

## IMPROVING DIGITAL PLATFORMS AND B2B2C STRATEGIES FOR CROSS-BORDER E-COMMERCE

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### ABSTRACT

Every country is trying to improve local economy and support the people in post covid pandemic. We also lost concentration in Cross-border e-commerce. Commerce transactions between the China and Thailand are growing steady based on China's "Belt and Road" policy and the background of Thai Industry 4.0. To improve the Cross border commerce, one shall understand the culture, consuming methods, demands, languages used, money handling issues and cumbersome cross-border trade policies between the two concern countries. Post covid pandemic requires digital platforms which can support cross border commerce quality aspects. To solve the existing problems in Business to Business to Consumer (B2B2C) this article analyze China's Guangxi and Sichuan Free Trade pilot zone and digital platform possibility to increase the Commerce links. Regarding the digital platform we recommend WeChat platform for communication, multiple languages, Location based services, Cloud Services, Management information system, easier programming languages to modify in future, backstage process and so on. Cross Border E Commerce can utilize the properties of WeChat Mini and serve in overcome the language gap, Cross Border transfer reference numbers, post sales services and act as a better Interface between Thai and Chinese Merchants. Since B2B2C business model required data packets storage until the purchase finish with mutual merchant satisfaction acknowledgement. This confirms the critical quality measurement of B2B2C business model in Cross Border E-Commerce.

**Keywords:** Cross-border e-commerce, B2B2C, Pilot Free Trade Zone, Set Theory, WeChat Mini.

### I. INTRODUCTION

In 2020, China's gross domestic product (GDP) will grow by 2.3% year-on-year, exceeding the threshold of 100 trillion yuan (\$15.42 trillion), reaching 101.5986 trillion yuan. The results of the seventh census showed that China's total population in 2020 was 141.78 million. In 2019, China's per capita GDP exceeded US\$10,000, which is 13.5% higher than the average level of upper-middle-income countries. China has the world's largest and most growing middle-income group. This group has more than 400 million people, which means that China has the world's most growing demand market, and the advantages of a super-large-scale market are obvious.[1] With the improvement of per capita income, the adjustment and upgrading of consumption structure will reasonably position Thailand's market position and product advantages and disadvantages. To win the market share of Sino-Thai cross-border e-commerce, it is more important to find a feasible development path. This article makes an in-depth comparison from five aspects: policy data analysis, product selection, sales platform, logistics method, and innovation challenge. At the same time, statistics from the past five years (from 2014 to 2018) show that China's outbound travel market has continued to grow steadily, with an average annual growth rate of 8.8%. In 2018, there were nearly 150 million Chinese outbound tourists. Excluding visits to Hong Kong, Macau and Taiwan, the number of outbound tourists accounted for 50-60%. It was found that the number of outbound tourists increased by 20% annually. The Taijing Compass Research Center predicts that Chinese tourists' overseas travel will increase by 6.9% annually, and the number of outbound

tourists will increase from 160 million in 2019 to 334 million in 2030. Among the Chinese who travel abroad, 80% were born in 1980-2000, that is, they are 20-39 years old, are in the working stage, and have a relatively strong ability to accept new things. They can search for information online and travel freely. Looking ahead to the next 10 years, there are now approximately 167 million people in the Z era and the age group between 10-19 years old, which has become an important demographic structure and will create approximately 33 million new tourists. [2] In terms of market share, although Europe and the United States are still the most important markets for China's cross-border e-commerce at present, ASEAN has become China's largest trading partner. Nearly 40% of the surveyed companies have entered Southeast Asia, surpassing Japan, South Korea and Russia. In addition, less than 20% of the companies entering Africa, Latin America, the Middle East and other markets have great room for cooperation in the future. In 2019, the total value of imports and exports between China and countries along the "Belt and Road" reached 9.27 trillion yuan, an increase of 10.8%, which was 7.4 percentage points higher than the overall growth rate of foreign trade.

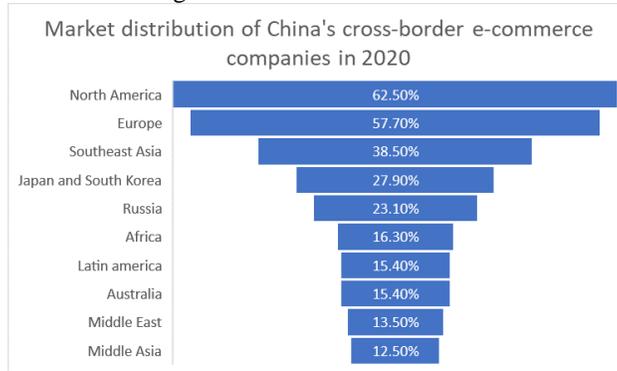


Fig.1 Market distribution of China's cross-border e-commerce company analysis in 2020 [3]

As of January 2018, according to reports, the most used Internet devices for Thai users are mobile phones, followed by laptops and desktops. This has created a very good network environment and audience base for the development of e-commerce and cross-border e-commerce in Thailand.

