path coefficient, *** indicates significant at the p=0.001 level and ** indicates significant at the p=0.01 level.

Table4- 3 Assumption Hypothesis Test of the Total Effect of Green Building Policy and Assembled Building with Steel-Structure Development Enterprise Service Innovation Performance

Variable relationships	Normalize path coefficients	P-value	Affects the effect	conclusion
Mandatory policies → service innovation performance	0.29	P<0.001	Positive significant	H1a supported
Incentive policies → service innovation performance	0.27	P<0.01	Positive significant	H1b supported
Supporting service policies → service innovation performance	0.22	P<0.01	Positive significant	H1c supported

From the above Figures 4-2 and Table 4-3, it can be seen that in the structural model between the various dimensions of green building policy and service innovation performance, the standardized path coefficient between mandatory policies and service innovation performance is 0.29, and it is significantly established at the p=0.001 level, and the mandatory policy has a significant positive impact on the service innovation performance of enterprises, assuming that H1a is established. The standardized path coefficient between incentive policies and service innovation performance is 0.27, and it is significantly established at the p=0.01 level, and the incentive policy has a significant positive impact on the service innovation performance of enterprises, assuming that H1b is true. The standardized path coefficient between the supporting service policy and the service innovation performance is 0.22, and it is significantly established at the p=0.01 level, and the supporting service policy has a significant positive impact on the service innovation performance of the enterprise, assuming H1c supported.

Conclusion

Focusing on the scientific problems to be solved, based on the review of relevant basic concepts and literature, this study takes China's Assembled building with steel structure developers as the research object to explore the role of dual innovation in green building policy and enterprise service innovation performance. According to the research framework of this paper, the relationship models of "green building policy - service innovation performance" and "green building policy - dual innovation - service innovation performance" of Assembled building with steel structure developers are constructed, and the research hypothesis based on this model is proposed. Finally, based on the data collected from the questionnaire, SPSS was used to analyze the reliability and validity of the sample data, and Amos's structural equation test was used to verify the research hypothesis. The following research conclusions are obtained:

(1)The overall green building policy and its dimensions have a significant positive impact on the service innovation performance of enterprises. In the research on the relationship between policy and enterprise performance, most scholars have proved that policy can promote the development of enterprise performance. The empirical research results of this paper show that: in the Assembled building with steel structure developers, the overall green building policy and its various dimensions have a significant positive impact on the service innovation performance of enterprises. Among them, the impact of supporting service policies is greater than that of incentive policies, and greater than that of mandatory policies. This means that the development of China's Assembled building with steel structure developers service innovation at this stage needs to continue to give play to the flexibility and freedom of supporting service policies, actively promote incentive policies, and increase the strength of government mandatory policies.

(2) Dual innovation plays a part of the mediating role in the impact of the green building policy as a whole and its various dimensions on the innovation performance of Enterprise Services. The exploratory and exploitative dimensions of dual innovation can actively absorb the content of the policy. On the one hand, strengthen and consolidate existing knowledge and skills, and on the other hand, use the incentive mechanism in the policy to introduce new talents and skills to develop new technology markets, thereby improving the performance of enterprises and enhancing the core competitiveness of enterprises. This study deeply explores the role of dual innovation in the relationship between the overall green building policy and its various dimensions and the innovation performance of Enterprise Services through empirical analysis. The study found that dual innovation has a mediating effect between green building policy and Enterprise Services innovation performance, and each dimension of green building policy and Enterprise Services innovation performance, all of which are partial mediating effects.

(3) Through the empirical analysis of the research samples, it is found that the overall green building policy and its various dimensions have a significant positive impact on the innovation performance of Enterprise Services, supporting the previous research hypotheses. At the same time, the research results are also consistent with the research results of most scholars on "policy-enterprise performance", and have a new supplement to the service innovation direction in Assembled building with steel-structure developers. The service innovation of Assembled building with steel-structure developers in China is still in its infancy, and most of its operation models are borrowed from mature manufacturing service innovation. Therefore, at this stage, the service innovation of Assembled building with steel-structure developers is mostly based on the government's macro-control, supplemented by the self-regulation and resource allocation of enterprises and markets. Among the mandatory policies, "MDP-2. Implement mandatory energy-saving standards in planning and design" has the greatest impact, indicating that starting from the root cause and carrying out mandatory energy conservation in the design and planning stage is the most significant means to improve the performance of service innovation; while "MDP-1. The impact of "Penalizing buildings that do

