Market Penetration Strategy of O2O Service Provider in Platform Business

Yongjune Kim,
SKK Business School,
Sungkyunkwan University, South Korea.
E-mail: kimyj@skku.edu

Minhwan Lee,
SKK Business School,
Sungkyunkwan University, South Korea.
E-mail: wlgid0727@skku.edu

Abstract

Research on O2O service has increased greatly, marketing strategies for O2O service remain to be studied. In O2O market, we explored what strategy should be utilized when new entrants enter the market. Based on structural alignment theory and the defender model, we examined how new entrants should use marketing strategy that emphasizes service attributes. At the results, offline service is more effective in determining the service type than online service, alignable/nongliagnable attributes are more effective for experience/credence. Simulation study also showed that the marketing strategy emphasizing alignable/nonalignable attributes for experience/credence services could obtain higher market share. Examinations of competitive marketing strategies for O2O platform businesses provide new classification method and influential utility of alignability. These results widen knowledge about attack strategies and provide normative suggestions for new entrants in the potential O2O market.

Key Words: O2O Platform Business, Structural Alignment Theory, Attacking Strategy
1. Introduction

With the growth of Uber and Airbnb, a variety of O2O services have emerged. O2O services have created new value and changed the structure of existing industries. O2O services are growing and creating new markets as the acceptance rate of O2O services is gradually increasing among consumers. Especially in China, the O2O market has developed rapidly with huge market size and a high growth rate. New entrants free to enter and exit the market. Although research on O2O service has increased recently, a research of marketing strategies for O2O service remain to be studied.

In this research, we explore differentiation strategies and strategic direction in two services markets: accommodation reservation and car rental. Do successful new entrants offer any particular service attributes to penetrate the market? We empirically analyze consumer behavior using the consumer decision-making model to resolve our research questions. This research provides marketing strategic alternatives for new entrants according to the importance of attributes. We explore the effects of new attributes presented by new entrants and look at changes in the competitive market that result from the proposed attributes. We derive optimal corresponding strategies for defender to new attacker.

2. Literature Review and Hypotheses Development

To assess the marketing competitive strategy of an O2O platform business, we examine the competitive factors that should be taken into consideration when entering new markets. Considering the comparability of service attributes as alignable and nonalignable, we clarify the competitive strategic alternatives for a new attribute. Our results suggest perception changes of new attributes and proportion, substitution, and attraction effects in the market structure. Market dominant companies could actively attack or respond to new entrants, whereas less-dominant companies have to find some strategic alternative to make the best profit in a competitive environment. Also, new entrants could become the dominant player in an existing market and strategically use an attack strategy.

O2O simultaneously include two-side service from providers and consumers. The characteristics of the provider on online side might be identical as the characteristics of the consumer on offline side, however they might also be different. O2O’s service characteristics could differ from both online and offline characteristics since O2O is an intermediary service. In the defender model, the perceptions of the end-user should not be examined from the provider’s point since service types should be applied from only consumer perception. In addition, offline service will be more effective in determining the service type, since it could consider the accessibility of actual users. That is, consumers’ perceptions of themselves as end-users will be determined by the classification of the service type, and the effect of service type on offline services will be greater than on online services. For instance, accommodation
reservations service could be a typical experience service of leisure. Although the online service is a credence service, the offline service could be interpreted as an experience service, and the offline service will have the stronger influence.

H1. Offline service has more influence than online service in determining the service type in O2O business.

Experience service privileges alignable attributes, and credence service regards nonalignable attributes as important (Sun, Keh, and Lee 2012). Generally, consumers tend to evaluate products or services using alignable attributes (Gentner and Markman 1997). When the need for cognition is high, nonalignable attributes become more influential than alignable attributes (Zhang, Kardes, and Cronley 2002). Specifically, as uncertainties increases, the need for cognition increases, which then increases the preference for nonalignable attributes (Sun, Keh, and Lee 2012). The distinction of a credence service is the difficulty in assessing its quality, even after purchase and usage. It motivates consumers to make efforts to minimize losses when purchasing credence service. Even under equivalent conditions of gain and loss, consumers are more likely to avoid losses than acquire gains (Simonson and Tversky 1992).

Therefore, in the terms of structural alignment theory, alignable attributes are more important than nonalignable attributes for experience service (Sun, Keh, and Lee 2012). If accommodation reservation is an experience service, a company with an advantage in terms of alignable attributes with accommodation types and prices, will be able to obtain a competitive advantage. If a car rental is a credence service, a company with an advantage in terms of nonalignable attributes with community events and corporate social responsibility, will acquire a competitive advantage. Therefore, O2O service consumers view alignable attributes as more important for accommodation reservation services since the offline service plays a greater role in consumer evaluation.

H2. O2O consumers evaluate alignable/nonalignable attributes as more important than nonalignable/alignable attributes for experience/credence services.