Number of internet users in Thailand increased from 36.5million in 2017 to 48.4million in 2020. According to prediction of Statista research institute, by 2023 this number may increase to 57.4 million.

With the support of relevant background, we have created a B2B2C cross-border e-commerce platform, mainly to provide a viable, elegant and secured platform for young groups. The platform interface is simple and practical, divided into four parts: homepage, small video, discovery, and personal center.

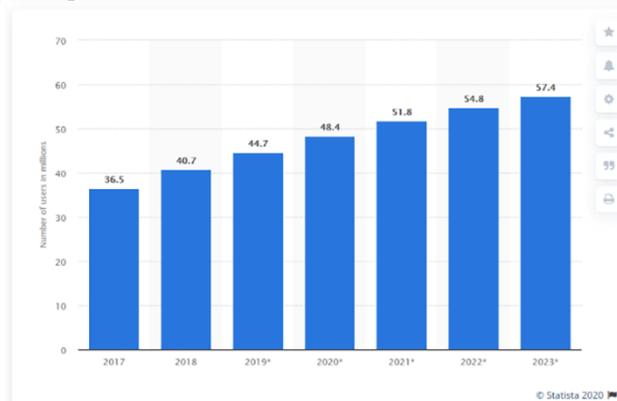


Fig.2 Number of internet users in Thailand from 2017 to 2023 (in millions) [4]

**II. RELATED WORKS**

Scholars from different countries are studying the feasibility of using Cross-Border E-Commerce Models to export local products and the specific impact they bring. This includes the need to establish free trade zones and pilot cities for Cross-border e-commerce.

***Research on cross-border e-commerce B2B export business***

The research results in the actual field are mainly based on industry consulting institutions and enterprise research and policy research departments of the energy sector are the main objects of the research. The research focus is on tracking study of cross-domain development especially Cross-border E-Commerce and cross-border logistics market. The representative research result of the media research [5] is the "Research Report on China's Cross-Border E-Commerce Industry". Accenture

and Ali Institute jointly released "Global Cross-Border B2C E-Commerce Market Outlook: Digital Consumption Reshaping Commercial Globalization." The Development Research Center of the State Council, the Institute of International Trade and Economic Cooperation of the Ministry of Commerce, and the China International E-commerce Center of the Ministry of Commerce conducted follow-up studies. The research data of these institutions includes effectively supporting market research and judgment.

**Cross border E-commerce Through Internet Business**

The research data [6] shows that the Asia is ahead of North American region and European Region. Institutions research includes Digital platforms, Internet as interface and Growth rate between the Europe region, Pacific Region, Asian Region, North America and Latin America. Efficiency is shown and calculated in Billion \$ business transactions. The Research data also mentioned the advancement in technology and payment system helped the market to increase the transactions and judgment on products.

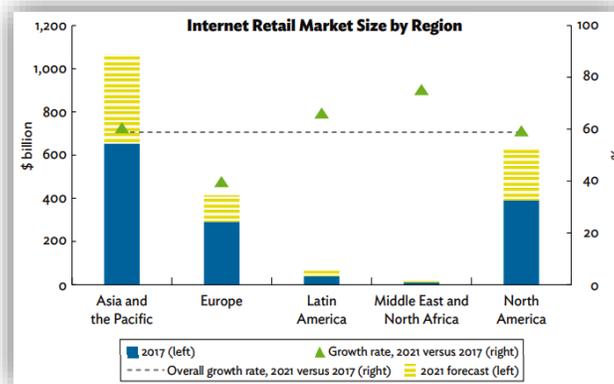


Fig.3 Internet retail market size by region (in \$ billion)

**Academia's research on cross-border e-commerce**

Estrella Gomez-Herrera, Bertin Martens and Geomina Turlea [7] investigated the distance association with online trade in physical goods. They used data from an online consumer survey panel on online cross-border trade in goods in a linguistically fragmented EU market. The analysis confirms that distance-related trade costs are greatly reduced compared to offline trade in the same goods. However, language-related trade costs increase. Moreover, online trade introduces new sources of trade costs such as parcel delivery and online payments systems. On balance, there are no indications that online trade is less biased in favor of home market products than offline trade. They examined options available to policy makers to boost cross-border e-commerce in the EU Digital Single Market. 1% increase in the use of efficient and flexible cross-border payment systems could increase cross-border e-commerce by as much as 7%. They also show that online trade gives a comparative advantage to English-language exporting countries. Zhang Bin Liu Xiaojun Tao Tao (2015) [8]"Current Situation and Operation Mode of China's Cross- Border E-Commerce Logistics" recommends starting with specialized logistics business, innovating the service model to support logistics enterprises, efficiently operating cross-border e-commerce logistics, and offering high quality and low price.

