

### Research on the Risks and Stability of Non-local Regularization of Night Markets Based on Actor-**Network Theory**

#### -Taking Huanlian Night Market in Jinan as an Example

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**Abstract.** In the post-pandemic era, activating the night economy has become a major force in upgrading urban consumption. As an important carrier for the high-quality development of the night economy, informalization of night markets has led to various risks, and the normalization of night markets in different locations has emerged as a solution to mitigate conflicts and stimulate vitality in the night market space. Through questionnaire interviews, cluster identification, evaluation, and construction of actor profiles and actor relationship networks in the Huanlian Night Market domain, a basis is provided for evaluating the risks and stability of normalization in different locations. Specifically, this includes: questionnaire interviews and quantitative analysis to analyze the characteristics of actors from three dimensions: managers, vendors, and consumers; constructing an actor profile database based on actor satisfaction and related factors in the survey; and proposing optimization strategies based on the impact of actors' opinions on the risks and stability of the Huanlian Night Market.

**Keywords:** Actor network, risk, stability, offsite formalization.

#### 1 Introduction

In the post-pandemic era, the country encourages stimulating the vitality of nighttime consumption, and igniting the "night economy" has become a focal point for many cities to upgrade and improve consumption. <sup>1</sup>In 2022, Jinan proposed that the old markets such as Huanlian Night Market would undergo renovation. Riding on the "big issue" of urban renewal in Jinan, the cotton and linen plot where Huanlian Night Market is located will usher in leapfrog development.

China has relaxed policies to increase employment and stimulate consumer spending, leading to the emergence of a large number of night markets. However, due to the lack of government guidance and planning, numerous conflicts and risks have arisen. <sup>2</sup>Fine-grained issues such as wasted spatial value, noise, and traffic burden are practical operational difficulties that need to be addressed in the high-quality development of urban renewal governance. <sup>3</sup>Besides mandatory policies such as banning or prohibiting, inclusive policies such as the relocation and regularization of night markets are of great significance in reducing the negative impact on the surrounding environment, creating a good business atmosphere, and increasing regional influence.<sup>4</sup>

#### 2 Research Idea

#### 2.1 Research Object

The research object is Huanlian Night Market, located in Zhushun Road, Licheng District, Jinan. Covering an area of 8 hectares, Huanlian Night Market is only 200 meters away from the exit of Jinan Metro Line 2. The 15-minute living circle centered on Huanlian Night Market includes 9 residential areas. The location is chosen by the government in combination with people's wishes, thus being representative.

#### 2.2 Actor Network

This study analyzes Huanlian Night Market from three dimensions: managers, vendors, and consumers, through the lens of actor perspectives. By collecting data through field research and supplementing it with personal interviews, the opinions of the actors can be gathered in a more intuitive and effective manner. Additionally, the use of scoring methods allows for the specific quantification and quantitative analysis of the actors' genuine feelings.<sup>5</sup>

# 3 Risks of Actor Network Updates During the Relocation and Formalization Process of the Night Market

### 3.1 The Dynamic Alliance of Actors Continuously Adapts to the Adjustments During the Relocation Process

The relocation and regularization of Huanlian Night Market is divided into three stages. In the first stage, the persuasion and education phase, the joint working team issued a letter about the comprehensive improvement of Garden Road and the relocation of the night market to the business operators during the operation hours of the night market, and multiple actors formed a primary alliance. In the second stage, the comprehensive relocation and strict prevention phase, the joint team of various departments deployed 200 people every day to continuously monitor the Garden Road section to prevent vendors from returning to the street, and the actor network evolved to the intermediate alliance stage. In the third stage, the establishment of rules and regulations phase, the daily management of the cityscape on Garden Road was handed over to a security company, while the Honglou Street Office established a long-term management mechanism for daily inspections and assessment systems, set up a night market management team, and collaborated with the Huanlian Oriental Trade City for

management. The actor network further expanded, forming an associated alliance (Figure 1).

