

Research on the Management Mechanism of Enterprise Service Innovation

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Abstract

Service innovation is the driving force of social progress and provides necessary impetus to the overall economic growth of the service industry. Although the importance of service innovation is very strong, the current definition of related concepts and definitions in academia is not yet clear. A large-scale economy as a whole can be interpreted as a large service system that contains a variety of interrelated subsystems. Therefore, to further promote the economic development through service innovation, we need to know how to establish the management mechanism of service innovation at the enterprise level. This thesis gives a new definition of service innovation and also points out the difference between the traditional model of innovation and new models of innovation. This thesis pays special attention to the promotion of enterprise services, and relies on relevant theories of management to construct a service innovation management mechanism for enterprise service innovation based on theoretical guidance.

Keywords

Service Innovation, Management Mechanism, Mechanical Machine

1. Introduction

In the past few decades, the service sector ushered in rapid growth and gradually gained a dominant position in the highly developed economies. According to the U.S. Bureau of Labor Statistics, the service industry has infiltrated many public utilities including finance, telecommunications, wholesale and retail, trade, education, insurance, transportation, real estate, healthcare, logistics and postal ser-

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vices. Its size in the national economy reflects its importance. For example, in the United States, 80% of GDP in 2007 was contributed by the service sector, while the service sector in China accounted for about 35% of its economy [1]. In 2011, the service sector contributed 70% of the OECD's GDP. Wholesale and retail and business services were among the top four value-added contributors [2]. With the rapid development of service industry, service innovation has become an important research field [3] [4] [5].

Traditional service innovation categorizations separate radical and incremental innovations (see Gallouj & Weinstein, 1997) and product and process innovations (Vaux Halliday & Trott, 2010). Commonly, categorizations addressing degree of change (e.g., radical versus incremental) describe service innovation. However, this approach does not identify what part of the offering qualifies as the service innovation. One traditional view of innovation builds on technological breakthroughs (Schumpeter, 1934; van der Aa & Elfring, 2002). Inferring service innovation only as a technology breakthrough limits the scope and impact of the concept and hinders theoretical development.

Arguably, this paper discusses service innovation and its closely related concepts, and aims at attaining a general understanding of the field, and substantiating the importance of service innovation. Firstly, the definition of service innovation is sorted out, and then the theoretical support of modern management mechanism is used to make a new definition of the definition of service innovation in enterprises. Secondly, combined with its characteristics, the enterprise service innovation is classified and summarized. Finally, a management mechanism of enterprise service innovation is built.

2. Service Innovation and Its Theory

2.1. Defining Service Innovation

Gadrey (1995) argues that service innovation is a reintegration of factors, such as resources, technology, and team in an innovative way or thinking because of differences in service that make essential differences between service innovations. A new type of service is to meet existing customers or attract potential customers [6]. Sundbo (1997) proposed that service innovation is a business through various means to enhance the service links to enhance customer value. The ultimate goal is to enhance Enterprise Competitiveness [7]. Alam (2002) emphasizes customer-oriented, that service innovation to customer as the main body, the purpose is to provide customers with new products or services, a new service innovation process. As service innovation not only in the service industry, in the manufacturing industry or some public service industry also has a large number of service innovation activities [8]. Therefore, the definition of service innovation can be divided into broad and narrow two: generalized service innovation refers to all and service Relevant innovation can be attributed to it; narrow service innovation will be limited to innovation in the service industry, refers to the service enterprises in order to improve service quality or create

higher economic efficiency, to customers and the market to provide more high quality and efficient services.

2.2. Categories of Service Innovation

Another way to understand service innovation is through categories or classifications that distinguish by innovation type. The main difference between the service and the tangible product is the nature of the service: the intangible, immediate production of immediate consumption, perishability and non-storage. Based on this difference, the researchers have several different methods of service innovation. Schumpeter (1934) proposed several innovative forms: creating new goods, following new production methods, discovering new sources of raw materials, entering new markets or creating new ones. According to Schumpeterian's service innovation point of view, Drejer (2004) further proposed that the dichotomy between products and processes is the two main categories of service innovation. In addition, the radical and incremental innovation dichotomy is a common service innovation categorization that suggests bifurcating innovations based on the degree of change. There are several benefits to the development and classification of innovations that not only provide us with useful insights but also provide a systematic basis for the comparison and implementation of innovations (Smith, 2002). Lovelock (1983) emphasizes the practical role of classification in marketing and suggests that innovations can benefit different types of marketing strategies and management tools. Different marketing and innovation strategies may significantly improve different types of service innovation (Hsieh *et al.*, 2013). However, the use of different classification methods in the study is difficult because of the large number of operational challenges associated with uncertain classification methods. Hsieh *et al.* (2013) argue that most of the research on service innovation does not provide concrete examples of how to use different types of innovations, although the details of the classification are of paramount importance.

