

# ***Research on Food Safety Supervision in Tourist Areas Based on Online Payment***

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**Abstract:** The mode of on-line consumption payment enters the public life, bringing a lot of convenience for us. The process of payment carries vital information about exchange, and online payment is easy to get and transfer these information. Tourist food safety traceability could make use of it to overcome problems of food safety information break and deficiency from of currency trade. Based on the convergence of online payment, tourism food safety and feedback information, we should complete food supervisory platform, use big data analyzing technology and artificial intelligence technology to improve supervision, early warning and emergency measure, serve the need of comprehensive supervision and promote the level of social supervision.

## **1. Introduction**

In a general sense, online consumption and payment means refers to the channel for transferring funds in the process of shopping (services) by relying on the Internet, mobile network platforms and their terminals to realize the connection between the owner of funds and the payment and settlement system of financial institutions <sup>[1]</sup>. The online payment methods familiar to the public include WeChat payment, alipay payment, unionpay payment, etc. <sup>[2]</sup>. Traceability, security, convenience and so on are making online payment methods more and more popular. Online consumption payment method has important application and value in the food safety traceability system in tourist areas, which is worthy of careful study and promotion.

## **2. The Importance of Food Safety and Its Supervision in Tourist Areas**

Food safety is a major livelihood issue. The newly revised Food Safety Law of the People's Republic of China in 2018 constitutes an important legal guarantee for regulating and regulating food production and business activities. The importance of food safety and its supervision in tourist areas is self-evident, which is related to the development and stability of tourism, regional economy and society. Each food safety incident may affect the normal order of tourist areas, while the impact of food safety accidents in tourist areas is more direct. On January 3, 2014, Legal Daily reported "a suspected case of poisoning of dog meat in Wudalianchi". The travel food safety accident and its investigation caused great confusion, and also exposed a series of problems in the supervision of travel food safety. There have been several similar cases of food poisoning in tourist areas. As the

public becomes more vigilant about food safety, the outcry over food safety is growing. Similar strict tourist attractions food safety reports also emerge in endlessly. Food safety and supervision in tourist areas have become a regular livelihood issue. Therefore, food safety and supervision in tourist areas must be done well to provide a healthy environment for tourism development.

### **3. Necessity of Strengthening Online Payment in Food Safety Supervision in Tourist Areas**

In 2013, China Food and Drug Administration was established. With the gradual implementation of the newly revised Food Safety Law, great progress has been made in the re-adjusted food safety supervision system from the national to the local level. In this context, tourism food safety supervision has been further strengthened. For example, the Food and Drug Administration No. 127 [2017] pointed out that a comprehensive tourism food safety management mechanism should be established to constantly improve the level of tourism food safety protection. At the same time, local legislation and administrative region tourism food safety management system have further improved the tourism food safety system<sup>[3]</sup>. With the continuous improvement of the supervision system and mechanism, the overall situation of food safety supervision in tourist areas has gradually improved. The main performance is the tourism area food safety accident prevention ability and the emergency treatment ability enhancement, the tourism food safety education receives the attention.

On the other hand, there are still some problems in the tourism food safety supervision, such as unclear functions of supervision institutions, imperfect supervision laws and systems, imperfect self-discipline mechanism of enterprises in the tourism food industry and insufficient social supervision. At the same time, operators and consumers in tourist areas have strong liquidity, commodity transactions have a certain randomness, and the supervision links are easily disjointed, which makes supervision difficult.

The effective supervision of tourism food safety objectively requires the mastery of market trading information, and the lack or interruption of commodity trading information may bring inconvenience or even harm to the supervision of tourism food safety. The traditional cash payment method is to record the consumption information by the bill (certificate). Some consumers will not take the initiative to ask for bills, and even some businesses lack business qualifications and can not provide the corresponding bills, after the accountability suffering, and the whole process of supervision is more difficult. The consumption payment method records important transaction information. Applying big data technology and online payment platform to rethink this issue will bring new enlightenment to the supervision of tourism food safety.

### **4. Role of Online Payment in Food Safety Supervision in Tourist Areas**

Nowadays, online payment is becoming more and more popular in our daily life. Due to the support of real-time account, convenient for buyers and sellers to confirm in time, online payment can meet the general consumption needs. Online payment platform has a low threshold, easy to operate, and a mature third-party platform to provide security protection, and its development is more and more rapid. In tourist areas, online payment is also convenient. In terms of hardware investment, UnionPay POS machines and wireless network cost less. The implementation of online payment can fully meet the needs of consumers, and it is also conducive to the supervision of food safety in tourist areas.