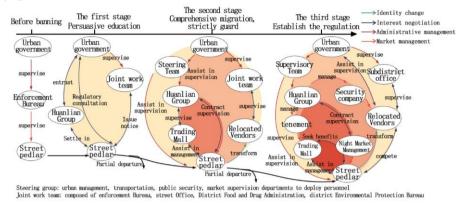


Fig. 1. Evolution of the Actor Alliance in the Huanlian Night Market, Author drawing

## 3.2 Individual Actors Take Practical Actions Rather Than Observe When Facing Developmental Opportunities

Before the relocation, 72% of the vendors were unwilling to move, mainly due to their discomfort with the transition from unregulated operation to formalized management, and concerns about disputes arising from the change from no stall fees to paying stall fees. Contract constraints increased the operational risks of the relocation and formalization process, as poorly performing operators could not be immediately removed, causing many vendors to hesitate to relocate due to fear of losses.

According to interviews, vendors initially expressed negative complaints after receiving the notification of relocation and formalization. However, some experienced vendors spontaneously formed a rights group and negotiated with the joint working team to fight for the vendors' rights and interests, ultimately reaching a consensus.

## 4 Field Investigation and Analysis of Actors Involved in the Relocation and Formalization of the Huanlian Night Market

#### 4.1 Renewal of the Governance Community

#### 4.1.1 Governance Model of the Huanlian Night Market

Regarding the Huanlian Night Market and its surrounding area as an independent field, various stakeholders including the Licheng District government, Huanlian Group, vendors, management teams, consumers, Dongfeng Street Office, and other relevant actors, some at the center and some relatively marginalized, collectively constitute the core of the field (Figure 2). The governance model of the Huanlian Night Market, under the multi-governance strategy that advocates joint governance of urban mobile vendors by the government, streets, and citizens, has also promoted coopera-

tion between the government and social enterprises, delegating the power of vendor regularization to market management, enhancing the flexibility and development enthusiasm of the night market.

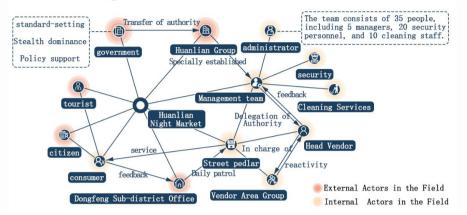


Fig. 2. Actor Network after Relocation and Regularization, Author drawing

Through a questionnaire, the influence of various actors in the Huanlian Night Market was scored on a scale of 1-5, representing no influence to very strong influence. The results showed that the Huanlian Group had the highest average influence, reaching 4.9, while cleaning and security personnel had an average influence of less than 3, indicating that they played a relatively small role in the governance community (Figure 3).

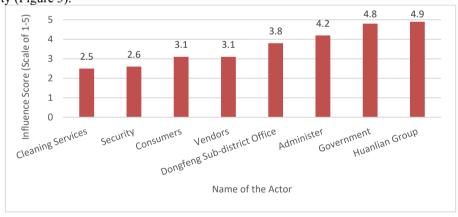


Fig. 3. Comparison of Actor Influences in the Huanlian Night Market, Author drawing

#### 4.1.2 Horizontal Comparison with Traditional Night Market Governance Models

In the management of traditional night markets, the government plays a leading role in control; urban management personnel have responsibilities but lack authority and face heavy workloads, remaining at the edge of the field with consumers, residents, and vendors. A questionnaire was used to rate the influence of actors in traditional night markets, with the government having the highest average influence, reaching a score of 4.5; while consumers had the lowest average influence, scoring

only 3.2 (Figure 4).

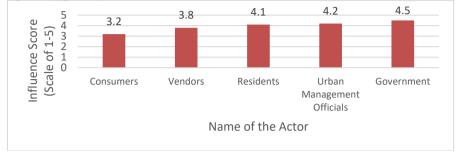


Fig. 4. Comparison Chart of Actor Influences in Traditional Night Markets, Author drawing

Through comparisons before and after, it can be concluded that the management model after relocation and regularization has enabled the vendor community to participate in their own management, rather than treating vendors as adversaries of urban management personnel and residents in traditional management approaches. The management model after relocation and regularization has established a channel for equal dialogue between the government and vendors through the actual manager of the enterprise, thereby protecting the survival rights and interests of vendors compared to the "one-size-fits-all" governance approach.

