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#### Recommended Citation

Leong, Mei Ling; Pan, Shan L; and Huang, JinSong, "Towards A Two-Sided Online Platform: The Case Of China's Largest Online Ticketing Firm" (2013). *ECIS 2013 Completed Research*. 45. http://aisel.aisnet.org/ecis2013\_cr/45

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# TOWARDS A TWO-SIDED ONLINE PLATFORM: THE CASE OF CHINA'S LARGEST ONLINE TICKETING FIRM

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#### **Abstract**

Having established itself as the leader in China's online ticketing industry, Damai set its eyes on the two-sided online platform to facilitate its next growth phase in 2011. Founded in 1999 in Beijing, Damai had 8 million registered customers and 20,000 distribution agents across China. Their B2C implementation strategy was supported by an online B2C portal and IT distribution system, and this strategy was critical in overcoming China's environmental and institutional adversity in the 2000s. As the ticketing industry continued to expand, Damai moved beyond its operating model to engage the surge of competitors who entered into the Chinese market because of the low entry barrier for e-business in China. The new CIO of Damai, Duan Dong Xu, was tasked with the challenge of devising the implementation strategy for the two-sided online platform, which leveraged the current success of the company. This case serves as a vehicle for discussion of the two-sided online platform, specifically from the point of view of a merchant in a traditional seller-buyer relationship. In addition, opportunities, risks, development issues and implementation processes may be discussed.

Keywords: Two-sided platform, e-business strategy and implementation, teaching case.

#### 1 Introduction

On November 5, 2011, Duan Dong Xu began work at Damai as its new CIO and was meeting the CEO and founder, Cao Jie, on the same day. From his new boss's office window, Duan could look out over the bustling morning crowd on Beijing Dongzhong Street, and he felt excited to have joined the largest online ticketing firm of China. From his encounter with Cao Jie during his job interview, Duan understood that Cao Jie intended to take the company to the next level, and Duan was eager to be part of that process. "I was running delivery services for e-commerce companies in 1998, and I saw an opportunity to go into the online ticketing business. Over the years, we have established our name in China's ticketing industry and are quite well known among customers," said Cao Jie, sitting in a high-backed black leather chair opposite Duan. Duan nodded in agreement. "I believe that the next thing we should pursue is to position Damai as a platform provider, just like eBay. I have always wanted to build a platform for our suppliers and agents so that they could interact directly with one another. I think this is the right time to do it." Duan understood that his new boss's aspiration was to expand the company by providing platform services because of its success in B2C business. This would enlarge the scope of Damai's business for future development. He recalled the concept of the "two-sided platform" from the MBA program he had recently completed. "I think what you have in mind is a two-sided platform. It enables direct interactions between multiple types of customers that are affiliated with an organisation. In addition to eBay, there are other examples of platform providers, such as Alibaba, Amazon and Google, thanks to the prevalence of information technology." From the smile on Cao Jie's face. Duan knew that he hit the nail on the head. He could not remember the details, but he remembered that there were challenges associated with the two-sided platform that were discussed in his MBA class. He noted these on his to-do-list because he wanted to make sure that he incorporated them into his proposal. Of course, the first thing was to understand in detail the development of the company to-date. It would be important to leverage the company's strengths and capabilities. He recalled that several of his new colleagues had been with the company for years. He should catch up with them over lunch before the week ended.

# 2 Industry Background

China's ticketing industry has undergone rapid growth over the past decade. Since the advent of the widespread digital distribution of music, music record labels have reported a considerable decline in sales. This turmoil in the music industry has caused record companies and artists worldwide to rely on live performance as their main source of revenue, which resulted in an abundance of performances and concerts. Simultaneously, the Chinese government was refining its cultural and entertainment industry. After the 16th Communist Party of China (CPC) National Congress in 2002, the government launched a series of initiatives to bring formerly government-affiliated agencies, including film studios and TV stations, to the market with the aim of stimulating the consumption of cultural and entertainment products. This favourable environment, coupled with China's growing GDP and rising standard of living — China's per capita income surpassed USD 5,000 in 2011 — contributed to an expansion in cultural and entertainment spending that reached 1 trillion RMB (USD 161 billion) in 2011. This encouraged the development of the ticketing industry in China, which reached 166 billion RMB (USD 27 billion) in the same year. Figure 1 showed various categories of tickets and the market share breakdown.



