The Effect of Digital Platform and Digital Transformation on Offline Entertainment Industry

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Abstract

In consideration of the bottleneck of development reached by offline entertainment industry and the inevitable trend of digital transformation of legacy industries, apply digital platform development patterns in which online platforms and offline business entities are closely connected to legacy offline entertainment industry. Put forward a multi-sided platform which builds the digital framework of physical entertainment industry and briefly introduce its operating model and marketing strategies. Analyze the influence of the digital platform development patterns on legacy offline entertainment industry, discuss the prospects of development of the industry, and provide an approach and guidance of transformation for the industry.

Keywords

Digitization, Digital platform, Offline entertainment industry.
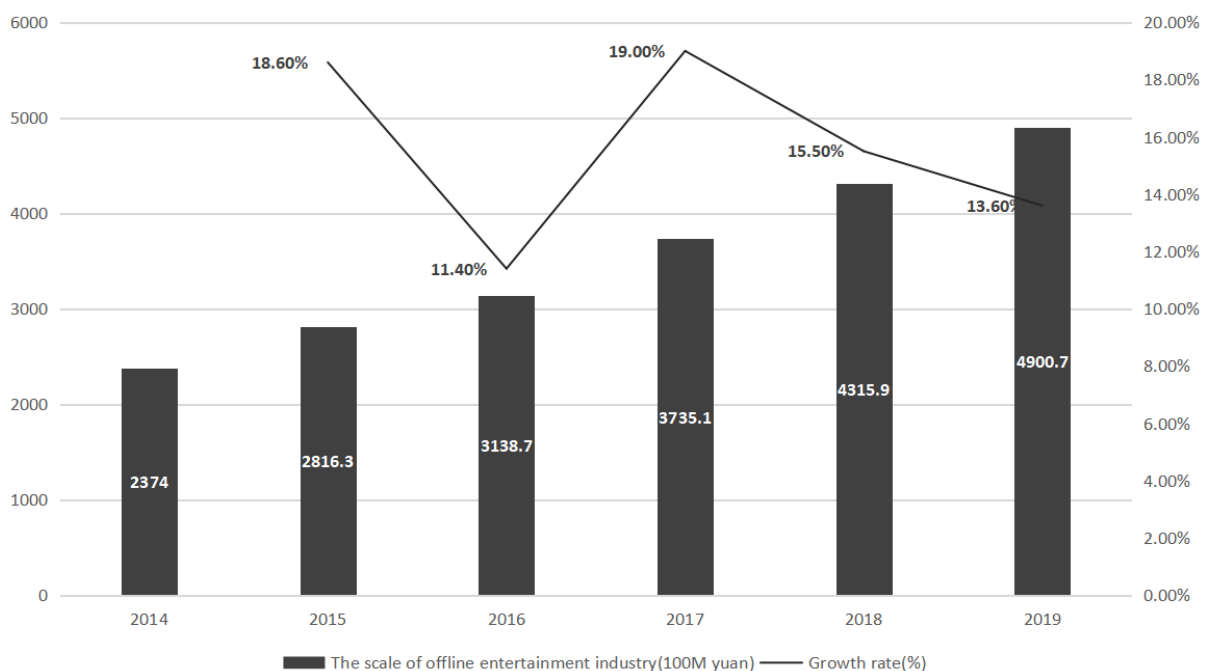
1. Introduction

Figure.1 The scale of Offline entertainment industry in China from 2014 to 2019

The COVID-19 epidemic has been lasted for half a year, resulting in pervasive occurrence of suspension of business in offline entertainment industries, represented by cinemas, karaoke bars, game parlors and other physical entertainment venues. However, the epidemic just exacerbates the decline of the industry. Growth of the scale of China's offline entertainment industry has been significantly declining since 2017. Even without the epidemic, the industry has reached the bottleneck of development.

The offline entertainment industry started booming in 2014. However, with the development of mobile Internet, it faces unprecedented dilemma and challenge nowadays. First of all, the known-after-experienced characteristic of the offline entertainment programs makes it difficult for users to have a certain perception of the program before experiencing it. Secondly, the travel problems caused by location and distance and the time consumption of finding playmates has excessively increased the cost of participating in legacy offline entertainment, which becomes a daunting prospect for potential customers. In addition, the offline entertainment industry putting more investment in assets but fewer in technology, rapid employee turnover and many other reasons lower the entry threshold of the industry. Moreover, given that the related policy becomes stricter, the offline entertainment industry is definitely facing a severe crisis.

