The Market Research of New Oriental Online Education in the Post-epidemic Era

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Abstract：With the COVID-19 occured swiftly and uncontrol lablely, many students lost their opportunity to study onsite. At that time, the online education saved this situation a lot, it not only break the limitations of time and region, but also the listeners can learn at their work flexiablity. As of September 2020, the epidemic in China has been effectively controlled, and offline education has gradually returned to its original state. However, the practice of online education during the epidemic has proved that online education have a huge potential market, online and offline integrated education has become a new trend in education industry. In this report, our aim is to explore which area New Oriental can improve to increase the retention rate of online education customers after the epidemic.

Keywords：Market Research; New Oriental Online Education; Post-epidemic Era

This report aims to explore which area New Oriental can improve to increase the retention rate of online education customers after the epidemic. For this purpose, the report provides research and analysis on the degree of influence of different factors on consumers' intention of choosing online education institutions. The research method is a combination of qualitative and quantitative. First collect secondary data to define the management decision problem and research question, and then collect the primary data that needs to be analyzed through the internet survey. We put forward 6 hypotheses. And we use descriptive analysis method and multiple linear regression methods to analyze our data. The results of the analysis show that people are most concerned about the strength of teachers force and brand awareness, followed by price and teaching hardware. This means that New Oriental needs to put in more capital to improve these four factors.

According to our analysis, our practical suggestions for New Oriental is first New Oriental should Recruit famous teachers to form the effect of celebrated teachers. Second suggestion is New Oriental should Recruit celebrity endorsements and campus agents to increase brand awareness. Third suggestion is New Oriental should use the cost advantage of online education to carry out more promotion activities. Fourth suggestion is New Oriental should continue to investand improve its ECCP Electronic cloud teaching platform and VPS Visual teaching system (New Oriental official website, 2021).

The report also pointed out limitations we have for the research design and data analysis process. Such as the gender and region of data collected from the questionnaire is unbalanced and there are fewer open-ended questions in questionnaire.

1．Introduction

The rapid development of information technology has radically changed the way of acquiring knowledge. Online education allows educational resources to break through the limitations of time and region, so that listeners can learn at their own suitable time. In particular, due to the sudden outbreak of the epidemic, in order to reduce the offline human flow, most colleges and universities choose to delay the start of school and use online courses. Many students have to choose online education, which has led to the

continuous increase in the user scale and market size of the online education industry (Wang, 2020). According to Financial Statements of New Oriental in 2020 (2020), during the epidemic, New Oriental's total revenue has achieved a huge increase. Among them, online education has made a greater contribution to overall performance. New Oriental official website (2021) states that K-12 (Pre-school education to senior high school education) fee-paying student increased 224. 5 percent during epidemic period. The development not only benefits from the expansion of New Oriental's online market, but also from New Oriental's continuous update of technical infrastructure and improvement of service quality in the face of the epidemic. As of September 2020, the epidemic in China has been effectively controlled, and offline education has gradually returned to its original state. However, the practice of online education during the epidemic has proved that Online education have a huge potential market, online and offline integrated education has become a new trend in education industry.

2．Objectives

In order to achieve the sustainable development of New Oriental online education after the epidemic, our management decision problem is 'which aspects the company should invest more in after the epidemic to increase the retention rate of online education customers? Therefore, we need to research the factors that customers consider when choosing an online education institution and the impact of these factors on their intention to choose online education. The research question is'After the epidemic, which factors have more influence on customers' intention of online institution? And we developed six hypotheses based on six different factors.

H1: There is positive linear relationship between convenience of attending class and customers' intention of choosing online education institution.

H2: There is positive linear relationship between brand awareness and customers' intention of choosing online education institution.

H3: There is positive linear relationship between the quality of teaching hardware and customers' intention of choosing online education institution.

H4: There is positive linear relationship between teacher force and customers' intention of choosing online education institution.

H5: There is positive linear relationship between cheap level of online courses and customers' intention of choosing online education institution.

H6: There is positive linear relationship between the enjoyment of online courses and customers' intention of choosing online education institution.

3．Methodology and research design

First, we use qualitative research to analyze the performance of New Oriental's online education during the epidemic period through secondary data, and define the management decision problem and research questions. And we put forward six hypotheses based on the research question.

Then, we plan to use quantitative analysis method to quantify the influence of different factors on the degree of intention of customers to choose online education institutions. Meanwhile,we use cross-sectional strategy because we could only collect the data after the epidemic period.

In the aspect of data collection,we chose the method of Internet Survey. We design the online questionnaire considering it has low cost and high convenience. The questionnaire is formed by dichotomous questions, multiple-choice questions. Likert scale questions and one open-ended question.

We classified interviewees through Dichotomous Question and set different questions for different interviewees. For example, we will ask the interviewees whether they have continued to sign up for online education courses after the epidemic. If they choose yes, we will continue to ask the brand they choose and why they choose this brand. If they choose no, we will ask them thereason for not continuing to sign up online courses after the epidemic. We also set multiple-choice questions to compare the difference between respondents' opinions on the whole online education industry and their specific opinions on the New Oriental online courses. Meanwhile, we use multiple-choice question to ask how much users spend on online education and some basic information about users. Additionally, we set Likert Scale questions to measure the interviewees' opinions on the degree of good of teacher force, brand awareness, enjoyment of online classes, convenience of online classes, and whether the customers think the price of online

education institutions is cheap. And the customers' intention to choose online education. The scale question's data is more convenient for us to code and conduct linear regression analysis.