In the service innovation classification study, Den Hertog (2000)'s four-dimensional model division is representative, which divides the content of service innovation into four categories: new service concept, new customer interface, new delivery system and new system selection. We can see that the market innovation and organizational innovation into the scope of service innovation, belonging to the broad sense of service innovation. And product innovation and process innovation is included in the service innovation, it belongs to the narrow sense of service innovation. How to understand service innovation, through the summary, can be analyzed from two perspectives: one is based on the depth and manner of attention to innovation, and the other is focused on innovation and innovation. Based on the first perspective, the research jumps out of the limitations of the "product/service, manufacturing/service dichotomy" framework in traditional innovation research, avoids identifying difficulties in distinguishing product innovation from process innovation, and enabling inno-

vation to cover both This classification is based on the research of Gallouj and Weinstein (1997) [9], which classifies three categories of dimensions, namely innovation novelty, changes in service characteristics and innovation The process of starting the process, although this classification helps to understand the mechanism of dynamic evolution of service innovation, but because the classification dimension is too complex, it is difficult to use the classification results to discuss the basis of the problem in theoretical research. The innovation process is intertwined. It is difficult to distinguish it. Moreover, the traditional technological innovation research methods are too narrow for the manufacturing industry itself. Therefore, scholars from the characteristics of service innovation as the starting point, put forward the product innovation, process innovation and transmission innovation and product/concept innovation, customer interface innovation and service delivery system innovation of these two categories. one of the most representative is Den Hertog (2000) [10], which focuses on the characteristics of the integration of service production and delivery of the second research perspective, the study of innovative output and innovation object, because product innovation accesses, based on the classification of service innovation characteristics in Miles (1994) [11], and further defines the “Front” and “background” of the transmission system innovation.

2.3. The Theory of Service Innovation

Tether (2001), through the study of German business case, agrees with Gallouj’s proposed method of service innovation classification, and on this basis, put forward the concept of standardized service, emphasizing the reproducibility of service [12]. Drejer (2004) extends Gallouj’s concept of service innovation and research methods both theoretically and conceptually, and agrees with Tether’s concept of standardized services [13]. Vander (2002), based on case studies, divides the types of service innovation from an organizational perspective [14]. De Jong *et al.* (2003) argue that no matter what kind of service innovation model, it includes some basic activities and processes, such as the generation, evaluation, development and application of new ideas, each with a number of specific Activities connected. These innovative activities have personality at the same time there are some common features, so these activities will be some kind of internal relations and promote each other. However, there is still a lack of accepted theoretical system in the field of service innovation research, including the definition of service innovation concept, service innovation classification, research methods and so on. Therefore, it is necessary to construct a complete. The theory of service innovation is the focus of this research.

Menor (2002) proposed the development of new services is the core competitiveness of the service industry, and its basis is the service innovation competition, service enterprises should deepen service innovation [15]. Greenhalgh (2004) examines how the service innovation can be replicated to health institutions and what management organizations should provide in management.

Matthing (2006) pointed out that service innovation should focus on customers. Customers are the source of service innovation. Hipp (2005) measured the level of service innovation in four different industries and noted that different industries should be treated differently [16]. Patterson (2005) argues that the organizational environment plays an important role in organizational efficiency and innovation [17]. Berry (2006) pointed out that service innovation can help enterprises to win more market share in marketing, marketing managers should continue to service innovation to increase the value of the enterprise, service innovation will be raised to the strategic height [18]. Lyons (2007) explores the different organizational patterns in the process of service innovation from the perspective of employees [19]. On the existing literature, the management of service innovation research is not enough depth, only to stay in the management of service innovation support level, did not go to further study the specific reasons.