Figure 1. China's Ticketing Market 2011(The ticketing industry excludes transportation tickets, such as air tickets and train tickets.) (Source: Enfogrowth 2012).

The new government policy and market evolution helped create changes in the value chain of China's ticketing industry. Before this, event organisers handled the design, production, sales and distribution of tickets. Because they generated the tickets, they were also recognised as the suppliers in the ticketing industry. These tickets were then sold through venue operators with whom the event organisers worked, which meant that a customer had to purchase a ticket at a theatre, art centre, stadium or theme park. In some instances, venue operators were also considered to be suppliers when they organised events such as crosstalks (traditional Chinese comedic performances, usually with two performers) and theatrical presentations. Since 2002, new roles gradually emerged in the industry. As the industry matured, ticketing distributors emerged as the mediators between event organisers and customers; such distributors offered a new channel through which customers could obtain tickets. Distributors operated as independent entities and owned networks of ticket-selling points — such as counters — at various locations. The distributors progressively took over the task of designing, producing, selling and distributing tickets from event organisers. In addition, distributors worked with ticketing agents. Agents played a simpler role than distributors — they were re-sellers of tickets situated between distributors and customers — and were important for distributors in expanding coverage areas. Because of their limited capacity, agents seldom approached suppliers directly. For large-scale events, such as concerts, suppliers would grant exclusive rights to a distributor who would then work with a group of agents.

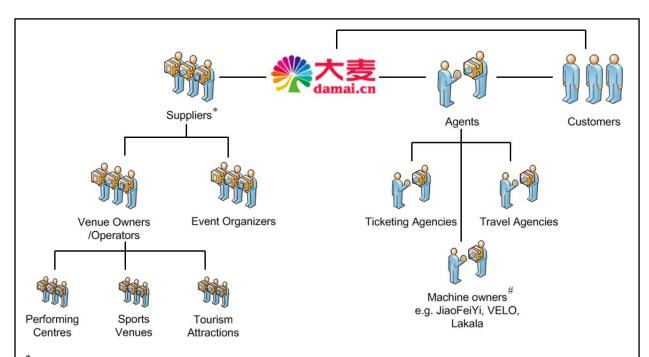
Online ticketing was introduced to China with the advent of the Internet. In the early 2000s, online ticketing was stymied by various institutional deficiencies in China, including poor infrastructure, immature online payment systems, unreliable delivery services and an inefficient regulatory system. Other than in the few major cities, the IT literacy of customers was low. It was challenging to entice customers to pay a "faceless" vendor before goods arrived. To make things worse, China was plagued with ticketing fraud even before the advent of the Internet; when tickets were offered online, these same con artists utilised the Internet as a tool for ticketing fraud, which reduced confidence in online purchasing even more. However, despite the difficulties at its inception, online ticketing began to gain a foothold in the mid-2000s, as e-commerce matured. By March 2011, as China overcame its binding constraints and became the world largest e-commerce market, Damai, China's largest online ticketing firm, had issued more than 10 million tickets.

# 3 Organisational Background

By 1998, IT entrepreneurs in China had jumped onto the bandwagon of electronic commerce. However, because of capital limitations, Cao Jie, the founder of Damai, doubted that he could start an e-commerce company. He conducted market research and found that 90% of e-commerce operations in the US were conducted by express delivery companies. With all his savings, he established a company in 1998 that offered delivery services. When he served a few e-commerce players, he experienced a sudden surge in the demand for his delivery services in one particular area, tickets to "Rhinoceros in Love", a classic drama of modern Chinese theatre. Cao Jie noticed a great business opportunity. It would cost him almost nothing to sell the performance tickets. If he could strike a deal with performance organisers, he could sell tickets "on behalf of them" and remaining tickets would be returned to the organisers. Conversely, the organisers should be happy that they could "outsource" ticket sales and delivery. He believed that the logistics capability of his company would be his main selling point. After a few rounds of negotiations, his idea was turned into a reality. With that, piao.com.cn was born in 1999 as a web portal selling tickets for the first time on behalf of a Russian circus. The marketing campaign by the performance organiser popularised piao.com.cn, which was later reincarnated into Damai (a homophone for "best-selling" in Chinese).