Michael Porter's Five Forces model [9] was proposed by Michael Porter in the early 1980s and has a global and far-reaching impact on corporate strategy formulation. If used in the analysis of competitive strategy, it can effectively analyze the competitive environment of customers. The five forces are: the bargaining power of suppliers, the bargaining power of buyers, the ability of potential competitors to enter, the ability to substitute for replacements, and the current competitiveness of competitors in the industry. Changes in the different combinations of the five forces will ultimately affect changes in the industry's profit potential.

Michael Porter's Five Forces model is used in framing this our business model, which is shown with the parameters in fig.4.

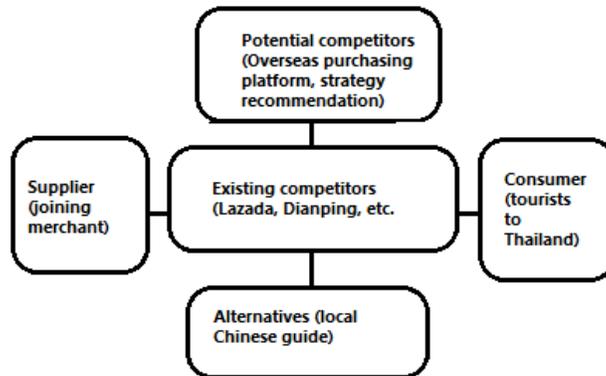


Fig.4 Michael Porter’s Five Forces model analysis on the proposed business model

Although there are some products that provide similar services in the market at this stage, most of them have problems. APPs can choose languages that lack Chinese options, overpriced, do not support China’s popular Alipay, WeChat payment and other online payment models, and Chinese tourists have no after-sales service. The existing competitor type, it’s application, characteristics, demerits and possible solutions are shared in the Table.1. The Problems are emerging one after another. To a certain extent, the perfect "Chinese tourists go to Thailand one-stop online purchase payment distribution after-sales" APP is still in a state of market vacancy.

Type	Represents APP	Characteristics	Disadvantages	Solutions
Food Introduction APP	Street Food Bangkok	Introduced to the food restaurants that Thais often visit	--Single function, language --Single category food shop only --fewer merchants --no online purchase functions.	Our platform invites as many quality merchants as possible, in addition to displaying the business address, but also provides online purchase payment function. and design for the full Chinese, simple and intuitive design in line with Chinese consumer consumption habits, for the WeChat and Alipay payment method. and provide a series of activities for users based on LBS.
Dining, shopping APP	Wongnai, Foodpanda Lazada Shopee	The app is highly labeled, only for sales services or only for shopping platforms	--Single function, language ---Can’t accurately place orders want goods --Payment method single.	
Strategy APP	Dianping	mention for tourist cuisine, strategy	--Users cannot purchase goods from the platform. ---Too much information to pinpoint customer needs	

Tab.1 Analysis of existing competitor

From the information discussed above, the components or strategies shall be used to make the platform credible and stronger. In the application user can access and find these components given in the table.2 for better utility or experience.

Small video drainage	In the current depression of the overseas tourism industry caused by COVID-19, the platform uses the method of shooting short videos of local characteristics in Chiang Mai, through the circle of friends, TIKTOK, Weibo and other channels to attract potential consumers and conduct user drainage.
Scan code authorization	After scanning the QR code of WeChat mini program, the user authorizes WeChat to log in and enter the home page interface of the platform

Matching the relative product with the user	The WeChat mini program search bar is at the top of the home page, and the platform supports three search methods: text input, voice, and sweep. The shopping cart button on the left side of the search bar can jump directly to the shopping cart page.
Display the found Information available for the Product	After the user enters the search keyword, WeChat mini program will jump to the search page, display the search results in the order of the store's credit rating, click on the product picture to view the product details, and you can purchase the store location information and route planning as needed.
Related products and good store recommendations	The user can view the "Star" shops on the current platform in the scroll bar on the homepage. If the homepage slides down, you can view the recommendations of nearby good stores, or you can choose to enter the category product recommendation page. The small video and discovery interface can view travel guides and platform product evaluation.
Complete online merchandise order	After the product selection is completed, users can enter the shopping cart page and place an order online through the platform. There are two ways to pick up the goods at the store and the platform. The online payment platform will provide users with exclusive platform offers.
Inquire about the completion of the transaction, make an evaluation or after-sale	Users can click the personal center interface to view the order completion status and logistics information. After the transaction is completed, if the product has no quality problems, the product can be evaluated. If there is a quality problem, you can click after-sales to contact the manual customer service.
Shoot high-quality feedback videos to receive points or voucher rewards	After completing the transaction, the user can shoot a product feedback video or write some travel notes to upload to the discovery. WeChat mini program background will conduct quality evaluation according to the heat and will issue points or vouchers to the user as a reward for the next consumption.