3. Enterprise Service Innovation

3.1. Definition of Enterprise Service Innovation

After combing the research results of service innovation, this paper finds out that the definition of service innovation is too broad, and puts forward the definition of “enterprise service innovation”, taking into account the many inconsistencies in the concept of service innovation. Service innovation is also defined as a combination of multiple innovations in business models, technology, social organization and needs for the improvement of existing systems, the creation of new value propositions or new systems. This paper refers to Gadrey (2000) on the service innovation made that the service innovation to the enterprise (organization) as the main, refers to the creation or introduction of a new service by the enterprise, or the improvement of existing services, the new The service is more novel than the services or products that the enterprise (organization) can provide at the moment [20]. Gadrey’s innovative features are from the perspective of novelty, service innovation to create an enterprise (organization) unprecedented service; by the enterprise (organization) take the initiative to promote the implementation; the above creation or improvement can make the consumer experience the value of the service to enhance the promotion of customer satisfaction, Improve the core competitiveness of enterprises.

According to the above theory, this paper gives the definition of enterprise service innovation: enterprise service innovation refers to the enterprise-led service innovation change, including the existing service to improve, or the introduction of the enterprise does not have a service, or by Businesses coordinate a variety of dynamic factors to create a new service, or the service concept and service processes to transform and innovate, making the new service and the enterprise can provide services or products compared to more novel. Enterprise service innovation to customer-centric, pays attention to the application of advanced technology and management concepts for consumers to bring more ser-

vice experience and value to enhance the same time for enterprises to bring higher returns and core competitiveness. To meet the above conditions of service innovation behavior, this article are defined as the enterprise service innovation. It can be seen from the definition that the definition of enterprise service innovation management emphasizes the dynamic role of enterprises in service innovation and highlights the management ability of enterprises for service innovation.

To sum up, the results of service innovation can be applied in many industries including: e-commerce, cell phones, credit cards, leases, franchises, loyalty programs, service desk outsourcing, music downloads, bar codes, ATMs and kiosks, patents System, compound interest savings accounts.

3.2. The Characteristics of Enterprise Service Innovation

Enterprise service innovation has its own characteristics. Analysis of these characteristics is conducive to scholars to distinguish between enterprise service innovation and technological innovation between the many differences. The characteristics of enterprise service innovation are expressed in the following aspects:

1) Business-oriented

Enterprise service innovation to the enterprise as the main body, to create an enterprise or organization of unprecedented service products and experience, enterprises in the process of innovation, to combine their own strengths and weaknesses, the establishment of effective and practical mechanisms to promote and achieve business The development of service innovation.

2) Innovative interaction

Enterprise service innovation is in the enterprise and customer interaction in the progressive realization of a spiral cycle is the process of rising. Enterprises in understanding the needs of customers on the basis of customer demand for innovative services to internal resources as the basis, under the guidance of the service innovation strategy to expand and extend the value of enterprises even, to create value for customers, in the process of innovation, customer—the first goal, not only to evaluate the service innovation products, but also pay more attention to consumer awareness of the value of innovative products.

3) The progressive nature of innovation

Innovation can be divided into radical innovation and progressive innovation, this paper believes that different industries in the enterprise service innovation will have different performance. Traditional industries, such as manufacturing, garment industry, enterprise service innovation is mostly progressive innovation, it is difficult to imagine in these enterprises, the radical service innovation will be employees, customers quickly adapt and produce good results. Emerging industries, such as relying on the provision of services to survive the e-commerce industry, business service innovation is relatively radical to a lot, the survival and development of enterprises are all in line with whether the user's innovation, as well as innovative implementation and development prospects. Most of the cur-

rent business providers have established a dedicated service innovation team and the corresponding system, these teams or systems for the radical service innovation will have some control of the damage.

4) Innovative comprehensive

Enterprise service innovation covers a comprehensive, innovative process is often accompanied by process innovation, organizational innovation and model innovation. In addition, the process of enterprise service innovation in the process of internal multi-sectoral participation, mutual cooperation, but also the value chain between the upstream and downstream enterprises collaboration, successful service innovation requires a wide range of participation and support, and this innovation is often a Comprehensive innovation.

5) Focus on the application of advanced technology and management philosophy

Enterprise service innovation should pay more attention to the use of advanced technology and management concepts, attach great importance to new technology research and development, to seek scientific and technological innovation and major breakthroughs, advanced management concepts and modern communication technology for enterprise service innovation has a significant role in promoting and to achieve business innovation activities.