The role of online payment in the supervision of food safety in tourist areas mainly includes:

#### **4.1 Record Transaction Information to Facilitate the Registration of Certificates**

The online payment method registers the basic transaction information, while the online payment

record serves as an important transaction document to prove the authenticity of the transaction. During the transaction, information about the buyer and the seller and the content of the transaction is temporarily preserved. In cooperation with transaction invoices and other payment vouchers, it is convenient to lock both parties in time during supervision, especially in the process of post-accountability, so as to maintain food safety in tourist areas.

#### **4.2 Covering Trading Links for the Convenience of Full Traceability**

Through the application of online payment layer upon layer, you can understand the specific situation of the transaction link, easy to find clues, timely find the source of the problem. By determining the production, circulation and business license qualifications of food producers and traders, the market access system for tourism food quality and safety can be strengthened, and illegal ACTS can be investigated and dealt with to maintain market order.

#### **4.3 Use Big Data Technology to Serve Food Safety Supervision**

In recent years, “big data” and “Internet Plus” have become new forms of economic and social development. The use of big data technology can facilitate the processing of food traceability, food batch information, risk monitoring, supervision and inspection, production and circulation data management, enterprise credit system and other massive business data, so as to effectively serve the tourism food safety supervision activities.

### **5. Application of Online Payment in Food Safety Supervision in Tourist Areas**

The users of online payment can be consumers and merchants. For the tourism food safety supervision system, consumers, businesses and regulatory agencies play different roles. Online payment and the consumption information it carries provide an indispensable basis for food safety supervision in tourist areas. The application of online payment in food safety supervision in tourist areas should solve the design of payment method and the use of payment information.

#### **5.1 Fully Guarantee the Smooth Online Payment Channels**

First of all, we should pay attention to the smooth online payment channels. According to industrial and commercial management system and business activities, to promote the popularization of online payment of hardware devices, such as POS terminals, responsible, receipt printers and wireless router, etc., and to actively expand online payment platform, such as WeChat public platform, ensure that the proof of registration and online payment records bundled together, form the corresponding relationship. Take WeChat public platform as an example. At present, the payment function of WeChat public platform can be realized through direct transfer to WeChat payment, WeChat secondary developer platform, micro web page and third-party APP platform. This greatly facilitates online payment and provides an embedded background management system, which provides a foundation for food safety information registration and feedback evaluation information collection.

In the process of online payment, the merchant rating should be introduced and linked with the merchant credit system, so as to ensure the gradual improvement and smooth of online payment channels. The unimpeded online payment channel depends on the business needs of merchants. Therefore, only by combining production and operation activities with supervision, consumer demand and satisfaction, can the unblocked online payment channel be really promoted. At present, it is common for scenic spots merchants to encourage the use of online payment for the convenience

of tourists' consumption. Some merchants have even launched online payment discount activities to increase the stickiness of consumers. Under the influence of consumption habits and multiple benefits, online payment also promotes the continuous improvement of payment channels. The smooth introduction of online payment platform and consumption habit is the basis for playing its role in food safety supervision.

## **5.2 Realize the “Double Fusion” of Online Payment Process and Food Safety Information Registration Process**

On the basis of perfecting the online payment channels, the key point is to realize the digitization and bearability of transaction information. In short, it is to realize the effective storage of basic transaction information on the online payment platform and delivery to the food safety traceability credit management system. This is an important part of providing regulatory data. In the process of tourism food consumption, important food information such as categories, batches and production information should be digitized. In the process of online payment, the consumption information should be timely stored through the corresponding platform, which is convenient for consumers to inquire and merchants to put on record. At the same time, the stored digital information will also be deeply used in food safety supervision. In tourist areas, most foods have uniform bar code labels, which provide information about food safety. During the online payment process, these barcodes can be read and added to the consumer information summary. At the same time, these bar codes can be easily inquired as long as they are included in the commodity bar code database. For products that do not have a barcode for production, such as dishes consumed in a restaurant, the development of traceability codes and identification systems can be explored. In some regions, merchants publish food safety information through electronic display screens, which lays a foundation for the integration of consumption information. With the help of purchase vouchers, merchants can digitize the purchase date, batch and other information of dishes so as to be reflected in the online payment information. In this way, consumers can grasp the relevant food safety information, achieve safe consumption, but also facilitate the food safety supervision work. More importantly, it realizes the full record of food safety information from production, circulation to final consumption<sup>[4]</sup>, fully integrates the payment process with the food safety information registration process, and avoids the possible default and omission links, as well as the lagging and negative cooperation behaviors of merchants.