#### 4.1.3 Post-Governance Activities of Actors in the Huanlian Night Market

Through tracking and investigating the activities of the actors in the Huanlian Night Market, it is found that the market reaches its peak vitality around 23:00 (Figure 5).

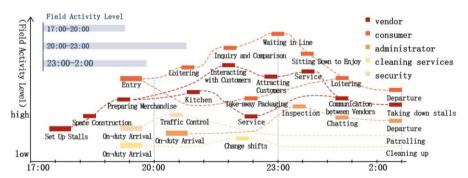


Fig. 5. Temporal and Spatial Distribution of Actor Vitality in the Huanlian Night Market, Author drawing

#### 4.2 Re-inclusion of Vendors in Employment

#### 4.2.1 Typical Profiles of Vendors

A survey of vendor characteristics was conducted to summarize their basic attributes (Figure 6). The data reveals that vendors have a more diverse age range, with the young and middle-aged population serving as the backbone. Vendors generally have lower education levels, primarily comprising junior and senior high school graduates, facing limited job opportunities and relying heavily on street vending. Vendors tend to prefer the stable business environment of the Huanlian Night Market due to the temptation of not having to pay stall fees as mobile vendors.

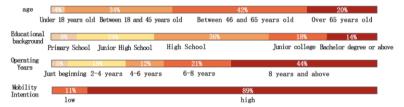


Fig. 6. Portrait of Vendor Population, Author drawing

#### 4.2.2 Vendor Characteristics Survey

Before relocation, the percentages of improvement-oriented, demand-driven, and experience-seeking vendors were 23%, 57%, and 20%, respectively. After relocation, the percentages of these three types of vendors shifted to 13%, 79%, and 8%. Improvement-oriented vendors gradually abandoned night market operations, and demand-driven vendors became the dominant force in the night market. This indicates that the Huanlian Night Market has provided a living space for the most urgently needed vendor groups, promoting the protection of the survival rights and interests of urban vulnerable groups and contributing to the stable development of the Huanlian Night Market."

#### 4.2.3 Vendors' Evaluation of the Current Status of the Huanlian Night Market

In summary, vendors were asked to rate their satisfaction with the Huanlian Night Market in terms of job opportunities, social integration, environmental satisfaction, and security (Table 1). The questionnaire collected the satisfaction of 189 vendors regarding the current status of the night market, with over half expressing satisfaction. However, 14.9% of vendors expressed dissatisfaction, and the majority of those dissatisfied cited low social integration as the primary reason.

**Table 1.** Vendors' Satisfaction Ratings for Various Aspects of the Huanlian Night Market, Author drawing

Options	Satisfied,	average	Dissatisfied	Total points
Job Creation Potential	75%	10%	15%	3.7
Social Integration Level	78%	15%	7%	4.1
<b>Environmental Satisfaction</b>	82%	9%	9%	4.4
Public Security Maturity	65%	20%	5%	3.5

#### 4.3 Renewal of Consumer Identification

#### 4.3.1 Typical Consumer Profiles

The questionnaire randomly collected the age, occupation, and income information of 201 consumers (Figure 7). Consumers are primarily young groups such as university students, entrepreneurs, and young workers, who have a rich nightlife and high demand for night markets. Most consumers belong to the low-to-middle income group, and the Huanlian Night Market provides a consumption space for this income group.

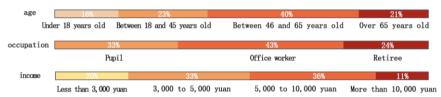


Fig. 7. Portrait of Consumer Population, Author drawing, Author drawing

#### 4.3.2 Place Attachment and Social Relationship Identification

According to the analysis of consumer attachment to the Huanlian Night Market, 30% of regular customers visit for the experience of the old night market. These regular customers have a strong attachment to the Huanlian Night Market, especially to the traditional stalls and signature food vendors. They have established strong social relationships with these vendors, while new customers have weaker social ties with the vendors.