3.3. Classification of Enterprise Service Innovation

Unlike service innovation classification, enterprise service innovation classification will be limited to service innovation in the market-oriented social enterprises. In the enterprise, and service innovation similar to the concept: technological innovation, was the core of enterprise service innovation, technological innovation is included in the service innovation, but not limited to the traditional technological innovation. The existing literature describes the types of enterprise service innovation, according to the analysis of different priorities, the type of enterprise service innovation research summarized as two categories: This paper is based on the integration of innovative models, the use of economic analysis of enterprise products and services to analyze (Gallouj, 2002) [21].

1) Service-oriented model

Service-oriented model research to service enterprises as the main research object, service enterprises have obvious characteristics of the service industry, such as intangibility and so on. Eiglier and Langeard (1987) from the perspective of service marketing, that the unique marketing services is a combination of core services and peripheral services, the core service is the basis of services, peripheral services to “product” differences; At the same time, service innovation requires the design of new core services, and the expansion of services is mainly by the increase in peripheral services to complete [22]. Gadrey (1995) and Sundbo (1995) also look at corporate service innovation from a broader, Schumpeterian perspective [23] [24]. Djellal and Gallouj (1999) proposed that the customer is the cooperative producer of enterprise service innovation, and

the service innovation in the interaction with the enterprise, and the service innovation takes place in the process of dealing with customer relationship. Therefore, they divided the enterprise service innovation into five types according to the different ways in which the enterprise handles the user relationship [25], as shown in **Table 1**.

2) Based on the integration of innovative models

The integration of innovative models between the two is more and more integration, services and products are inseparable. This service and product convergence, so that scholars no longer distinguish between services and products, tend to regard them as a whole, from the functional point of view of the type of innovation to start. The potential assumption of this view is that customers are more interested in satisfying their needs or functions than products and services.

Barras (1987) uses functional models to propose innovative categories that apply to both products and services. He divides innovation into functional innovation, specialized innovation, and productivity, depending on whether innovation is related to functionality, exclusivity, or production processes innovation [26]. Functional innovation is the production of new, non-differentiated abstract function; specialized innovation is the specific application of functional innovation in practice, it is for different types of customers designed products and services; productive innovation is committed to the cost Reduced innovation, so that services can be mass or standardized production. However, the classification method is still difficult to distinguish between products and processes, and functional and specialized innovation distinction between the practical significance is relatively small.

Table 1. Service innovation.

Enterprise Service Innovation Type	Customization features	Service provider
Custom innovation	The products are customized according to the customer's special needs	Small service business
Characteristics of innovation	An innovation that builds and suggests solutions to the specific problems of a particular customer in the process of social interaction	Knowledge-intensive service enterprises
Restructuring innovation or process innovation	It is through the standardization of enterprise service elements to re-split the combination of access to a service innovation	Financial services industry
Differentiated innovation or affiliated innovation	It is an added new service or new affiliate service innovation provided by the enterprise	Trade industry
Passing innovation or standardizing innovation	Retain the basic functions and characteristics of service products at the same time, the enterprise service delivery system or customer interaction interface for an innovation	Financial services industry

3) Enterprise service innovation type new generalization

On the basis of previous studies, this paper divides the enterprise service innovation into six types according to the innovation theory of Schumpeter (1934) and the research results of Sundbo (1997), Gallouj (1998), Miles (1999): Product process innovation (this article in this product and process as one, not a specific distinction, it is because the service is essentially an invisible process, service products to a large extent is the service process, more difficult in the product Innovation and process innovation between the two clear distinction), market innovation, organizational innovation, transmission innovation, reorganization of innovation, characteristics and innovation. The first three types of innovation are based on Schumpeter's innovative theory, although the names are similar, but there are some differences in the connotation of innovation; the latter three types of innovation is mainly based on the study of Gallouj *et al.* Derived, these types of innovation are determined by the characteristics of the service itself, in the enterprise service innovation plays an important role.

4. The Composition of Enterprise Service Innovation Management Mechanism

Enterprise service innovation management mechanism is a complex social system, which consists of a variety of different elements, through the role of service innovation activities in the form of organic whole. Different elements of interrelated interaction, the formation of reticulation staggered three-dimensional structure, and through a certain structure to play its role. Therefore, from the function of the behavior management mechanism, this paper considers that a complete service innovation management system includes running mechanism, dynamic mechanism and restraint mechanism. These three mechanisms are closely linked and cooperate with each other.