Tab.2 User function introduction

**III. USING SET THEORY ON THE COMPONENTS OF B2B2C:**

In Business or commerce many people already used Set Theory or Rough Set or Set functions or methods to fix parameters in business, improve the market, predict the values, chose the correct supplier, etc. M. Aghdasi et.al [10] proposed a business framework to find and fix critical Business Objects using rough set theory. They use set theory to Identifying critical business objects which causes to fix the critical business rules. Fixing the Critical business rules is a new concept in business process domain. By identifying and fixing the critical business rules will results in expected business results. Finding, analyzing, modifying and optimizing the critical business rules are done through the set theory to attain the business goals. B. Chang et.al [11] proposed a study using set theory to build a model of supplier selection to improve organizational capability and competitiveness. Chang also applied this model to solve practical problems in business to find the supplier selection in a closer look. The critical criteria concept is used for supplier evaluation. This study used the questionnaire, which was developed with three classes. The questionnaire differentiates class 1 with excellent firms, continued by class 2 with common firms and class 3 with disappointed firms. All these are related to the suppliers, which is evaluated by participants. Chang used rough set theory (RST) to analyze the results and framed the rules of supplier selection. The supplier selection is an important business attribute which can reduce the problems and improve the decision-making. Using the Rough set theory on the results of the questionnaire data was admitted as the main analysis for business enterprises to fix the optimum supplier which resulted in quick and accurate business framework in a business organization. Another study was about selecting business partner, which is proposed by Y. Zhang et.al [12]. This work was differentiated with the term business partner dynamic selection using Rough Set Theory. Selecting an ideal partner is a crucial step of successful business. Constructing a business alliance can influences the parameters such as efficiency, economy, operations, co-ordination, decision, maintaining the business, sustaining and so on. This study proposed a dynamic partner selection for the business model which included parameters such as collection module, rough set processing module, partner selection module, and result assessment module. Methodologies were applied in this model such as meta search engine to find the scope of potential partners, rough set theory was used to evaluate indices and data analysis was done on result assessment and feedback. Ninda et.al [13] proposed a sustainable business process model considering a set of rules in business sustainability. The change of business process shall be relying on the evaluation based on sustainable facts affecting the business throughout the business years. Ninda and authors confidently proposed that the sustainability metrics shall depend on the quality measurement frameworks and quantity measurement frameworks. The work used the event log in process mining as a reference for evaluation to align the business process related to the set of sustainability indicators. The set of parameters based on the sustainable business frameworks focused on the classification and duration of the business benchmarks. After understanding the parameters plays a major role in the business, we use the above references and make sure our process also required a set of parameters relating

our commerce platform to our business concept. We brief our understanding that related parameters are given as Non Empty sets. Let us consider Set “Q” indicates the quality of the cross border business quality aspects or metrics [14], Existing Model’s Quality aspects as Set “E” and WeChat Mini Components “W” as three different sets. let us try to understand, relate and evaluate the business strategy’s strength in this work. Let us process this section with the given below Set Theory [15] operations for the understanding process. For qualitative purpose we shall use the Cross Border Commerce quality aspects, Number of the parameters we are relating in this section shows the quantitative aspect. These two aspects will be related to the Existing Models as the Gold standard comparing to the WeChat Mini platform. Three Non Empty sets are finalized and given below as Set Q is the Quality indicators or parameters of the Cross Border E-Commerce, Set E is the Existing Model’s quality indicators or parameters and Set W is quality indicators or parameters available in WeChat Mini Platform.

Q = {Good required, Intention of Buying, Supplier detail, Information available for the Product, Potential Competitors in the Market, Digital Security in networks, Digital Payment possibility, Evaluation on Products, Evaluation on digital transactions, Product feedback in Digital survey or digital modes, Digital Feedback on transaction, Global Language availability and options, Search Engine based Recommendations, User-Guide in current trend, Post-Sales services, Compatible Comparisons, Global Currencies, Global Platform, Global Policies, Customized Market Research}.

E = {Good required, Supplier detail, Information available for the Product, Available Competitors, Digital Payment Possibility, Regional Language, Customized Market Research, Product feedback in Digital survey or digital modes}.