However, challenges come with opportunities. Due to the development of digital techniques, such as IOT and big data analysis, digital platform development patterns on the basis of internet and big data, in which online platforms and offline business entities are closely connected are probably applicable to the legacy offline entertainment industry. The industry can accordingly transform the relationship between users, businesses, scenarios and channels by integrating online and offline activities, which offers new sources of inspiration to and thus reinvigorates the development of the industry.

The essay aims to put forward a multi-sided platform which build the digital framework of physical entertainment industry, briefly introduce its operating model and marketing strategies, analyze the influence of the digital platform development patterns on legacy offline entertainment industry and finally discuss the prospects of development of the industry.

2. Literature Review

Digital platforms dominate the modern business world. Five of the ten most valuable companies all over the world today---Apple, Alphabet, Amazon, Facebook, and Microsoft--generate much of their value from digital platforms. These platforms are also known as multi-sided platforms (MSPs), as they facilitate interactions or transactions between different groups of users.[1] MSPs create value by increasing the number of participants on each side, which is known as "network effects". In detail, larger scale generates more value, thus attracting more participants, which accordingly generates more value. So "network effects" can be seen as a positive feedback circuit which can lead to monopolies.[2]

Nowadays, most of the managers regard modern business environment as interdependent networks of entities connected with each other to generate and capture value,[3] which can be analogous to biological ecosystems,[4] wherein interdependence, networks and partnerships are of great importance.[5][6] New ecosystems are driven by new digital technologies, to which firms within traditional industry structure need to adapt,[7] so do the venues in legacy offline entertainment industry. These changes are generally known as digital transformation.[8] To help enterprises manage their approaches to digital transformation, a pair of interdependent concepts is put forward: Production Ecosystems and Consumption Ecosystems.[7] The former is composed of interdependent relationships in value chains, such as producing and selling products or providing services to customers, while the latter consists of interdependence evolving after the sale of products or the provision of services.[7]

Two kinds of ecosystems are being transformed by modern digital techniques.[7] On the one hand, the features of traditional products and services of enterprises can be significantly enhanced by digitally embellished production ecosystems.[7] On the other hand, with the rise of software, sensors and connectivity, the scope and significance of complementarities, which lie in sets of products or services supposed to be used in pairs, can be extended exponentially, because consumers can connect different digital products together much more easily, while application program interfaces (APIs) enabling software programs communicate with each other further extend the scope markedly.[7] To reactivate enterprises' production ecosystems and participate in new consumption ecosystems, managers need to make good use of their digital envelopes and product-in-use information.[7]

Digital envelopes are digital representations of physical products and their uses, which can be achieved by collecting, analyzing and deploying real-time, product-in-use information of the products' operation and the environment where products are used.[7] Product-in-use information is collected by sensors that can observe the operating conditions of each individual or group of assets, and then analyzed and deployed by software platforms and analysis tools,[7] the process of which is known as internet of things (IoT). Via advanced techniques such as big data analysis and machine learning, various inferences can be deduced from data, which are then fed back into the assets to repeat the cycle.[7] The physical assets themselves can thus be more intelligent and even more subtle data can be provided to their digital envelopes through the repeated cycle.[7] Therefore, enterprises can strengthen their competitiveness in digital ecosystems by establishing their digital envelopes and delivering the product-in-use information into production and consumption ecosystems.

3. Platform Operation

The platform has three broad components: social services, information services, and travel services. By connecting people through social service to providing personal recommendation with information service and travel service, these three components shape up our platform and how it functions. Nowadays, most companies compete within ecosystems. The modern business environment is interdependent network of entities that connect with one another to create and capture value.

3.1. Social Services

The idea of digital platform is to connect people who otherwise were in a digital space on a physical space, the social interaction feature is focused on people who live in the same geographical space.

Accordingly, the platform matches playmates based on their subjective characteristics and User Generated Content besides location, so that teenagers can set their own interest tags to improve matching accuracy, and can set up or join in online communities where they can start activities and find friends.

Overall, the core design concept of the social service section of our platform is to realize social contact in a specific scenario, which is actually physical entertainment, by combining LBS with teenagers' interests in physical entertainment.

3.2. Information Services

For merchants, the O2O business model requires consumers to pay online. The payment information will become an access for merchants to understand consumers' consumption patterns. It will be convenient for merchants to collect product-in-use information such as consumer purchase data through the sensors on the platform and put these data in each user's digital envelope. And then the merchants can achieve the purpose of precision marketing,

retaining original customers and attracting new customers by analyzing and deploying real-time product-in-use information.

