

It varies from person to person, targeted and strive to achieve better results.

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DISCUSSION ON THE NECESSITY OF BIM AND PREFABRICATED BUILDING WHOLE PROJECT COOPERATION FROM THE PERSPECTIVE OF ADAPTIVE PSYCHOLOGY

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Background: China's GDP surpassed the 100 trillion-yuan level for the first time in 2020, with the construction industry accounting for 7.2 percent of the total, indicating that the driving role of the construction industry in the national economy remains strong. According to the survey report of McKinsey, a famous international consulting company, the informatization level of the global industry shows that the informatization level of construction industry is only higher than that of agriculture and slaughterhouse industry. The informatization input of construction enterprises in developed countries accounts for 1% of their total value, while the index in China is only 0.08%, a difference of one order of magnitude. This also shows that our building information industry has a very broad space for development from the differentiated input-output ratio at the stage of social and economic development.

Recently released "China Construction Industry Information Development Report" shows that the assembly building market is developing from a single point of component factory concept to information management, in the deepening of design, production planning management, safety and schedule management, is a relatively concentrated application of information in the field. At present, BIM and assembly are respectively in the separation stage of single point application. The development trend of the future should be to connect points into lines. The deep integration of BIM and assembly technology will chemically react with data generated by other digital technologies to form data assets to empower construction enterprises. Therefore, from two aspects of economy and technology, the combination of BIM and assembly building will become a hub for construction enterprises to realize digital transformation and complete industrial upgrading of construction industry in adversity.

Methods of statistical analysis: Guided by the positive psychology, this article mainly from the industrial policy, industry development and practical application aspects, combing analysis of prefabricated construction and the development path of BIM technology, the advantages and disadvantages of their existence, facing the internal and external environment, analysis of BIM and prefabricated building fit, interpretation of the construction of prefabricated building based on BIM process the necessity of cooperative mode.

Study design: By sorting out and analyzing the development path of prefabricated building and BIM technology, this paper distinguishes the fit between BIM and prefabricated construction, and explains the necessity of building a BIM-based cooperation model for the whole process of prefabricated construction. It can be said that, guided by positive psychology. It is expected to provide a new idea for improving the synergy efficiency among the participants of prefabricated construction, giving play to the marginal cost advantage of prefabricated construction, and providing a theoretical basis for the development of information synergy platform software in the future.

Results: The development of prefabricated buildings. Prefabricated building has experienced a tortuous development history in China. In 1956, The State Council issued the Decision on Strengthening and Developing the Industrialization of construction, and issued a series of policies to vigorously develop the industrialization of construction. Since the 1960s, through a patchwork of precast reinforced concrete plate big board houses nationwide promotion, but in the 90s the big board building due to the model of a single, cannot satisfy the consumer demand for family diversity under the market economy, and the key technology such as waterproof, seismic, connection of major defects has been eliminated by the market. For the next 30 years, there was little prefab in the construction market. This situation lasted until 2016, when The State Council issued the relevant document "Guidance on Vigorously Developing Prefabricated Buildings", and "prefabricated" buildings returned to public view, and people suddenly found that many of the original "prefabricated" technical defects had been solved by new technology. With the policy support of The State

Council and governments at all levels, prefabricated buildings will account for 30% of new buildings in the next 10 years.

Conclusions: At the theoretical level, prefabricated buildings have the following advantages: (1) Good safety performance; (2) High resource utilization; (3) Fast construction speed; (4) Low marginal cost, etc. However, in the application level, prefabricated buildings are still subject to the following disadvantages: (1) Low level of information; (2) There are many participants; (3) Complex collaborative tasks, etc. These disadvantages lead to the theoretical advantages cannot be effectively translated into practical results. How to reverse the disadvantages and turn them into advantages? The most scientific method is to use informatization as the main line to improve the informatization degree of the whole production chain of BIM design and assembly buildings, and drive the whole life cycle of building products from data.

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RESEARCH ON BARRIER FREE DESIGN OF HOUSEHOLD PRODUCTS BASED ON DESIGN PSYCHOLOGY

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Background: The causes of population aging are the decline of birth rate, mortality and long average life expectancy caused by social development, the improvement of living standards, the change of lifestyle and the change of fertility concept. The phenomenon of population aging is the product of the development of human society to a certain stage, reflects the progress of human society, and is the basic feature of the development of the times.

Subjects and methods: Nowadays, more and more countries in the world have entered an aging society. In China, there are about 130 million elderly people. In the current situation of aging population, we need to design products suitable for the elderly. Due to various restrictive factors, most of the activity space for the elderly is indoors. Therefore, household products closely related to the daily life of the elderly have become very important. Since then, there are few household products designed for the elderly in the market, and many products are not suitable for the elderly. The purpose of this paper is to design barrier free household products for the elderly. Taking the design of household products for the elderly as the research object, this topic expounds how the barrier free design of household products for the elderly combines the psychological and physiological characteristics of the elderly. It is also an exploration of the design and development of household products for the elderly, which can enrich the product market, and has practical significance for the establishment of Chinese home style and the development of Chinese home industry. In addition, it will also provide some reference value for interior designers in elderly home design.

Study design: Barrier free household products refer to general household products for the elderly. The physical, psychological and social changes of the elderly make them have many special requirements for the products they use. In terms of physiological characteristics, the physical function of the elderly is degraded, and the behavioral space and environmental facilities need to compensate for their lost ability, maintain and exercise their remaining ability. In terms of psychological characteristics, the elderly is afraid of discrimination and loneliness, and need to make extensive contact with relatives and friends to seek comfort; In terms of social characteristics, they hope they can do something, enjoy and treat. These changes and demands focus on the research scope of barrier free product design suitable for the elderly.

Methods of statistical analysis: This research adopts the interdisciplinary research method. From the perspective of sociology, demography, physiology, design psychology, ergonomics, aesthetics, product semantics and other disciplines, this paper discusses the design of household products for the elderly, makes a comprehensive analysis with the method of horizontal connection, deeply analyzes the proposition, and expands and extends the appropriate design theory. Use different elements to flexibly apply theory to guide the design of household products for the elderly, prove the theory with practice, and help practice with theory.

Results: The barrier free design concept is integrated into the design process of household products for the elderly, which reflects the humanistic care, ergonomic factors, aesthetic factors, culture and lifestyle factors. Barrier free design of psychological products for the elderly is a hot topic in the current design field, which should be paid enough attention by designers and all domestic enterprises. In the design process of household products for the elderly, the body size model of the elderly is established by applying anthropometry theory, anthropometry experiment and probability statistics method, so as to provide basis for the design. Summarize the barrier free design principles of household products for the elderly reflecting