W = {Good required, Intention of Buying, Supplier detail, Information available for the Product, Potential Competitors in the Market, Digital Security in networks, Digital Payment possibility, Evaluation on Products, Evaluation on digital transactions, Product feedback in Digital survey or digital modes, Digital Feedback on transaction, Global Language availability and options, Search Engine based Recommendations, User-Guide in current trend, Post-Sales services, Compatible Comparisons, Customized Market Research}.

Count of  $Q \cap E = 8$  (1)

Count of  $Q \cap W = 17$  (2)

Count of  $Q \setminus E = 12$  (3)

Count of  $Q \setminus W = 3$  (4)

Count of  $Q \cap E \cap W = 8$  (5)

Count of  $Q \cup E \cup W = 20$  (6)

Comparing the resultant values in the basic set operations between the B2B2C and Cross Border strategies the count of the Common elements or Intersection [16] is proportional to the quality of Cross Border Commerce platform components.

In the same way differences in the equations 3 and 4 denotes the weakness in the system or platform. From the given above count of Intersection and differences of the results of the Sets Q, E and W shows the quality analysis and quantitative analysis as well. The Success rate of the business model or concept is directly proportional to the quality based parameters available in the digital platform which support the commerce platform. The Figure 4 shows the above equation into a visible analysis format. As the Standard count is 20 Components and WeChat Mini platform is almost close to the gold Standard. The Existing Competitors didn’t reach the half of the gold standard component counts.

### B2B2C Strategies- Components Count

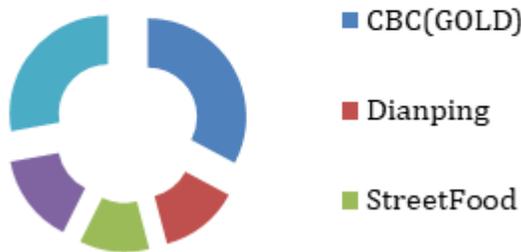


Fig.5 Analysis of competitor’s component counts

#### IV. RELATED TECHNOLOGIES

Through Porter's Five Forces [17] analysis of the business model, the improvement space for the existing competitive platform is determined. The technical support required by cross-border e-commerce platforms is particularly important. With the inspired by the research of online content mining by these two researchers, Hsiao Y H, Chen MC. [18] small videos will become the carrier of online content and connect to online content mining to increase customer loyalty. Technically, it also

poses challenges to cloud storage and computing functions. Regarding the forward-looking design, full consideration is also given to reserved interfaces for large-scale cross-border security eID services for e-government and e-commerce according to Blažič, B. J.'s research. [19] Strategic innovation through business intelligence to link competitive forces and profitability suggested by Ho, James K. [20] The deviation is measured from the perspective of consumers, distribution centers and driving factors to improve the economic efficiency of the enterprise and customer satisfaction which was discussed in Zhang, Xiaheng, and Wenying Zhu. [21]

### ***WeChat Mini Program (Platform)***

WeChat Mini Program [16] is developed based on WXML and JAVA script. WeChat Mini platform is building an ecosystem for online service. The modules running within WeChat Mini can be interfaced with the offline world. WeChat allows outside party or third party companies to develop Micro Programs providing advanced features or properties to the users. This empowers the users to run within the APP.

The WeChat Mini is the platform and technology supports the objective of cross border commerce. WeChat Mini shall provide the users with multi tasking experience. By WeChat Mini platform, a rich digital ecosystem related to the developer mode is born. WeChat Mini has the common characteristic with Apple's APP ecosystem. Apple's App considered WeChat Mini as "app within an APP" with 2 benefits, such as an instant loading and ease of use. This App didn't take the memory from the mobile phone or digital gadget. This technology enables WeChat to combine features and capabilities into a single stand alone mobile APP. Users never need to leave the WeChat application, same time the user can use other platforms at the same time. For all these fruitful reasons, WeChat Mini turns into a favorite app in Digital E Commerce App in any store. The cross-functionality ecosystem around the App is progressively positioning the location, language in this "super APP" as "(social) Operating System" for everyday life.

There are some differences available between WeChat Mini and H5 are given below:

- (1) Different development tools: The shell that H5's development tools rely on browser in mainstream. The development of small programs is based on WeChat developer tools, which can only be opened in WeChat. It can synchronize a complete set of processes such as local file + development and debugging + compilation + preview + upload + release.
- (2) Different development languages: WeChat Mini Program has developed a set of WXML markup language and WXSS style language, instead of directly using standard HTML5+CSS3.
- (3) The component package: There are many components of the native APP that are independent from the applet. In HTML5, functions that need to be simulated can be called directly in the applet.
- (4) The domain name configuration: Ordinary H5 mobile phone websites only need customers to register their own domain names and resolve them to use. The domain name used by the WeChat Mini Program must be filed and https must be added.
- (5) The user experiences: The applet is implemented based on the WeChat client, the analysis is optimized, and many resources can be cached. Therefore, it feels smoother when using small programs. H5 is still a web page in essence and needs to request various image style resources and then render in the browser kernel, so the user experience is poor.