not meet energy-saving requirements" is small, indicating that subsequent punishment measures cannot solve the fundamental problem and can only be used as an auxiliary means. At the same time, the immaturity of the service innovation of Assembled building with steel-structure developers makes the corresponding supporting service policy only an auxiliary means, and at this stage, its impact on the service innovation of Assembled building with steel-structure developers is very small. Therefore, at this stage, it is necessary to continue to strengthen the government's mandatory policies, actively publicize incentive policies, and at the same time give full play to the flexibility and freedom of supporting service policies.

(4) According to the empirical analysis results of the structural equation model, it is shown that the overall green building policy and its dimensions have a significant positive impact on dual innovation, and the research hypothesis H2 and its sub-hypothesis are established. The results of this study are consistent with the previous research results of Jiao Hao and other scholars. At the same time, since this study targets Assembled building with steel-structure developers, the research results also open up ideas for the theoretical development of dual innovation in Assembled building with steel-structure developers. The results of this study show that in the process of implementing the current green building policies in China, most of the enterprises use the mandatory policies and incentive policies to attract talents in relevant directions, learn and develop new knowledge, so as to have a greater and more intense impact on the dual innovation of enterprises. This is consistent with the research results of Wang Li (2015) and others. The supporting service policies are mostly used to consolidate and demonstrate existing knowledge and skills, and use existing resources to improve the business model of enterprises, so as to have less impact on the dual innovation of enterprises.

(5) According to the structural equation analysis results of the mediation effect test of dual innovation, it can be seen that dual innovation has a significant positive impact on the service innovation performance of enterprises, which supports the hypothesis H3, which is consistent with the research results of many scholars. At the same time, based on the perspective of service innovation theory, this research results provide ideas for the intersection of dual innovation and service innovation. This research takes Assembled building with steel-structure developers as the research object, and believes that both exploratory innovation and exploitative innovation will have a significant impact on the service innovation performance of enterprises. From the structural model diagram, the driving degree of exploratory innovation is 0.84 * 0.55 = 0.462, and the driving degree of exploitative innovation is 0.72 * 0.55 = 0.396. It can be seen that in terms of service innovation performance of Assembled buildings with steel-structure developers, the driving degree of exploratory innovation is significantly higher than that of exploitative innovation.

(6) According to the structural equation analysis results of the mediation effect test of dual innovation, it can be seen that the overall green building policy and its various dimensions have a significant direct effect on the innovation performance of Enterprise Services, and the indirect effect on the innovation performance of Enterprise Services through the intermediary variable of dual innovation is also significant, indicating that dual innovation plays a partial mediating effect in the impact of green building policy as a whole and its dimensions on service innovation performance. Among them, dual innovation plays a part of the mediating effect in the impact of mandatory policies on the service innovation performance of Assembled building with steel-structure developers, accounting for 18.92%; dual innovation plays a part of the mediating effect in the impact of incentive policies on the service innovation performance of Assembled building with steel-structure developers, accounting for 21.64%; dual innovation plays a part of the mediating effect in the impact of supporting service policies on the service innovation performance of Assembled building with steel-structure developers, accounting for 15.93%; dual innovation plays a part of the mediating effect in the green building policy The overall impact on the innovation performance of Enterprise Services played a part of the intermediary

effect, which accounted for 30.15%. The results of this study are consistent with the previous research hypotheses, confirming that dual innovation has a mediating effect between green building policy and Enterprise Services innovation performance, each dimension of green building policy and Enterprise Services innovation performance, and some mediators are dominant. However, since the mediating effect of dual innovation does not account for a very high proportion, there may be other mediating variables or moderating variables in the relationship between green building policy and Enterprise Services innovation performance.

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Cite this article:

LIU LIANGJUN (2022). A Study of Sreen Building Policy on Service Innovation Performance: Context in Assembled Building with Steel-Structure Developers. *International Journal of Science and Business, 14*(1), 273-294. doi: https://doi.org/ 10.5281/zenodo.7219823

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