

Administration and Regulation: A Study of Taiwan's Interior Design and Construction Regulatory System

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Abstract—The establishment of the interior design and construction regulatory system was triggered by the 1995 Wei-Er-Kang Restaurant fire incident which caused a high death toll. Pressed by public opinion and the will of the people, the government finally revised the building administration law and regulations substantially and tailored interior design and construction law and regulations according to the environment and system of Taiwan. Taiwan's interior design and construction administration system was built for the administration of two targets: people, the action subject, and buildings, the object. The system was modified in three stages. The study found that the system is characterized by a graduation transition from the initial public safety protection orientation to putting emphasis on simplifying the interior design and construction system, modifying the interior construction permit application, and implementing the certificate renewal and retraining systems for interior design and construction companies and professional technical personnel to improve professional quality.

Index Terms—Interior design, interior construction, administration, regulation.

I. INTRODUCTION

Taiwan's building construction regulatory system was first established during the Japanese colonial period, but at that time, neither the Taiwan Housing Architectural Regulations nor the Taiwan Urban Plan Ordinance, two major pieces of architectural regulations, made any provision for interior design regulation. After Taiwan was taken over by the Koumintang Government in 1945, the architectural regulation system remained superficial until the promulgation of the Building Act in 1971 [1]. Unfortunately, the Act focused on building regulations and administration rather than on interior design.

Before the interior design and construction regulatory system was established in 1995, the lack of a professional regulatory system had led illegal interior design companies as well as shell companies to proliferate. Moreover, it was common for business owners to charge their customers arbitrarily. Many so-called interior design and construction companies actually did not have professional interior design competence. There were also no quality standards on the safety of interior construction materials.

An interior design and construction regulatory system was ignored until the Wei-Er-Kang Restaurant fire incident in Taichung in 1995. This incident caused fire protection and prevention department to be separated from the police

administration system. Prompted by public opinion, the government started to substantially amend the law and regulations on buildings, fire protection and prevention, and public accident insurance. Some major changes included making mandatory the use of flame retardant and fire resistant materials at public venues and keeping escape routes unblocked. It also became obligatory for food service businesses to purchase public accident insurance. Taiwan also began to build its interior design and construction regulation system.

From the perspective of authorization by law, the interior design regulation system was established based on Article 77 Paragraph 2 of the Building Act. Its objective is to regulate construction permit applications and interior design and construction activities after obtaining permits so as to prevent building structures and facilities from being arbitrarily altered, which is dangerous for public safety. The system also set up professional ethics for interior design and construction companies and interior design professionals.

II. LITERATURE REVIEW

Before the establishment of the interior design and construction regulation system in 1995, Ho and Liu (1991) had already pointed out several problems, including the proliferation of illegal buildings, illegal building usage, usage of inappropriate interior construction materials, poorly organized professional associations, and a lack of interior design professional competence [2].

Soon after the establishment of the interior design and construction regulatory system, Chou (1996) found out that the regulations on interior construction fireproofing materials, borrowed from Japan's Building Standard Law and Fire Services Act, lack technological regulations and specifications, inspection criteria, and a validation system, and this inadequacy can hinder system implementation [3].

Liu *et al.* (1997) pointed out that the interior design and construction system should cover construction materials inspection and testing as well as a quality certification system [4].

Moreover, the researchers also considered that test methods for carpet-related textiles are required and should meet the needs of the public and industries in Taiwan. Wang (2002 & 2003) analyzed the development of the interior design sector in Taiwan based on differences in the interior design and construction systems among Taiwan, USA, Japan, Germany, and mainland China and proposed that, on the administrative level, a professional interior design and construction business licensing system and a standard for interior design and construction professional and technical

personnel be established [5], [6].

Chuang (2002) considered that professional competence should be included in interior design education, examination, and training in Taiwan [7].

It can be seen from the above that these studies put their focus on issues related to interior design and construction licensing, professional technical personnel, interior construction materials, and illegal buildings. There is, however, little or no study exploring how the overall interior design and construction administration system in Taiwan has evolved over the years. Moreover, there is no study analyzing the rapid change in the professional interior design domain in Taiwan or the supplementary law and regulations made to complement the substantially amended law on interior design and construction.

III. RESEARCH METHODOLOGY

Taking the perspective of law development, the study examined the development of Taiwan's interior design and building construction regulatory system. The investigators reviewed the central and local governments' legal interpretation of the law and regulations as well as their statistical data to determine factors affecting the system and analyze the development of relevant law and acts. The structure of the law and acts of Taiwan's interior design and building construction regulatory system is presented in Fig. 1.