In short, the WeChat applet integrates many components of the native APP. In terms of experience and page fluency, it will be much better than HTML5. In terms of running speed, traditional HTML5 is limited by the network environment when loading. It needs to load HTML, CSS, and JS in sequence, then return the data, and finally render the page and display it in the browser. Users often have to wait a long time, and the experience will be affected. In contrast, the two threads of the applet: Appservice Thread and View Thread will be simultaneously loaded, parallel loading, and even Appservice Thread will be executed earlier, when the view thread is loaded, notify Appservice, Appservice will use the prepared data with set Data The method returns to the view thread. This optimization strategy for applets can reduce user waiting time and speed up the response speed of applets.

### ***Management Information System***

Through the general design of the "WeChat Mini Program"[23] management information system, we hope to be able to present a more complete relationship between the organizational modules, and hope that the specific implementation of the information flow through the conceptual design diagram, logical design diagram, etc. can be predicted.

- (1) **Database design of management information system-ER diagram.**

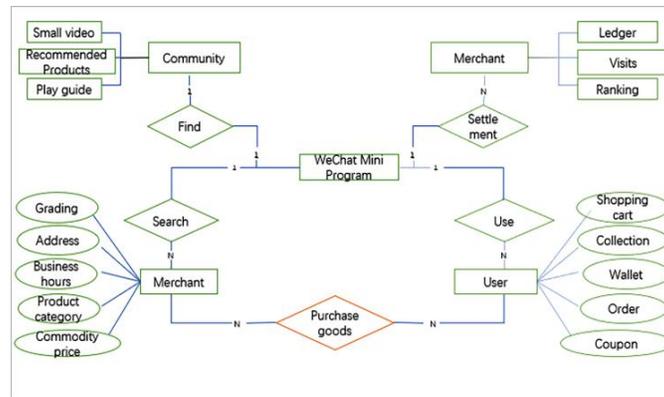


Fig.6 Database design of management information system-ER diagram.

**(2) Database design of website management information system:**

Regarding database design, the website management information system is realized through the mature developed database model of Phpmysql database system. In this database, we have added an account management app, a geographic location-based Baidu cloud app, and a payment method Alipay app to implement various shopping functions for tourists.

**LBS positioning technology**

Location Based Services (LBS) positioning technology [24] is generally applied to mobile phone users. It is a location-based service. It obtains the location information (geographic coordinates or geodetic coordinates) of mobile terminal users through telecommunications, mobile operator's radio communication network or external positioning methods. On the GIS platform with the support of, a value-added service that provides users with corresponding services.

**Features of LBS:**

- (1) Convenient positioning, LBS [25] positioning technology is located through mobile phones. In theory, if the signal differences of the three base stations are calculated, the location of the mobile phone can be determined. Therefore, if the user's mobile phone is within the effective range of the mobile communication network, the location can be located at any time without being affected by weather, tall buildings, location, etc.
- (2) The cost of LBS [26] positioning is lower. After all, positioning is done according to the current base station. Theoretically, it is only necessary to measure the signal differences of the three base stations to be able to distinguish the geographic location of the machine without interference from weather conditions, high-rise buildings, and geographic location.

**Thinkphp (Backstage)**

(1) Thinkphp [27] is a free and open source, fast and simple object-oriented lightweight PHP development framework. Founded in early 2006, it was released in accordance with the Apache2 open-source protocol and was born for the agile WEB application development and simplified enterprise application development. Thinkphp has been adhering to the concise and practical design principles since its birth. While maintaining excellent performance and minimal code, it also pays attention to ease of use.

(2) The MVC mode of the Thinkphp [28] framework: MVC (Model View Controller) is an abbreviation of model-view-controller. This mode is used for hierarchical development of applications. Model is the part of the application that processes the data logic of the application. View is the part of the application that handles data display. Controller is the part of the application that handles user interaction. The user enters the URL, goes through the framework startup, routing, and distribution to the controller layer. The controller is not responsible for data acquisition to ensure a single intersection for data manipulation. Logic is the logic layer that handles business logic. The commonly used reusable business logic can be abstracted into a Logic, and the Controller can directly call Logic. For simple business, you can directly call Model; if it is necessary to reuse, sort it into Logic. Service is the service layer and provides services for other layers.