The defender model (Hauser and Shugan, 1983) compares perceptual maps changes before and after attack to understand optimal market entry strategy. Tracking market changes in a competitive environment, we determine how a new brand influences existing brands. It could provide a interpretation of defending and attacking strategies. The defender model has the strong advantage that the position of both the defender and the attacker concurrently. This methodology could provide not only a defening strategy but also an attacking strategy. Therefore, when alignable or nonalignable attributes are introduced to the market analyzing whether market changes could achieve higher market share provides implications for an efficient strategy. In the simulation study, the alternatives chosen by the defender and attacker present different strategic aspects depending on service type and service attributes.
H3. When offering experience/credence services, it is more effective for new entrants to use alignable/nonalignable attributes rather than nonalignable/alignable attributes.

3. Research Methodology and Results

In pretest 1, we verified the classification of service types and the validity of the target service setting. In pretest 2, we derived attributes and attribute levels for the conjoint analysis. The configuration of attributes and attribute levels for the conjoint analysis profile design is derived by factor analysis based on the attributes importance. In pretest 3, we verified whether level changes in attributes could represent attributes itself. In the main study, we analyzed a consumer perception map of preferences before and after the entry of new attributes using a congestion design and profile presentation. To confirm the appropriateness of the setting for testing the hypotheses, we conducted a manipulation check. We tested the hypotheses using a conjoint analysis and the defender model. In simulation studies using the defender model, we examined the change in market share from the viewpoint of the attacker and the defender.

Pretest 1 (n=51) was designed to explore the classification of service types to reduce subsequent errors because the preferred attributes vary depending on the service. Thus, we checked whether accommodation reservation and car rental services are experience or credence services. Pretest 2 was designed to identify important attributes and attribute levels for the conjoint analysis and to reduce the number of attributes to improve the efficiency of the analysis. This pretest was among respondents who experienced an accommodation reservation (n=41) or car rental (n=35). They evaluated the importance of the attributes in their accommodation reservation or car rental. We conducted pretest 3 (n=54) to verify that a level change in attributes could represent the attributes itself in the conjoint profile design. We examined the alignability of supplementary services that change with the entry of new attributes (those selected in pretest 2). At this time, the alignability of the attribute was presented to the respondent as the lower level of a specific attribute, and respondents evaluated the alignability of the supplementary service by considering all the lower levels.

We used conjoint analysis to analyze the attributes of accommodation reservation and car rental services and performed a profile design. In the main study, we used price with four levels, reputation and reliability with three levels, and supplementary service with three levels. Based on the results of pretest 2, we reduced the number of attributes and the number of levels of each attribute and determined the appropriate difference between levels. Consequently, 16 orthogonal profile alternatives derived from the fractional factorial design. Using purposive quota sampling of undergraduate students and an online survey panel, we collected 162 samples. First, we used the descriptive statistics, frequency analysis, t-tests for group-to-group comparisons, hypothesis testing, and the manipulation check. Next, we calculated the partial value and relative importance of the service type for all respondents. Not only partial
value but also importance of each attribute were derived. Also, change of market share is calculated identifying the changes in new attribute penetration. Considering the changes before and after the entry of alignable and nonalignable attributes, we were able to determine the effects of service type and service attribute.

Hypothesis 1 asserted that the offline service has stronger effects than the online service in an O2O platform business. Both accommodation reservations and car rentals presented above median values (MAR = 5.26, MCR = 4.30), O2O service is perceived more as an offline service than as an online service. Comparing the averages of offline and online influences, we found that offline service is more effective in determining service type than online service (FAR=122.432, pAR=.000<.05; FCR=4.529, pCR=.035<.05; FAverage=50.373, pAverage=.000<.05). Thus, we found that the effect of the offline service was greater than that of the online service for both the reservation service (experience service) and the car rental service (credence service), therefore it supports hypothesis 1.

Next, we tested hypothesis 2, which concerned the attributes that consumers consider important at the point of purchasing an O2O service before and after the entry of new attributes. We compared the importance that respondents ascribed to the attributes by direct answer and the conjoint analysis. In our analysis of the directly written responses, respondents assigned importance to different attributes depending on the service type. Alignable attributes were more important for accommodation reservations, an experience service (t=2.002, p=.047<.05), nonalignable attributes were more important for car rentals, a credence service (t=2.402, p=.018<.05). Thus, hypothesis 2 is supported. These also results show a significant difference in the average comparisons after the entry of new attributes. The results depended on which additional service attributes were added. The results of the conjoint analysis were similar supporting hypothesis 2. In accommodation reservations, an experience service, the importance of alignable attributes is higher, and in car rentals, a credence service, the importance of nonalignable attributes is higher. After the entry of new attributes, the conjoint analysis showed statistically significant differences according to the attribute alignability of the proposed conditions in both accommodation reservations (t=2.806, p=.006<.05) and car rentals (t=2.803, p=.006<.05). Therefore, we conclude that alignable attributes are important for experience services, and nonalignable attributes are important for credence services.