The analysis had two parts: factors affecting the interior design and building construction regulatory system and the development of Taiwan's interior design and construction regulatory law and acts. Lastly, the investigators discuss issues related to the present system and proposed appropriate solutions.



Fig. 1. The structure of law and acts of Taiwan's interior design and construction regulatory system.

IV. FACTORS AFFECTING TAIWAN'S INTERIOR DESIGN AND CONSTRUCTION REGULATORY SYSTEM

A. Public Attention on Building Safety Prompting the Establishment of the System

In Taiwan, interior design and construction is most likely to be implemented after building construction is completed and the usage permit is issued. Improper interior design not only hinders the fire prevention function of buildings but also damages or interferes with the main structure of the building, the fire prevention and evacuation facilities and the fire barriers. Alarmed by the Wei-Er-Kang Restaurant fire incident, the Taiwanese government has come to recognize the importance of the regulation of interior design and construction activities, the setup of interior design and construction companies, and the certification of professional technical personnel.

Article 77 Paragraph 2 of the Building Act makes provisions for interior design and construction. The investigators analyzed the present interior design and construction regulatory system and the results are presented below: [8]

1) Buildings used by the public as well as non-public buildings deemed by the Ministry of the Interior as necessary should apply for interior design and

construction.

- 2) The Ministry of the Interior may appoint inspection personnel from the architects' association in special municipalities, offices of the architects' association in cities and counties, or other related professional technical organizations to perform interior design and construction review and inspection.
- 3) Interior design and construction materials should meet the provisions of construction technical regulations and should not interfere with or damage fire prevention or evacuation facilities, fire prevention equipment, fire barriers, or the main structure of the building.
- 4) Facilities used to protect people's privacy rights should not be hindered or damaged.
- 5) Interior design and construction shall be performed by interior design and construction practitioners registered at and permitted by the Ministry of the Interior. Interior design and construction practitioners should be registered as permittees with the Ministry of the Interior and to practice within the scope of business and responsibilities.

The above-mentioned regulations make provisions for fire prevention, privacy protection, building usage change, prevention of illegal buildings, and safety of building structures. They also authorize the guidelines for interior design and construction regulation.

B. Administration of Legal Interior Design and Construction Companies and Professional Technical Personnel

The interior design and construction administration system is established to protect the rights of legal and professional technical personnel and companies and controlling and penalizing those practicing interior design and construction illegally.

In Taiwan, the number of interior design programs at universities and colleges has increased continuously since 2000, and moreover, the number of people obtaining their professional license has gone up too. The expansion of the professional association has made it more influential in prompting the government to take the regulation of interior design and construction much more seriously. Take a look of data presented in Table 1, the number of individuals with an interior design and/or an interior construction license(s) has increased by more than 10% each year since 2008. The number of individuals with both interior design and interior

construction licenses also increased about 3%. Table II shows that in Taiwan, companies engaged in either interior design or interior construction increased more than 10% each year, while companies doing both increased nearly 5% each year.

According to the content and scope of the cultural creative industry defined in 2010, interior design is part of the architectural design aspect of the cultural creative industry. It is shown in Table 3 that the interior design sector increased each year.

To be in line with the global building industry and professional technical personnel system, Taiwan has gradually opened the market to foreign interior design companies and practitioners by allowing them to do business directly in Taiwan and to obtain relevant certification from Taiwan. This is another factor contributing to changes in the interior design and construction system.

TABLE I: GROWTH OF INTERIOR DESIGN AND CONSTRUCTION TECHNICAL PERSONNEL AND COMPANIES BETWEEN 2008 AND 2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of people with interior design license	207	231	288	324	394	457	458	578	627
Rate of increase (%)	-	11.60	24.70	12.50	21.60	15.99	0.22	26.20	8.48
Number of people with interior construction license	2 435	3,279	3,863	4,403	4,974	5,461	6,159	6,878	7,551
Rate of increase (%)	-	34.70	17.80	14.00	13.00	9.79	12.78	11.67	9.78
Number of people with both interior design and construction licenses	8 957	9,215	9,477	9,743	9,989	10,262	10,650	11,016	11,444
Rate of increase (%)	-	2.90	2.80	2.80	2.50	2.73	3.78	3.44	3.89

Source: Table 6-9 of Interior Design and Construction Companies and Professional Technical Personnel from [9]; Summarized by the investigators.