In Fig.6 the WeChat Mini Program's the client sends a request to the server, and then the server accesses the method in the controller according to the request, and then find the template in the v layer and the data in the M layer, finally find after passing through the controller back to the client. The source language cannot be changed because of the company policy, in future it may be allowed to edit in other languages as well.



Fig.7 Thinkphp (Backstage) interface

**Tencent Cloud Pagoda Panel**

Tencent Cloud [29] plays the role of "cloud host" in this project. Thinkphp is the background, which is equivalent to software installed on Tencent Cloud's cloud server. The Phpmysql database is also software installed on Tencent Cloud server, which stores small the data used by the program. The foreground and background use php to add, modify, delete, etc. the content in the database. The foreground uses php to access the content in the background database and display it in the interface through the relevant code:

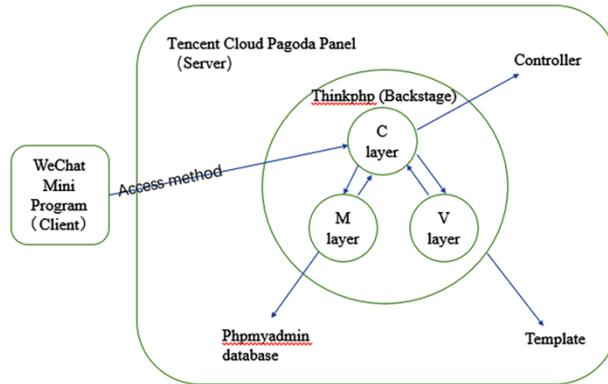


Fig.8 Tencent Cloud Pagoda Panel working principle

**Brief introduction of steps:**

- (1) Build an interface in WeChat developer tool for playing small videos and write relevant code. (Refer to the online case)
- (2) Upload the video to be played in the "File" column of the backend in shown in Fig.8 (Tencent Cloud Pagoda Panel). Source given in Chinese language but the display support's Chinese, Thai and English. It may extended to French and prominent languages later, based on the number of downloads and usage intensity.

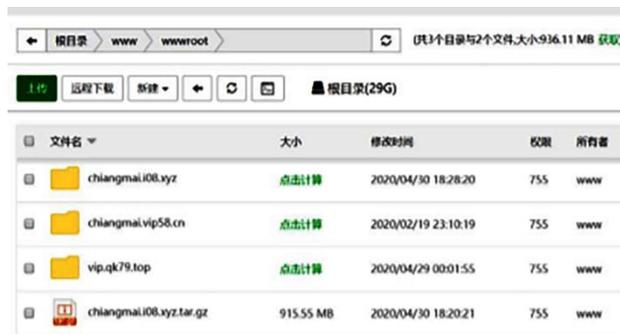


Fig.9 Interface of File structure and uploading

- (3) Call the video via <video src="path"></video> in the video playback interface of the front end (WeChat Developer Tools) is shown in the Fig.9.

```

</block>
</view>
<view class='content' wx:if="{{coupon_list&&is_show_bonus>0}}">
  <view class='contop clearfix'>
    <video src="https://chiangmai.i88.xyz/Public/video/myvideo1001.mp4"></video>
    <view class='v1'>优惠券</view>
    <navigator class='vr' url="/pages/member/coupon-list/coupon-list">
      <text>更多</text>
      <image src="/images/more.png"></image>
    </navigator>
  </view>
</view>

```

Fig.10 Calling in the video

(4) Video playback can be seen in the interface at this time



Fig.11 Video playback facility in the platform

## V. PLATFORM DESIGN

This article is designed to gather local stores in Chiang Mai, Thailand in the form of WeChat Mini Program. Given the cultural differences between Thai companies and Chinese consumers, as well as the difficult language to communicate with, Thai local Information available for the Product has been translated into Chinese as a trading platform that enables Thai businessmen to share Chinese customers, thereby promoting trade between China and Thailand. The platform integrates functions such as ordering, distribution, maps, and recommendations. It can provide convenience for customers who cannot leave the store but cannot go to the store, that is enjoy "one-stop service" from order to delivery and can also provide services to local customers. Recommendations of popular attractions and accurate store location information allow visitors to choose a store in person. At the same time, because Thai businessmen are accustomed to adopting a unique "social marketing" method, their marketing methods are different from the habits of Chinese consumers, and there is no suitable social marketing platform for Thai businessmen to use. Therefore, the WeChat Mini Program promotes the trading behavior of Thai merchant, greatly reducing the inconvenience caused by different languages and marketing methods. Combining geopolitical advantages and the policy bias of the Chinese government, LBS positioning technology serves the B-end merchants of Pilot Free Trade Zone in Guangxi and Sichuan provinces, as well as the C-end customers who come to Thailand for tourism.