To collect the data, we use convenience sampling method which by post our online questionnaire on our Wechat groups andmoments. Which is least expensive; least time consuming; and more convenient. The sample mainly consists of our friends and family. The survey was conducted from May 4th to May 20 th, 2021, and has collected 303 groups of data for analysis. The basic information of all respondents can be found in the charts below. It shows that there is 41.4 percent of male respondents and 58.6 percent of female respondents. And the interviewees aged18-23 is 89.16 percent at most, and those aged 24-29 and over 30 are both 5.42 percent. For the identity, 89.66 percent of respondents are college students. 6.4 percent of respondents are graduates with job and have no children. 3.94 percent of respondents are graduates with job and have children.
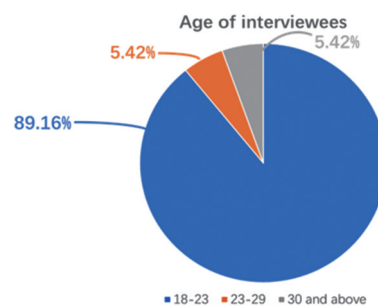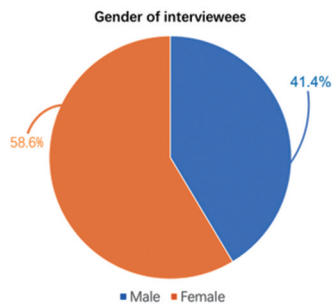

Figure 1. Result of the survey: Gender ratio of all respondents.　**Figure 2.** Result of the survey: Age ratio of all respondents.
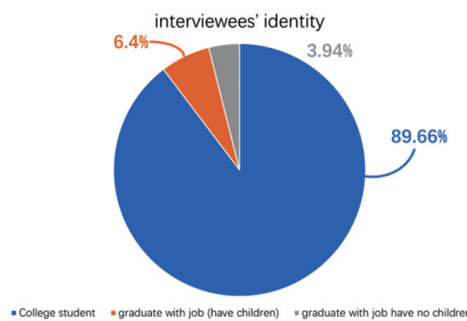

Figure 3. Result of the survey: identity ratio of all respondents.

4. Data analysis and finding

First, we use descriptive analysis method to analyze whether the customers think the teachers force, brand awareness of online education institutions, the convenience of online courses, the teaching hardware and the enjoyment of online education are good, andwhether the customers think the price of online education institutions is cheap. If very bad represents 1 and very good represents 7. And if very not cheap represents 1 and very cheap represents 7. The results show that the mean value of the customers' opinions about degree of good of teacher force is 6.21, the mean value of the brand awareness is 6.14, the mean value of the convenience of online courses is 5.88, and the mean value of whether the price is cheap is 5.97. The mean value of degree of good of teaching hardware is 6.02, and the mean value of high enjoyment of online courses is 5.67. These data preliminary show that customers satisfaction level with these factors of online education is high.

And then we use multiple linear regression method to analyze the linear relationship between these independent variables and dependent variables, and through the coefficient to understand which independent variable has the greater influence on the dependent variable. In the multiple linear regression, the value of R Square in the Model Summary is 0.752, and R Square refers tothe degree of fitting of the regression line to the observed value. The closer the value of R Square is to 1, the better the fitting degree of the regression line to the observed value. Our R Square value is greater than 0.7 which indicates that our Goodness of Fit is good.

In terms of coefficient, among our six independent variables, the P value of the independent variable that customers believe that online education institutions have high convenience is 0.347, greater than 0.05, which is not significant. Therefore, this independent variable does not support our hypothesis and will be discarded. The P value of the variable which is whether the customer thinks the brand awareness of online education is good is 0.054. Although it is greater than 0.05 but it is very approach to 0.05 and is less than

0.1. Therefore, we still retain this independent variable. The remaining independent variables' P values are all less than 0.05, but the coefficient of whether customers think online education's enjoyment is good is a negative number, which is inconsistent with our hypothesis of positive linear relationship and cannot support our hypothesis.

On the rest of the independent variables, the coefficient of variable which is whether customers think the teachers force of online education is good is 0.235, which is the largest coefficient. This indicates that the degree of good of the teachers of online education in customers' minds increases by 1, and the intention of customers to choose online education increases by 0.235. The coefficient of variable which is whether customers think the brand awareness of online education is good is 0.229, which is the second largest. The coefficient of variable which is whether customers think the price of online education is cheap is 0.222, which is the third largest. The coefficient of variable which is whether customers think the degree of good of teaching hardware of online education is 0.175, which is the fourth largest.

In conclusion, we accept the Hypothesis 2, Hypothesis 3, Hypothesis 4 and Hypothesis 5.