V. DEVELOPMENT OF TAIWAN'S INTERIOR DESIGN AND CONSTRUCTION ADMINISTRATION SYSTEM

Taiwan's interior design and construction regulatory system aimed for two targets: people, the action subject, and buildings, the object. People, the action subject, include architects in practice and professional technical personnel from the construction or the interior design and construction sectors. Buildings, the object, can be classified into buildings for public usage and buildings not for public usage. The

system has gone through three stages of change, and significant changes were made during these stages. Initially, the interior design and construction system was established for protecting public safety and since these changes, its has focused on streamlining the administration system, establishing a retraining and certificate renewal system for interior design and construction companies and personnel, enhancing professional competence, and fortifying the regulatory system.

TABLE II: ANNUAL INCREASE IN INTERIOR DESIGN AND CONSTRUCTION COMPANIES BETWEEN 2007 AND 2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of interior design companies	16	18	20	31	40	54	68	75	95	103
Rate of increase (%)	-	12.50	11.11	55.00	29.03	35.00	25.93	10.29	26.67	8.42
Number of interior construction companies	545	728	939	1159	1348	1551	1781	2117	2434	2811

Rate of increase (%)	-	33.58	28.98	23.43	16.31	15.06	14.83	18.87	14.97	15.49
Number of interior design and construction companies	3568	3745	3923	4084	4295	3872	4057	4266	4505	4828
Rate of increase (%)	-	4.96	4.75	4.10	5.17	-9.85	4.78	5.15	5.60	7.17

Source: 6-9 Interior Design and Construction Companies and Professional Technical Personnel from [9]; Summarized by the investigators.

TABLE III: OUTPUT VALUE OF TAIWAN'S INTERIOR DESIGN SECTOR BETWEEN 2010 AND 2015

Year	2010	2011	2012	2013	2014	2015
The interior design industry output (thousand Taiwan dollar)	22,432,242	24,752,254	25,309,124	26,066,369	29,831,626	29,002,288
Rate of increase (%)	-	10.34	2.25	2.99	14.44	-2.78

Source: [10]; Summarized by the investigators.

The investigators analyzed the interior design and construction review for approval system and the results are presented below.

- 1) For new building construction cases where the interior construction part is completed when the building construction is completed, the interior construction drawings can be included when applying for the building permit. To apply for construction completion inspection together, the usage permit has to be included.
- 2) Those implementing interior construction after receiving the usage permit should apply for interior drawing review for approval as well as construction completion inspection first. Interior construction qualification certificates shall be issued only if the above requirements are met.
- 3) When application is made for both usage change permit and interior construction permit, usage change and interior construction drawings will be reviewed together. At the completion of construction, interior construction completion inspection will be performed before usage change construction completion inspection. Cases meeting the above requirements will have the usage change permit and the interior construction qualification permit issued.
- 4) Architects in practice or professional design technical personnel should sign the interior construction drawings to take the liability. For altering the location of internal walls or increasing or reducing the number of internal walls that are deemed to be related to public safety, the above drawings should be signed by the architect to take the liability.
- 5) Cases meeting the scope of usage stipulated in Article 33 of Guidelines on Interior Design and Construction Administration can apply for the simplified interior design and construction review for approval.

VI. DISCUSSION: ISSUES RELATED TO THE PRESENT INTERIOR DESIGN AND CONSTRUCTION REGULATORY SYSTEM AND CORRESPONDING SOLUTIONS

The interior design and construction regulatory guidelines have been revised several times and are now more comprehensive. Nonetheless, there is still room for

improvement, and some ideas are linking relevant laws and regulations and meeting the international standards. Currently encountered difficulties are analyzed and summarized below.

- 1) Poorly implementing or failing to implement building safety inspection: for building safety, it is mandatory for completed interior construction in buildings to be reported according to the building safety inspection reporting procedure. Buildings undergoing interior construction but without a qualification certificate will be tracked, and the person reporting the case will be requested to complete the application process before reporting. Nonetheless, because of a lack of manpower and money, local governments are not quite capable of properly implementing the interior design and construction regulatory guidelines when the guidelines were enacted and promulgated on May 29, 1996. For example, buildings detected to have no interior design and construction material certificate during the building safety inspection are only required to provide an architect's affidavit to close the case.
- 2) Illegal interior design and construction companies practicing interior design and construction: there are illegal interior design and construction companies running businesses even though they have no business permission. Because local governments cannot review and inspect their design and construction work, disputes with consumers may arise.
- 3) Professional technical personnel's licenses borrowing (illegal): The public have little idea of what makes an interior design and construction practitioner legal. In fact, many disputes arising after the completion of interior design and construction projects are associated with interior designers who practice illegally by borrowing licenses from others. This problem has a negative impact on the public's confidence in this profession.
- 4) Some interior design and construction inspection personnel fail to authentically inspect interior design and construction projects and detect problems: Interior design and construction cases violating the building law and regulations may threaten public safety.
- 5) Residents' right to give consent hindering interior design and construction improvement: this is commonly seen in