In the beginning, customers visited the company's web portal to place an order for tickets. Damai staff would then contact the customers on the telephone to confirm orders. After gathering the orders, the company would send someone to the ticket-selling points (often at the venue in which the performance was held) to purchase tickets. When the ticket was delivered to the customer, payment was made and the transaction was complete. At that time, ticket design and production were handled by the event organisers and all tickets were pre-printed. If there were printing errors, tickets had to be reprinted and this could cause disruptions in ticket distribution. However, the situation was considerably improved when Damai took over the production of tickets from suppliers in 2005. A ticketing system was developed in-house for online purchases. Later, the company was also put in charge of the marketing and of after-sales tasks, such as ticket verification and admission control.

Within five years, Damai had become the leading online ticketing firm in China and enjoyed a 70% market share that was approximately three times that of its closest rivals (ZhongYan and YongLe). Currently, it had 35 branches in the largest cities in China, a staff of approximately 600 and a distribution network of 20,000 agents nationwide. Figure 2 showed the business network of Damai and the types of suppliers and agents in its network. In addition to musical and cultural events, Damai sold tickets for sports, movie, entertainment and travel sector events. As of the end of 2011, the company had approximately 8 million registered users. As of March 2011, it had been involved in more than 10,000 events that amounted to approximately 10 million tickets being printed. Organisers of major events such as 2008 pre-Olympic test events and NBA China Games had chosen Damai as their exclusive distributor. Its exceptional performance attracted investment from Lenovo in 2004. Furthermore, Ticketmaster — the US-based ticketing company that was the world's largest — has offered to acquire Damai, although it was rejected by Cao Jie more than once.



<sup>\*</sup> Suppliers were ticket generators who sought distributor's (and sometimes agent's) service to sell tickets.

JiaoFeiYi was the operator of third-party payment terminals that were deployed at various locations such as office buildings, neighbourhoods, banks, campuses, supermarkets, etc.;

Lakala was the operator of personal payment terminals that were placed at home for ease of various payments, such as utility bills and credit cards;

VELO was the owner of interactive advertising terminals that were widely deployed at the rapid transit stations.

Figure 2. Damai's business network.

# 4 Development of Damai

#### 4.1 Selling tickets directly to Customers

At the cafeteria, Duan was speaking to a few experienced staff members from different divisions. They had long heard about the CEO's plan and were glad that Duan had joined them and spearheaded such initiatives. Chen, the Senior Manager of Business Development Department, Marketing Division, said:

"In the early days, ticket selling occurred over ticket counters. It was inconvenient and frustrating when there was an overwhelming response to the performances or events. Traditional transactions were limited to an allocated time at specific spots, but an online website could enable purchasing anytime and anywhere. When Damai was first incorporated in 1999, the company launched a simple website that allowed customers to 'order' a ticket online. A paper-based ticket would then be delivered to the customer's doorstep. Later, we launched an

Machine owners were ticketing agents who sold the tickets through their own network of machines/terminals at different locations.

online purchasing portal in 2004. Customers completed the payment online and they could later collect a ticket from our agencies or do a self-printing at Damai's terminals."

The most critical issue in encouraging online ticketing was to enhance customer's confidence in Damai's fraud prevention measures. Considerable efforts have been dedicated to prevent counterfeit tickets and to educate customers. One way to achieve this was through the implementation of multiple security measures with respect to the tickets. There were at least six anti-counterfeiting features on its tickets, such as 2D barcode, which made it difficult to imitate (Figure 3). Damai also worked with venue operators by providing them verification devices (Figure 4) as part of admission control. Moreover, customers were able to verify their tickets by entering a verification code in the online authentication system (Figure 5), which was also available in a mobile version. Customers were encouraged to report ticketing fraud incidents through their website to alert other customers. In addition, Damai committed to ensure the safety of customer's information and was certified compliant with international security standards in 2011. Over time, this strengthened the reputation of Damai as a trustworthy source of tickets.