For consumers, our platform provides comprehensive and timely merchant information, which can help consumers quickly select and order suitable products or services at an affordable price.

3.2.1. Comment Module

The platform's comment module can be divided into two categories—user's comment on merchant(U2M) and comments between users(U2U). Users can choose to be anonymous when making comments. We develop the structure, function and significance of the comment module from four perspectives:

1) Side: The users and merchants.

2) Service: Comment after experiencing.

3) Data: Score and review of users and merchant; sales data of merchant products and services.

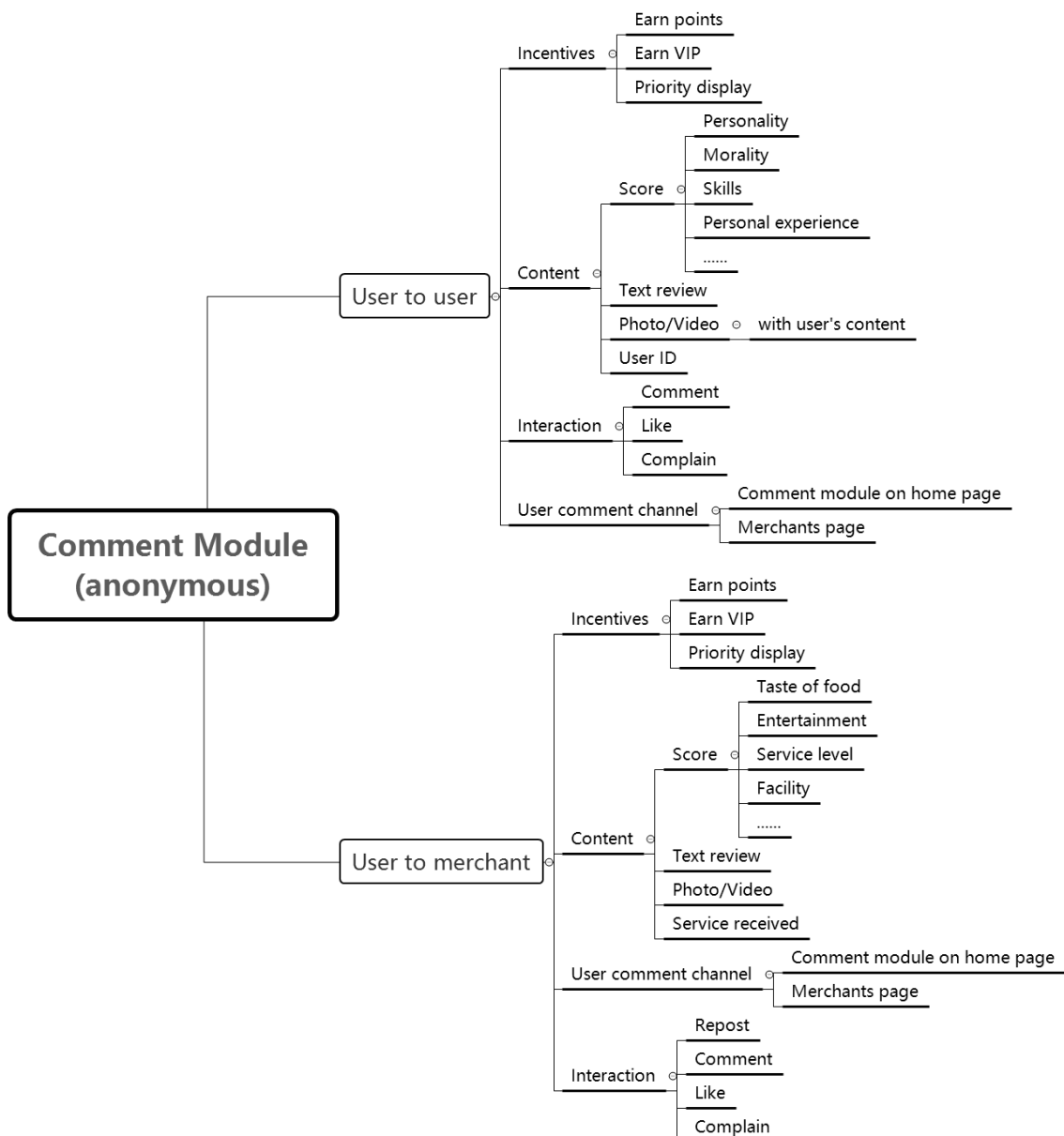4) Value: User risk evaluation system; merchants' services improvement.
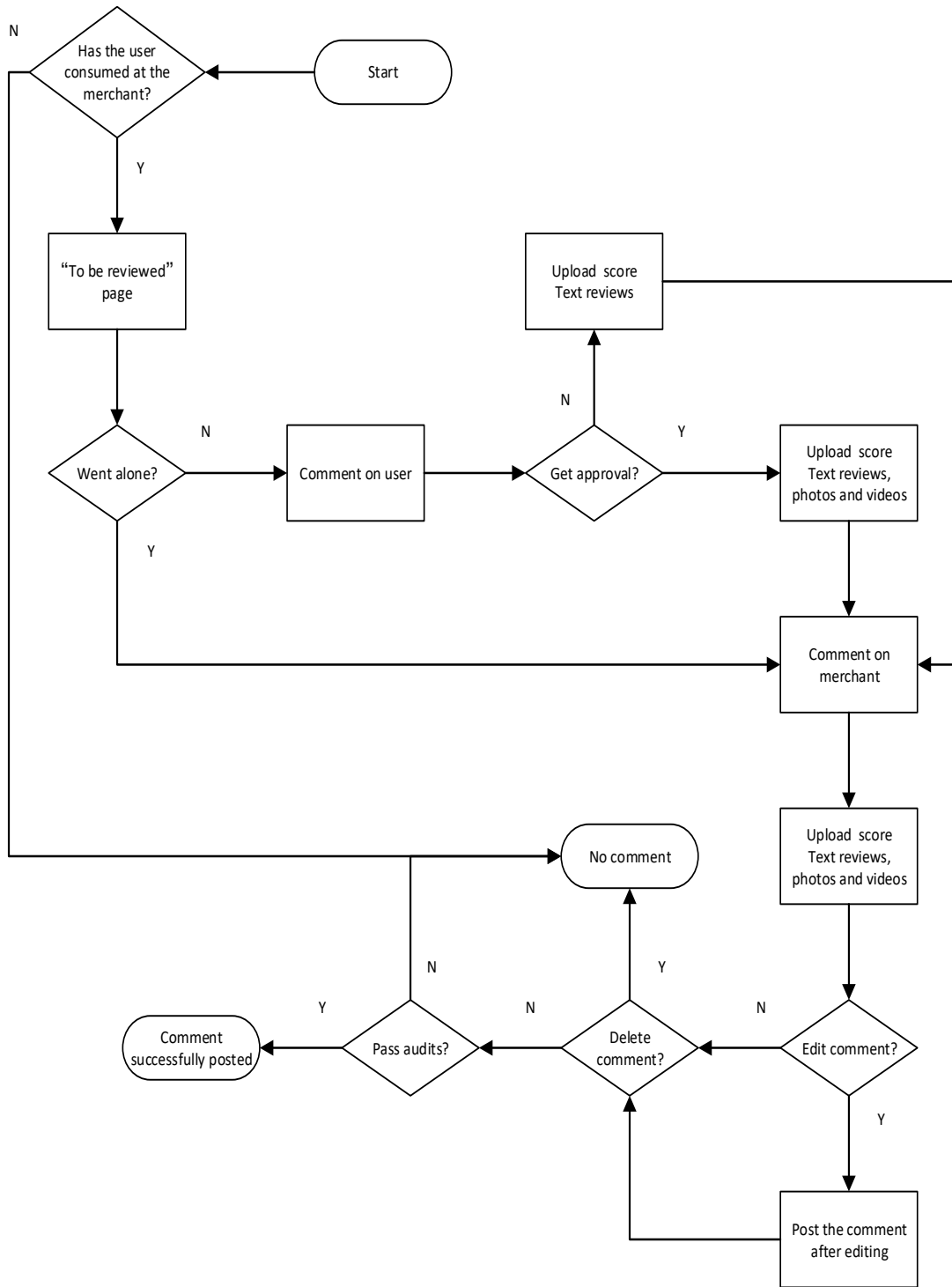