old buildings where shared facilities need to be improved or they may affect public safety.

- 6) Meeting internal standards: presently, Taiwan has been working on signing on to agreements with other countries via WHO. In the future, restrictions on nationality, business or company registration in Taiwan by foreign interior design and construction companies or practicing interior design in Taiwan by non-Taiwanese professional technical personnel will be gradually lifted. Supporting measures will be added to the domestic interior design and construction regulatory system and be revised accordingly step by step.

Solutions for the above issues are presented below.

- 1) Increasing the manpower for interior design and construction administration at local governments: The interior design and construction regulatory system should be paired with a public safety inspection system for interior design and construction improvement of existing buildings for public usage (Classes A, B, D and F).
- 2) Promoting interior design and construction consignment and contractor agreement templates: it is helpful for resolving not only business practice by illegal interior design and construction companies but also the license borrowing problem with professional technical personnel. The focus should be on protecting interior design intellectual property rights and enhancing technical personnel's professional ethics and sense of social responsibility.
- 3) Local governments should make their own interior design and construction administration self-governing law and regulations: Local interior design and construction administration law and regulations can be established not only based on the local need, i.e., urban, township, remote or offshore, but also according to the specific time or phase.
- 4) Continuous revision of the interior design and construction administration law and regulations: According to the future trend of industry development, the Building Act, Guidelines on Interior Design and Construction Administration, and other related codes and acts should be revised on an ongoing basis to elevate the status of interior design and construction professional technical personnel and the quality of the industry, and to match the international system.

VII. CONCLUSION

The establishment of the interior design and construction regulatory system was triggered by the 1995 Wei-Er-Kang Restaurant fire incident which caused a high death toll. Pressed by public opinion and the will of the people, the government finally revised the building administration law and regulations substantially and tailored interior design and construction law and regulations according to the environment and system of Taiwan. In a sense, the entire building construction regulatory system was overhauled.

The study has found that the interior design and construction system in Taiwan was established for improving

building safety and accommodating the fast changing architectural and construction environment. The system is now aimed to handle issues such as improving the quality of interior design and construction companies and personnel, stopping the proliferation of illegal buildings, satisfying the need for a system regulating the usage and inspection of interior construction materials, reducing disputes between interior design and construction practitioners and consumers, and defining the role and function of the interior design professional association.

Taiwan's interior design and construction administration system was built for the administration of two targets: people, the action subject, and buildings, the object. The system was modified in three stages. The first stage was to establish an interior design and construction system. The second stage was to define targets of the administration and to enhance the qualification of professional technical personnel to reduce interior design and construction disputes. The third stage was to set up a certificate renewal system for interior design and construction practitioners, to simplify the interior design and construction business registration for approval procedure, and to establish a random case inspection system. The study found that the system is characterized by a graduation transition from the initial public safety protection orientation to putting emphasis on simplifying the interior design and construction system, modifying the interior construction permit application, and implementing the certificate renewal and retraining systems for interior design and construction companies and professional technical personnel to improve professional quality.

In the last part, the study presented problems encountered by Taiwan's interior design and construction administration system, and these problems include poorly implemented or unimplemented building safety inspection (especially the inspection of interior materials) by local governments, illegal interior design and construction companies practicing business, license borrowing by professional technical personnel for illegal practice, and meeting international standards. As Taiwan's cultural creative industry has progressed steadily in recent years, the output value of the interior design and construction sector has put itself in the spotlight. According to the analysis of the study, the most urgent task at this stage of the game is to establish comprehensive retraining and certificate renewal systems for interior design and construction practitioners to improve their professional competence. To help the system meet international standards more quickly, it is also critical to effectively enhance the government's administration efficacy by increasing interior design and construction manpower, developing self-governing law and regulations based on local needs, and having the interior design and construction law and regulations revised on an ongoing basis.

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