## **5.3 Build a Feedback Evaluation Information Sharing Platform**

The online payment process can not only incorporate food safety information, but also feed back food safety information for early detection of problems. At present, this mechanism is widely used in e-commerce platforms. For example, when consumers buy food on 360buy, they will generally first pay attention to the previous consumption evaluation data, which is combined with the payment record. After the completion of the online payment process of goods, merchants generally encourage consumers to make shopping evaluations, and in the process of accumulating merchant credit, consumers' personal credit is also accumulated, and consumers' personal credit points and credit conditions can bring them convenience and benefits. It can be seen that attaching importance to building a feedback evaluation information sharing platform can achieve a win-win situation. At the same time, this is also conducive to food safety supervision needs.

With the continuous development and improvement of online payment, the collection of food safety information will take place simultaneously with the payment process. Feedback and evaluation information is naturally included. Therefore, in the process of designing the online payment method of scenic spots, in order to achieve a win-win situation for merchants and tourists,

and out of the need of food safety supervision, multiple channels for feedback information collection should be established. Can be based on the feedback information of online payment, trying to build website platform covering scope of food consumption of the scenic spot, the development of the corresponding APP or public number, using management background to the merchant's public food safety information and credit situation, merchants will be the “regulatory information, kitchen sites, qualification certificates, health, the traceability of raw materials, test results, the operation processing, waste disposal” moved to the site, and so on information platform, realize the social supervision. When necessary, the food safety supervision department can also directly call the original data records. In this way, online ordering, offline distribution, online payment and platform supervision can be integrated. This is a development trend in the future. Some areas currently only have the basic conditions of online payment, consumption feedback information is scattered, during to the feedback information sharing platform, can be released by a separate management platform, and gradually try to establish a unified, standardized feedback interface, achieve the purpose of the platform.

#### **5.4 Establish a Comprehensive Supervision Platform Based on Online Payment**

The food safety supervision department should explore the establishment of a comprehensive supervision platform based on online payment. Nowadays, “big data” and “Internet +” have been increasingly integrated into all aspects of social life. Food safety supervision needs to monitor a large number of data, and more importantly, the establishment of an early warning and emergency mechanism, which cannot be separated from a comprehensive supervision platform. On the basis of the organic connection between online payment, food safety information registration and feedback information collection, the construction of the integrated management platform based on online payment has its foundation. Food safety regulators in some regions have taken note of this, and the prototype of a comprehensive regulatory platform with limited coverage and imperfect functions has aroused people's interest.

Referring to various types of Internet of Things state and diagnostic platforms <sup>[5]</sup>, the integrated supervision platform based on online payment also has three logical levels, namely, data acquisition layer, operation and processing layer and meeting and session layer. First of all, this comprehensive supervision platform has a standard information acquisition interface to realize the unified management and monitoring of various information sources. This constitutes the data acquisition layer of the system. At the same time, based on artificial intelligence and big data analysis technology, the operation and processing layer should be built to carry out data tracking, matching, screening and diagnosis in a timely manner. On this basis, a session layer is built to form a problem tracking discovery and analysis report to meet the needs of early warning and emergency. The whole comprehensive supervision platform is based on online payment and ultimately serves the supervision of food safety. For tourism areas, this platform is particularly important, it facilitates the preparation and identification of various information sources and positioning. This is the key to dealing quickly with similar food safety incidents.

Online payment provides a new entry point for food safety supervision in tourist areas. Using artificial intelligence and big data technology, comprehensive food safety supervision platforms have been unveiled. In practice, how to realize the organic connection between online payment, food safety information registration and feedback information collection is a key issue to be studied. The whole process of building a comprehensive regulatory platform ultimately needs to overcome various conflicts among merchants, consumers and regulatory activities. Online payment provides us with an important and realistic way of thinking.

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