(1) Classification of business information: Based on the market pain points that lack the business information aggregation platform of Thailand, we will establish a lifestyle platform that facilitates communication between Chinese customers and Thai business. For Thai businesses, we will share the business information for Chinese tourists in Chinese mode from the aspects of food, shopping, beauty (massage), play, and accommodation, and recommend good businesses to customers based on star ratings and distances. Meet the needs of tourists in all aspects of playing in Thailand. At the same time, we will establish a platform for Thai merchants to settle in, which will make it easier for Thai merchants to communicate with tourists through this platform and optimize the trade between China and Thailand.

(2) Convenience of payment and logistics: We will run the platform "WeChat Mini Program" through WeChat applets and conduct transaction activities through WeChat payment. Through online transactions, it not only reduces the transaction barriers caused by language communication, but also makes the payment of Chinese tourists more convenient. At the same time, we build a Sino-Thailand logistics and transportation platform for tourists, so that tourists can carry Thai food, souvenirs, etc. back to China; they can also enjoy the delicious food from Thailand. The convenience of payment and logistics methods has reduced international barriers.

(3) Build a marketing platform: The WeChat Mini Program applet builds a platform for Thai merchants that can take advantage of social marketing, brings Thai merchants and Chinese tourists together, and provides an exchangeable platform

for trade. At the same time, WeChat Mini Program uses Chinese to face Chinese tourists and Thai to Thai businesses, which greatly weakens the language barrier and promotes trade between Thailand and China.

## VI. INNOVATION AND FUTURE ENHANCEMENTS

Since this article is biased towards the design of business models in the context of policy advantages, the author denotes significance to using data or specific examples to prove the author's point of view. A large amount of data in this article comes from the literature of major libraries, relevant organizations and the research results of e-commerce platform research institutions and government e-commerce research institutions, thus providing a theoretical basis for this; followed by China Customs Database, China E-commerce Research Center and The National Bureau of Statistics collects data in different ways and converts the data for interpretation to enhance the persuasion of the article. Finally, through the interpretation of the policies of the cross-border e-commerce comprehensive test area in various parts of China, and the corresponding strategic recommendations made by Chiang Mai's special products.

Digital Innovation in research is a perspective towards enhancement. In addition, the topic of cross-border e-commerce [30] is very popular, but most of the previous researchers were based on the viewpoint of enterprises, and they studied how companies use cross-border e-commerce. There is a lot of literature in this regard, but from the perspective of the government and the country, there are not many articles that study the policies and strategies to promote the development of cross-border e-commerce export business, especially studies like comprehensive test areas. [31] Since the establishment of the comprehensive examination area in China is not long, the relevant research is feasible.

- Research strategy innovation, after analyzing the traditional cross-border e-commerce B2B, the advantages of exports and the difficulties encountered in the development of B2B exports, the enterprise's electronic thinking, the maturity of service support, the ecologicalization of regulatory methods, combined with the standardization of industry development, innovatively proposed the B2B2C platform construction model to solve related problems.
- The comprehensive utilization of a large amount of data, including a large amount of customs data, including the official data of the Chinese customs, the data of the Thailand Tourism Bureau, and actual cases. Proved the feasibility of this strategy.

The shortcoming of this article is that the developed case is in the stage of testing and platform classification, and its running effect needs to be tested for one to two years. However, relevant predictions are made here based on financial methods. Perhaps in the future, when R&D cases cost to run, we may add the result in future also.

## VII. CONCLUSION

In this article, Commerce transactions between the China and Thailand are concentrated based on China's "Belt and Road" policy and the background of Thai Industry revolution 4.0. We saw in the article that the Cross border E-commerce requires digital platform which can support the culture, consumer habits, demands, expectations, multiple languages, money handling issues and cross-border trade policies between the two concern countries. Regarding the digital platform we recommended WeChat Mini platform for the location-based services technology, management information system, Thinkphp (Backstage) and Tencent Cloud Pagoda Panel are comprehensively applied to WeChat developer tools, and combined with the characteristics of the Thai products. Cross Border E Commerce can utilize the properties of WeChat Mini and serve in overcome the language gap, Cross Border transfer reference numbers, post sales services and act as a better Interface between Thai and Chinese Merchants. Since B2B2C business model required data packets storage until the purchase finish with mutual merchant satisfaction acknowledgement. This confirms the critical quality measurement of B2B2C business model in Cross Border E-Commerce. This shall be improved to extend the region from Thailand to surrounding countries in south such as Indonesia, Malaysia, Brunei, Cambodia, which will increase the South Asian commerce well as ASEAN's post covid-19 pandemic plans to serve better through merchants and consumers with high quality and inexpensive Thai products.

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