1) The definition of service innovation management mechanism

As mentioned above, the management mechanism is designed and created according to specific objectives, and the mechanisms are inseparable from specific objectives and are established and operated according to the objectives. This paper defines the management mechanism of enterprise service innovation as: the constituent factors of the internal service innovation management system and its operation mechanism, through the coordination of the internal service innovation behavior and the performance management of the enterprise, the author puts forward the definition and explanation of the "management mechanism" Improve service innovation and business performance.

2) The goal of service innovation management mechanism

The original service belongs to the addition and supplement to the product, and the service provided in this product portfolio as the core value requires continuous service innovation. Because the service contains different elements (supply-sided, customer-sided and institutional/geographical), service innovation can be interpreted as a process of reorganization and reorganization of these

tangible and intangible elements (such as business processes, people, technology, management methods, etc.). That makes the evolutionary process of service innovation highly interactive. Therefore, the unpredictability of this process is so high that it is difficult to manage or control, and the handling of each service is unique. The main objective of establishing a management mechanism for service innovation is to create unique services for customers in service systems.

Service innovation management mechanism objectives, that is, enterprise service innovation management objectives, refers to the enterprise service innovation management system to achieve the desired results or to achieve the purpose, it is the basis of enterprise service innovation management and action guide. Enterprises to carry out service innovation management to improve service innovation performance, and in the enterprise service innovation process, innovative behavior and individual innovative products is not the ultimate goal of enterprise service innovation. Through the analysis of service innovation success and failure behind the reasons for the evaluation of service innovation behavior and business performance, and ultimately sustainable and effective innovation ideas and systems widely used in the enterprise, this is the enterprise service innovation management mechanism of the goal.

For the same industry enterprises, competitors and products and services between the homogeneity, and direct contact with customers is the quality of business services and products, so customers and business innovation with the most direct, with the traditional service Enterprise is also more obvious than the perception. So it can be said that the development of enterprises are accumulated by thousands of service innovation. Service innovation is the source of enterprise development, rather than service innovation for the development of the goal, the role of management mechanism in the enterprise is through a series of mechanisms of guidance and control, so that service innovation as the source of enterprise development.

4.1. Operating Mechanism

In order to make service innovation fruitful, managers need to analyze the internal and external environment of service innovation, and effectively control the innovation process. The basis of service innovation management is to create an environment that encourages service innovation, including relevant institutional policies, resource allocation, organizational structure and personnel arrangement. These are the basic conditions for the creation and adjustment of the basic conditions of enterprise service innovation, and guarantee the normal development of enterprise service innovation System, which is called the operational mechanism of service innovation.

Enterprises are hoping that employees can carry out independent innovation, continuous innovation, but really can do the innovative achievements of the emerging enterprises are rare, service innovation mechanism is inseparable from the talent, system, resources, organizational protection. Innovative talent is the first step in innovation, with innovative and innovative experience of employees

is an important resource. Zhejiang University Innovation and Development Research Center, a survey shows that obstacles to the implementation of full innovation factors, including employee innovation is not (32.76%), lack of innovation (32.76%), and the lack of attention (32.76%) of the employees' innovation ideas (41.38%), the lack of innovation resources (37.93%), the lack of innovation. The appropriate organizational structure, through a variety of systems to establish a framework for the operation of innovative services for creative collection, screening, support and assessment work to provide protection, thus breaking the barriers of communication and communication at the same time, through the organization's authorization to provide resources for staff innovation The rational authorization allows employees to autonomously control more resources (in addition to funds, equipment and other resources, but also including time, etc.), and thus more active and active into the enterprise's innovative activities. Isaksen (2007) that the organization and management practice through the coordination, communication, control and planning actions to integrate various resources to achieve the stability of the organization and the goal of a reasonable order [27]. The manager is coordinating the behavior of others, so that the behavior of the manager will affect the behavior of other people in the organization, thus affecting the atmosphere of innovation (1995). Studied the relationship between the superior support and the degree of product innovation, found that the level of support and organizational innovation performance there is a significant correlation between the higher level of support, organizational innovation, the better the atmosphere, the organization's innovation performance is higher [28]. Amabile (1996) explores the existence of a creative work environment and organizational innovation performance. If there is a good innovation atmosphere in the organization: organizational encouragement, leadership encouragement, team support, autonomy and challenge, etc. Individuals are more inclined to play their creativity [29].