Figure.2 Framework of comment module

Figure.3 Flow chart of comment module

3.2.2. Recommendation Module

We develop the structure, function and significance of the recommendation module from four perspectives:

1) Side: The users and merchants.

2) Service: Providing each user with their personal recommendation.

3) Data: User CTR; user profile.

4) Value: Detailed user profile; accurate recommendation; higher user stickiness.
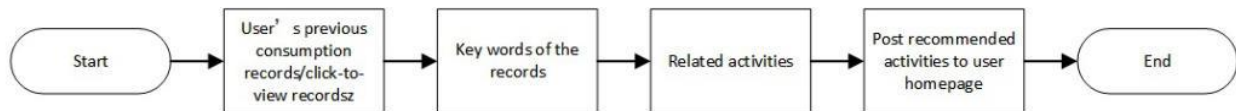
Figure.4 Operation flow of recommendation module

3.2.3. Discount Module

We establish a discount module composed of low-cost subsidies, sign-in subsidies, VIP function, credit joint concessions and other functions to increase user stickiness and retention rate. Our platform also provides users with online booking channels, so that users can conveniently complete payment with platform discounts. We develop the structure, function and significance of the discount module from four perspectives:

1) Side: The users and merchants.

2) Service: Online payment; discount.

3) Data: User consumption level.

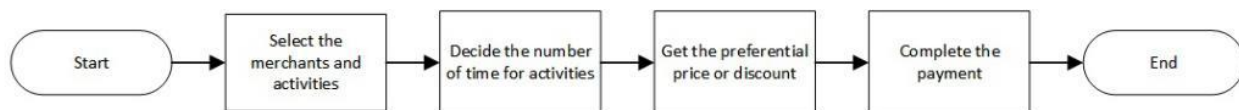4) Value: Higher discounts rate; higher user stickiness.

Figure.5 Operation flow of discount module

3.3. Travel Services

We develop the connection between our platform and travel platform, in which way customers on our platform can be led to the travel platform, and meanwhile it offers our users with navigation and taxi-hailing services. More importantly, users can accurately locate each other when they are separated. In fact, cooperation between platforms can bring more benefits, not only can more users be merged, but also can share user information and data.

4. Positive and Negative Effects on Offline Entertainment Industry

The platform, which focuses on interaction between entertainment providers and consumers, has positive effects on customer, merchants, and upstream suppliers.

For customers, varieties of communities based on different hobbies provide a channel for our customers to share their experience, which helps not only the novices have better understanding of these events, but also those experienced players find people to play with. Secondly, our comment module help customers know about the merchants before arriving. These designs provide an efficient way for customers to find and book specific entertainment projects, which would reduce time cost and stimulate consumption.

For merchants, our platform gives them an opportunity for digital transition by helping them collect customers' data which indicate the operation of every individual or group of assets. The merchants, therefore, can improve their entertainment services for future customers. In addition, many merchants for popular entertainment items, such as Trueman Room Escape and mini bar, are located in residential buildings which are hard to find without online or offline advertisement. While offline advertisement has weak impacts with limited scope and high cost, our platform is a great choice for online advertisement.

For suppliers, the platform can be a sensor to help them have better understanding of the demand of different products, so that they can selectively produce and improve the most demanded ones and thus having positive effects on production ecosystem.

Besides, due to the recommendation services which contain suitable restaurants, shopping malls or cafes close to the pointed merchants, the consumption stimulated by our platform forms cluster effect of linked businesses and drives the industry development.

However, those businesses that have demand for online exposure but have not been found and invited to our platform will get to a worse situation. Thus, in the initial stage of platform establishment, we will try our best to find as many as merchants, not only for avoiding the previous problem, but also for our users to have better user experience.

5. Conclusion

Obviously, under the trend of traditional enterprises transforming to data, the offline entertainment industry will also present a new industry model through muti-side Platform.. As such a platform can provide a simple credit guarantee for people, and can also be used as a more convenient tool for travel planning.

At the same time, this platform can provide merchants with more data by collecting all kinds of information of users' travel, consumption, preference and so on, so that everyone can get more personalized services. In addition, these data will also be available for more sociological and economic studies as reliable data.

Focus on the here and now, some institutions have closed down due to the epidemic, some have been forced to seek online transmission, or have to develop online products due to the stagnation of traditional business. Under the pressure of the epidemic, offline cultural consumption supply began to try digital transformation. Even after the end of the epidemic, offline cultural enterprises have to face the problem of how to expand diversified business models and form diversified profitability, so as to improve the ability to resist risks in the future. However, many enterprises in the field of traditional culture production did not have a comprehensive understanding or preparation for digitization before this. At present, many digital cultural industry projects are typical representatives of attention economy or flow economy. From the perspective of complex functions of culture, the realization of its economic value is more limited to entertainment functions or to meet primary consumption demands.

With eyes toward on the future, online and offline services and experiences will break the antagonistic relationship and achieve win-win results. Data intelligence will bring consumers offline, enabling offline businesses to provide consistent and efficient services and experiences to users with different needs. The integration of digital technology and culture has gone through the development process from creative means and media to product formats, profit models and management thinking. In the future, people will have not only simple recreational activities, but a higher quality of life service.

Acknowledgements

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