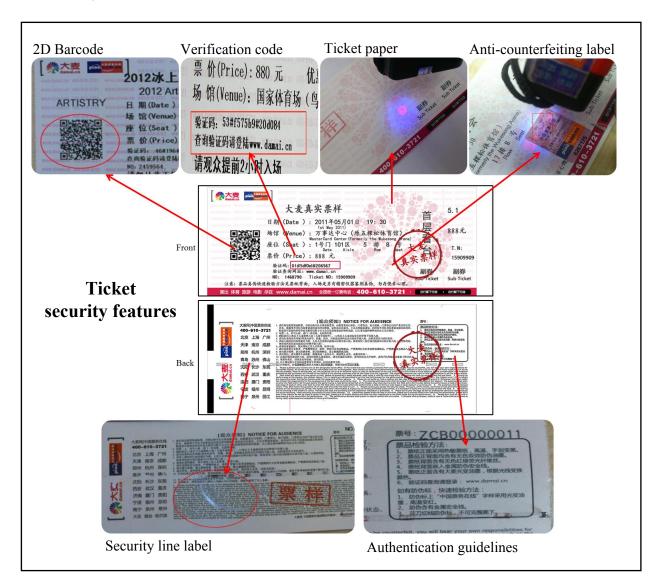


Figure 3. Damai's ticket security features.

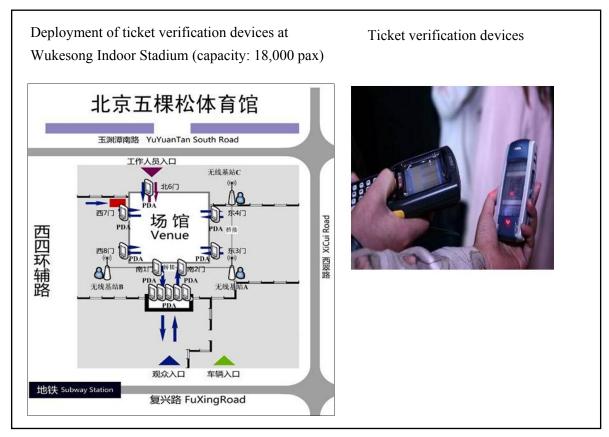


Figure 4. The deployment of ticket verification devices.



Figure 5. Damai's online ticket authentication system.

Simultaneously, Damai prepared for the launch of electronic ticketing and other service-enhancing online features such as online seat selection. In addition to reducing operating costs, these features refined the customer's experience in purchasing tickets. In the past, customers were not allowed to select a seat when they purchased online; Damai was the first to launch the program that enabled seat selection. As the Director of IT Division recalled:

"Damai became more famous in China's ticketing industry in 2009 regarding a concert from Li Yuchun (a famous pop singer of China). Within 24 hours, all the tickets were sold as we launched e-tickets and online seat selections. The ardent fans grabbed all the seats in a day. This was a new experience for them because the entire process was transparent — you were able to see how many tickets are available. As long as you were fast, you could obtain a ticket. This was a fair process."

Damai realised that customer visits to their website were driven purely for functional purposes, which simply means that customers came to the website only to purchase a ticket. This could be a risk if competitors caught up with Damai in the provision of services, pricing or IT capability because customers would have no incentive to stay with Damai. Thus, Damai strove to increase the number of informal visits that customers would make to the website. First, an analysis was conducted to understand a customer's favourite events. To attract customers, the website was categorised into several major groups such as rock music, drama, classics, kids and family (Figure 6). For each group, an interactive sharing forum was provided that facilitated communications among customers with similar interests. In addition to the in-group discussions, customers are able to "talk" to Damai through various channels such as feedback and polling — polling allowed customers to vote for the performances that they wished for. This fulfilled other social requirements of the customers, as the Director of IT Division indicated:

"The consumption of cultural and entertainment product is driven by stimulus. By providing peripheral services, we are part of the stimulus also. For example, because we provide the social network platform, customers are encouraged to make friends as they purchase their tickets. In other words, we are fulfilling other aspects of customer needs in addition to simply providing tickets."



Figure 6. Damai's B2C website home page.

Along with a proliferation of social media, Damai has been busy working on its strategy for "weibo", a Chinese Twitter-like microblog. Since the end of 2010, they have created approximately 1000 accounts, posting messages about events and artists and interacting with customers to create a mass of "followers". Figure 7 showed a screen shot of Damai's weibo (left). This encouraged customers to socialise amongst themselves and promoted information dissemination. On average, Damai attracted approximately 3 million customer visits to its weibo every month. The Assistant Director of Web Division explained:

"In the past, customers have had no further relationship with Damai after they finished purchasing tickets. However, as we launch various initiatives in weibo, a connection can be maintained. For example, they can share a photo of the concert when they are at the scene. In addition, customers can use mobile phone positioning to locate a friend at the venue."