In fact, the establishment of the operating mechanism for the enterprise to carry out service innovation to build a structure in which the enterprise can be the resources of all parties in the right place to make them interrelated, mutual coordination in order to achieve enterprise service innovation. Of course, the operational mechanism of this architecture is to build the rationality and effectiveness of the need for enterprises to continue to explore in practice.

4.2. Dynamic Mechanism

Service innovation management mechanism is a complex system. The elements of the system need a certain way to form an organic whole, from the function of the behavior management mechanism. The dynamic mechanism refers to the internal and external factors through a common role, so as to provide the impetus for the service innovation of the enterprise. The so-called incentive mechanism is the organization system to stimulate the subject and the object to motivate the interaction of the way, is based on institutionalization, people-centered human resources management theory. The dynamic mechanism of the enterprise

system (incentive mechanism) is divided into two parts: external power and internal power. The internal strength is the foundation of the enterprise power mechanism, including the technology, equipment, information, capital, talent and management within the enterprise. Guidance and start, and can accelerate the normal operation of enterprise power mechanism conditions, generally including the interests of gravity, demand pull, competitive pressure and incentive thrust. The incentive mechanism described in this paper is based on the microscopic individual perspective. Incentive mechanism is to rely on the interests of the internal needs of employees and to meet the incentive to achieve the staff, from the perspective of human resources management practice, more embodied in the enterprise's salary to reflect the design, career management and promotion of mobile system. The incentive mechanism is used to meet the needs of a certain employee needs, and the incentive is divided into external incentive mode and internal incentive model, the external incentive is to pay incentives, internal incentives to meet people's high-level needs. On this basis, the design of the remaining incentive mechanism model, the basic idea that the employer and the employer is not an antagonistic relationship, the two can be win-win situation.

The establishment of the operational mechanism provides an architectural basis for the innovation of enterprise service. On this basis, it is necessary to guide and promote the operation to make it work. In conclusion, the dynamic mechanism is divided into internal promotion and external guidance The How to rational use of two kinds of driving force, so that enterprises in a smooth and orderly service innovation are still constantly exploring.

4.3. Constraints

Constraint mechanism refers to the enterprise through the evaluation of innovative activities, more scientific allocation of enterprise innovation resources. Service innovation cannot be uncontrolled, in the limited resources conditions, how to achieve service innovation to maximize the benefits of business is more emphasis on the issue. For the evaluation of service innovation methods, from the national level and industry, regional level, "Service innovation five classification", according to the service innovation on the novelty of enterprises, this classification method clearly used in the enterprise characteristics.

5. Conclusions

The management mechanism of enterprise service innovation distinguishes service innovation from general enterprise innovation, and provides more reasonable theoretical support and guidance for enterprise service innovation. This will enable enterprises to make more outstanding contributions to the service level and enhance their competitiveness. This article defines the definition of service innovation and the definition of management mechanism, and guides the improvement of service innovation from three aspects: operation, motivation and restraint mechanism. The relevant theories in this paper are mainly based on

macro-level theory. Scholars can learn from these concepts to further verify the mechanism of service innovation from practice and jointly promote the development of service innovation in the real industry.

The challenge of service innovation stems from the diverse nature of services and the different requirements of participants that underlie the additional possibilities of service innovation, service creation, and service improvement, leading to better quality and productivity levels. Today, the service industry has become a significant contributor to economic value, and in fact it has become a major driver of economic growth and wealth accumulation. Diversified and comprehensive services appear in people's daily lives, including transportation, education, medical services, urban services, financial services, e-mail and so on. As services exist in different areas, involving different disciplines, we need to explore from a different perspective, a comprehensive analysis.

It is noteworthy that, with the continuous prosperity and development of the Internet, the impact of e-commerce on service innovation is becoming more and more important. The role of service innovation on the platform using the Internet is considered as an interesting sub-topic. It is to take full advantage of the new electronic network information: developed, convenient, safe and other advantages, to better meet customer's needs. Analogous to service innovation, it can be called creating new electronic services or new electronic service processes. Industries such as finance, e-sports, hospitality and education have innovated their original services in combination with Internet technologies. Due to service innovation and many new services that have emerged, many services have been readjusted and how to provide services through new means of electronic communication and collaboration is an urgent topic to be discussed in the context of the Internet.

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