## 4.3.3 Consumers' Evaluation of the Current Status of the Huanlian Night Market

The questionnaire collected the satisfaction of 201 consumers in the Huanlian Night Market regarding its current status, with over 65% expressing satisfaction. However, 15% of consumers expressed dissatisfaction, mainly due to low signage clarity and poor stall identification.

#### 5 Conclusions

#### 5.1 Issue Summary

The stakeholders of the Huanlian Night Market have undergone continuous adjustments during the process of regularization in a new location. The Huanlian Group, Dongfeng Sub-district Office, Licheng District Government, as well as tourists and citizens have successively joined the social relationship network, completing the stability update of the actor network of the Huanlian Night Market. In the operational process of stability update for the Huanlian Night Market, based on the governance model of diversified co-governance and government-enterprise cooperation, it has given more prominence to the employment rights and interests of demand-driven

vulnerable vendors. The Huanlian Night Market has played a role in promoting the protection of the survival rights and interests of urban vulnerable groups. Consumers' recognition of the Huanlian Night Market's demand and the social relationship identification between regular customers and veteran vendors have promoted the formation of strong network relationships between consumers and vendors. However, the lack of spatial carriers for social networks among vendors, and the relatively weak social relationships between vendors, can affect the dynamic development of the field and whether it can maintain a good or stable field order in the future.

#### 5.2 Optimization Strategies

- (1) Implement corporate management, build corporate culture, strengthen vendors' sense of identity and belonging, increase their connection with the night market, thereby consolidating the social relationship network for easier management.
- (2) Promote the internet celebrity economy, strengthen the connection between vendors and the night market, and embed internet celebrities within the vendors. Make vendors inseparable from the Huanlian Night Market, and the Huanlian Night Market inseparable from vendors, thus forming its own influence circle.
- (3) Improve the competitive relationship among vendors, transforming vicious competition into sustainable healthy competition. Optimize the spatial distribution of infrastructure and reduce conflicts caused by the use of public facilities.
- (4) Utilize and expand the original "vendor-consumer" relationship network, encourage cooperation and mutual assistance among vendors, enhance the matching degree of supply and demand, and better meet consumer needs.

#### References

- GULNARA KHADIULLINA, ANNA SVIRINA, ALFIA ZABBAROVA. Entrepreneurial Development in Countries with High Share of Informal Economy[C]. //The 18th world multi-conference on systemics, cybernetics and informatics: Proceedings, vol. 1: 18th world multi-conference on systemics, cybernetics and informatics (WMSCI 2014), July 15-18, 2014, Orlando, Florida, USA.: International Institute of Informatics and Systemics, 2014:25-30.
- BETTY GAMA, YOTO WIDODO, HARIYANTO. Survival Strategy of Street Traders (PKL) in Nusukan Market Surakarta[C]. //International Conference on Media and Communication Studies: ICOMACS 2018, Bandung, Indonesia, April 4-5 2018.: Curran Associates, Inc., 2018:47-49.
- NING DAI, TAIYANG ZHONG, STEFFANIE SCOTT. From Overt Opposition to Covert Cooperation: Governance of Street Food Vending in Nanjing, China[J]. Urban forum, 2019,30(4):499-518. DOI:10.1007/s12132-019-09367-3.
- D HANTONO, B PRAYITNO, D PRAMITASARI. Hybridity of economic and social activities on informal market in Jakarta[J]. IOP Conference Series: Earth and Environmental Science, 2021, 878(1). DOI:10.1088/1755-1315/878/1/012009.
- 5. PIUS SIAKWAH. Political Economy to Globalized Assemblages: Actor Network Theory, Hydrocarbon Assemblages, and Problematizing the Resource Curse Thesis[J]. International Journal of Mathematics, Game Theory, and Algebra, 2018, 27(1):1-22.

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