Smartphones offered a new avenue to engage customers. Damai launched the mobile version of its B2C website (Figure 7 middle), which offered an almost "ubiquitous" channel to the customers. With the mobile version, customers could make a purchase and socialise on Damai's social network platform anytime and anywhere, without being tethered to a computer. To further improve the ease of purchase, Damai used existing resources, such as posters. New posters now come with a 2D barcode, which customers could scan and purchase almost immediately, as shown in Figure 7 (right).



Figure 7. Damai's mobile and social network environment.

In addition, Damai turned the bulk of its customers into a "resource". The group-buy feature was incorporated to encourage customers to pull others along to enjoy a discount off the ticket price. Moreover, they could share accommodation and transportation fees when travelling to the venue, as the Assistant Director of Web Division explained:

"We were thinking from a more interactive perspective. We considered the functions that customers would require when they bought a ticket. This function of "yiqipin" (which meant "fight together" in Chinese) allows customers to buy tickets together (for a discount) and to share accommodation and transportation if they must travel to another city for the performance... Customers can take the initiative to obtain others' responses... and they feel a value-added service from these little functions."

### 4.2 Selling tickets indirectly through Agents

"Although our companies have a presence in more than 30 cities, we are definitely not able to cater to everyone's needs at some second- and third-tier cities... The online portal provides only one channel and we want to ensure that we are accessible conveniently, even for customers with no Internet conncetion.." - Assistant Director of IT Division

The above statement explained the reasons why Damai continued to work with approximately 20,000 distribution agents to provide flexibility and convenience in purchasing tickets from Damai. As Damai set up branches in large cities, they also established partnerships with smaller agents to expand service coverage. As shown in Figure 1, certain agents include ticketing agencies, travel agencies and terminal operators such as *JiaoFeiYi*, Lakala and VELO. In large cities, these partnerships served to construct a pervasive network of Damai's service; in smaller cities, moreover, the collaborations helped Damai to penetrate local markets efficiently.

Partnerships with agents relied on an effective exchange of information. In addition to the number of agents and geographical distances, the major challenge facing Damai was differences in established operations and practices. For those agents from the ticketing industry, such as ticketing agencies and travel agencies, the collaborations may differ across cities and with individual agents in terms of agent fee structures, charging procedures, authorisation processes and partnering models. For instance, different agent fees might apply to partnerships with agents from Chengdu compared to agents from Beijing because of the city tiers. Conversely, with regard to agents from other industries such as VELO, they were accustomed to a business operation that was vastly different from Damai. Faced with the diversity of its agents, Damai required an IT system that could link all its agents to its B2C engine. In developing this system, the Senior Manager (Damai) from IT Division (Product Development) pinpointed the basic requirement of the system:

"The agents are located in different tiers of cities with diverse requirements for partnership. Additionally, the operating procedures differ across agents. We must ensure that our system satisfies the adaptability and flexibility demanded of distribution channel exploration at a nationwide level..."

The distribution system, *youpiaotong*, was developed by Damai's in-house IT team. It was provided to the ticketing agencies in the form of a computer and printer. As soon as the IT team installed the computer at agencies' workplace, they were able to access the backend database of Damai and start selling available tickets. In addition to this, the system was installed in the self-purchasing terminals of Damai. These terminals, in turn, were deployed at venues of agents such as convenience stores, schools, hotels and venue owners. User friendliness was a critical consideration to ensure that agents experienced a small learning curve with minimal disruption to their core businesses. Lastly, for agents who previously had their own terminals deployed at various locations (e.g., JiaoFeiYi, Lakala and VELO), the *youpiaotong* system could be installed in existing machines, leveraging the network that they had previously built. Figure 8 showed the different terminals owned by agents. As the Senior Project Manager of the Business Development Department of the Marketing Division recalled, the distribution systems were critical in forming Damai's nationwide distribution network:

"We used to have only dozens of small ticketing agencies in Beijing, but our sales channel department has extended our network. We have a wider coverage, and this would not be possible without our distribution system."



Figure 8. Terminals owned by different agents.

These systems alone did not, however, bring about the attachment that Damai wished to promote in its relationships with agents. Unlike a typical principal-agency relationship, Damai did not plan to commercially exploit its superior position in its connections to ticket suppliers. For instance, they could earn from the difference in commission that they received from suppliers and the commission that they distributed to agents. However, Damai was prepared to share profits with agents to sustain the relationship and grow the agent's coverage, which would eventually complement and expand Damai's sphere of influence in the industry. This message from the CEO was clear to all staff, as repeated by the Senior Manager (Damai) from the IT Division (Product Development):

"We must promote our services and brand. Profit sharing with our agents is necessary. In fact, we are trying to expand our coverage by doing that."