To derive optimal strategies using the defender model, we needed to estimate the utility value of individual respondents. We calculated the relative importance and preference angle of each individual attribute for each company profile to derive the market share using the defender model. In this study, we conducted two simulation studies using the defender model: a comparative advantage condition (attacker position) and a market-dominant condition (defender position). According to simulation study 1 (results from the perspective of the
attacker), market share was the highest (26.51%) when an alignable attribute entered for an experience service, and market share was the highest (35.90%) when a nonalignable attribute entered for a credence service. Also, the effect of the service type on the change in market share had different aspects. When a new alignable attribute entered the experience service market, a substitution effect occurred in the market share of existing companies. Substitution and attraction effects appear when a nonalignable attribute introduced to the market. For credence services, both new service attribute types showed a substitution effect, but it varied. Therefore, alignable attributes for experience services is more effective strategy than nonglignable attributes, nonalignable attributes for credence services is a more effective strategy than alignable attributes. Thus, hypothesis 3 is supported. These results are well explained by structural alignment theory: a market-dominant company indicates the presence of certain established business conditions. A marketing strategy highlighting nonalignable attributes is more effective in defending market share in an established business condition. In a similar vein, the attributes provided by the market-dominant company become a reference point for decision-making, it is more effective for a defender to use a differentiation strategy that emphasizes new attributes not previously provided.

Table 1. Hypotheses Testing Results

<table>
<thead>
<tr>
<th>H1: Offline vs. Online</th>
<th>Experience</th>
<th>Credence</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offline</td>
<td>5.26</td>
<td>2.74</td>
<td>4.78</td>
</tr>
<tr>
<td>Online</td>
<td>4.3</td>
<td>3.7</td>
<td>3.22</td>
</tr>
</tbody>
</table>

Table 1. Hypotheses Testing Results

<table>
<thead>
<tr>
<th>H2: Alignable vs. Nonalignable</th>
<th>Experience</th>
<th>Credence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>19.45</td>
<td>20.57</td>
</tr>
<tr>
<td>After-Alignable</td>
<td>23.97</td>
<td>16.2</td>
</tr>
<tr>
<td>After-Nonalignable</td>
<td>15.9</td>
<td>24.9</td>
</tr>
</tbody>
</table>
4. Conclusion and General Discussion

In this research, we explored what strategy should be used when new entrants enter the market. Empirical results were derived using the sophisticated and sound methodology of conjoint analysis and the defender model. Specifically, we examined how new entrants should use marketing strategies that emphasize service attributes to enter or penetrate the market. In this study, the service type consists of experience and credence services, and the service attribute type distinguishes alignable and nonalignable attributes according to structural alignment theory. We find that offline service is more effective in determining the type of O2O service than online service: a supplier that provides an actual product or service has more influence than one who does not on consumer perception formation in the O2O service structure. In addition, which attributes consumers prefer differ according to the service type. Alignable attributes are more important for experience services, and nonalignable attributes are more important for credence services. Investigating the market share of new entrants through a simulation study, we found that an experience service gains a higher market share when the new entrant presents alignable attributes, and a credence service gains higher market share when the new entrant proposes nonalignable attributes.

This research has some theoretical and managerial implications. First, we have classified O2O services into experience and credence services. That is a meaningful distinction for this emerging business model. We’ve also established that offline aspects of platform business are more important than online aspects in determining the service type. Therefore, our work has extended the academic field by providing new implications for many studies on existing service types. Second, this research has applied and tested structural alignment theory in the new industry of O2O service. It is meaningful that we have applied both online and offline attributes to the existing structural alignment theory of alignable and nonalignable attributes. In O2O service, it is particularly important to distinguish between online and offline attributes, so researchers should apply the alignability of attributes differently to O2O services. We classified the service types and service attribute types proactively through pretests, and our results provide clear direction and interpretations. Third, the literature of marketing competition strategy contains many defender strategies but few attacker strategies. In a new market such as O2O platform business, strategies for an attacker’s position in market entry and market penetration are important. This research investigated the attacking strategies. In particular, we present strategic alternatives by service type and service attribute type, suggesting which attributes new entrants should consider when entering and penetrating a market. We also suggest strategic implications for all players in the market regarding which service attributes to promote. Thus it provides a normative approach to strategic marketing implications for new entrants. According to our results, easily comparable attributes such as price, accessibility, specific properties of the
facility, and a flexible refund policy should be presented for experience services such as accommodation reservations. Credence services, such as car rentals, should offer distinctive characteristics that are not easily comparable, such as community activities, an insurance system, and the provision of legal services. Our results could also be applied to representative experience services, such as restaurants, food delivery, flower delivery, beauty services, and fashion services as well as to representative credence services, such as real estate, social dating, job seeking services, legal services, and medical services.

References