This was implemented through a fair and transparent operation visible in the *youpiaotong* system. As Damai was selling tickets through its B2C website, it allowed its agents to access the identical pool of tickets. Moreover, they adopted a flat structure in their commission sharing with agents — whatever commission was offered by the supplier would be visible in the system. In other words, this meant that agents were enjoying the same commission rate as Damai.

"We hope this increases our agents' competitive advantage. Being smaller, they often give discounts to attract customers... We ensure that this is visible in our system." – Channel Development Manager, Marketing Division (Channel Development Department)

As the working relationship grew over time, it revealed the complementary resources that both collaborating parties could offer. Often, these complementary resources could create synergy within inter-organisational partnerships. For instance, in the partnership with Lakala, Damai could leverage its marketing capabilities. Lakala, conversely, could make use of Damai resources in offering tickets. This has culminated in several marketing events organised jointly by Damai and Lakala. Through such

events, they have explored additional ways to exchange resources between organisations. An example given by the Senior Manager from IT Division (Product Development) was the trading of tickets in exchange for advertising time:

"With a close relationship with VELO and Lakala, we are able to exchange resources easily. We exchange tickets for advertising time ... We have also organised several promotional events jointly. We sponsor tickets as prizes and Lakala helps us to promote Damai's brand."

Damai also worked closely with Sina, the parent company of Sina weibo, which had over 10 million user visits every day. This mass of people has certainly attracted the attention of Damai, as mentioned by the Director (Social Media), IT Division (Research & Development):

"Weibo has a huge user base, and they hope to introduce more services to their customers. There is definitely space for joint efforts [between Damai and Sina]."

The joint development effort between Damai and Sina materialised as a ticketing channel built by the parties. As the Senior Manager (Damai) from IT Division (Product Development) explained:

"If the user comes across the information about a ticket or an event on the Sina website, he/she can purchase it directly from Damai without leaving Sina's portal. Indirectly, Sina has become part of our B2C chain."

# 5 The Next Stage

Apart from enhancing the downstream process of distributing the tickets, Damai has dedicated much of its efforts toward enhancing its relationships with suppliers over the past three years. They offered marketing solutions as a value-added service to suppliers. Based on their experience, they advised suppliers about suitable venues for their events and the right advertising channels to reach their target audiences. In addition to ticket design, Damai has been involved in the design of marketing materials, such as posters and online flyers. They worked closely with suppliers in devising and implementing the online and offline marketing strategies for events, operating as part of the suppliers' marketing team. This has proven to be a particularly valuable service for overseas suppliers who were not familiar with the Chinese market.

However, the development of the ticketing industry in China was closely tied to regional factors. In first-tier cities such as Beijing, Shanghai and Guangzhou, in which huge entertainment venues are concentrated, large-scale events were held, attracting audiences from all over China. Conversely, there were local markets in the provinces in which venue operators served mainly their local populations with smaller-scale cultural and entertaining performances such as crosstalks in Tianjin. Ticketing agents from these locations were therefore more familiar with the local environment and market conditions than Damai, who might only have had a branch of three to five staff members in the city. These agents enjoyed high levels of recognition among local customers and venue operators. With the growing emergence of these second- and third-tier cities, suppliers became increasingly interested in approaching these local agents directly in the cities in which the suppliers would like to hold events. Here, Damai faced difficulties in intercepting the direct dialog between suppliers and local agents.

Duan understood from his colleagues that Damai had a strong foundation in the B2C arena. Nonetheless, if it was complacent with their success in B2C, Damai might lose its leading position when the local agents caught up in the competition. Although no one in China's ticketing industry had initiated a B2B operation, he thought he could draw on the lessons from B2B players in other sectors. In ticketing, B2B would mean enabling direct transactions between suppliers of tickets and agents or

even other distributors. He believed that his team would have no issues in designing the technological platform; the challenge involved the implementation and sustainment of this two-sided online platform as the company continued its B2C business. In other words, as Damai bridged the gap between suppliers and agents, it might lose its advantageous position as a ticket distributor who was the intermediary between the two. Moreover, how could he create value that was not as easy to imitate as the technology platform? He needed to highlight these issues and propose his solutions.

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