Table 4. Coefficients, means and significance of Variables

Model	Unstandardized Coefficients	Mean value	Significance
Do you think the teachers in online education institutions are good?	0.235	6.21	0.001
Do you think online education institutions' brand awareness is good?	0.229	6.14	0.054
Do you think online education institutions' price is cheap?	0.222	5.97	0.001
Do you think the teaching hardware of online education institutions is good?	0.175	6.02	0.013
Do you think online education's convenience is good?	0.096	5.88	0.347
Do you think online education institutions' enjoyment is good?	—0.072	5.67	0.035

5. Conclusion

In conclusion, the aim of our research is to explore after the epidemic, which factors have more influence on customers' intention of online institution? And our research finds that the ranking order of influence on customers' intention of online institution is teachers force first, brand awareness second, cheap level of price third and teaching hardware fourth. This indicates that New Oriental canfocus on investing and improving these four factors. In the aspect of teacher force, New Oriental already has high quality teachers. All the teachers in New Oriental have 985 education background and more than five years of teaching experience. Our recommendation is that New Oriental can recruit teachers with more well-known educational qualifications, such as those from Tsinghua University and Peking University, to form the effect of celebrated teachers, so as to improve customers' evaluation of New Oriental's teachers. In the aspect of brand awareness, our recommendation is that New Oriental can recruit some celebrities to endorse New Oriental so as to attract students to sign up for the online courses of New Oriental (Yuan, 2010). Meanwhile, New

Oriental can develop campus agents in each school to provide students with information to make them understand New Oriental better, and also improve students' impression of New Oriental. In the aspect of price, our recommendation is that New Oriental can take advantage of the cost advantage of online education to hold more promotional activities, so as to make customers more satisfied with the price. In terms of teaching hardware, our recommendation is that New Oriental can continue to invest and improve its ECCP electronic cloud platform and VPS visual teaching system (New Oriental official website, 2021)

6．Limitation

（1）In this study, I think the limitation is that our data collected from the questionnaire is unbalanced. We collected a total of 303 pieces of data, but 58.6% of them were filled in by women and 41.4% by men. Therefore, this different data ratio does not represent the views of all students on affecting online educational institutions. (Xu.Han)

（2）Throughout the investigation process, our research also had many limitations. The first point is that the number of samples is difficult to guarantee. We conduct surveys in the form of online questionnaires, but not everyone who sees the link to the questionnaire will choose to answer the questionnaire, which results in a lower recovery rate and efficiency. For example, our expected number of surveys is about 400, but we only received 303 answers to the questionnaire. The second limitation is also the shortcoming of online questionnaires: There are fewer open questions, which may limit the answers. Online questionnaire surveys should be easy to understand, and at the same time, the questionnaire response time should be controlled at about ten minutes. In order to collect data quickly and efficiently, the surveyors usually give some preset answers for the interviewees to choose. This means that there are fewer open questions in the questionnaire, and some niche answers may be ignored. (Zeyu.Long)

（3）I think one of the limitations of this study is that the second‑hand data collected is not enough. Because this study is to determine the problem to be studied through second‑hand data. However, in the process of research, we can find that there are few second‑hand data about New Oriental online education projects, so it is difficult to understand in detail what kind of problems exist in New Oriental now, which are most worthy of study. (Xiyuan.Long）

（4）There are several limitations of methodology and research design which can cause negative effect to our data analysis. Firstly, the cross‑sectional strategy which we have used as our research strategy is not comprehensive enough and have no comparison in time dimension. Secondly, we chose to use internet survey to collect data because of its convenience, however, some interviewees will overfill or omit which cause low accuracy of the data and low richness for the information. In addition, we used convenience sampling for our data collection part, therefore, we have to accept the passive consequence, which have been shown as the uneven gender and age ratio. (Yuzhou.Wang)

（5）The convenience sampling method we use are result 72 percent of the interviewees were from Jiangsu province, which may cause selection bias and cannot represent the entire Chinese users. In the data analysis part, linear regression can only measure the linear relationship between independent variables and dependent variables. We should do more analysis such as causality research to measure the occurrence of which factors can increase the probability of the occurrence of customers' intention to choose online education institution. (ZhengKun.Sun)

7．Appendix

Table 5．Model Summary

Modle	R	R Square	Adjusted R Square	Std．Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig．F Change
1	.867[a]	.752	.746	.980	.752	129.879	6	257	.000

a. Predictors: (Constant), Do you think online education institutions' enjoyment is good? Do you think the teaching hardware of online education institutions is good? Do you think online education institutions' price is cheap? Do you think online education's convenience is good? Do you think the teachers in online education institutions are good? Do you think online education institutions' brand awareness is good?

Table 6. Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.346	.168		2.065	.040
Do you think the teachers in online education institutions are good?	.235	.070	.238	3.345	.001
Do you think online education institutions' brand awareness is good?	.229	.118	.236	1.937	.054
Do you think online education's convenience is good?	.096	.102	.104	.942	.347
Do you think the teaching hardware of online education institutions is good?	.175	.070	.180	2.492	.013
Do you think online education institutions' price is cheap?	.222	.065	.220	3.397	.001
Do you think online education institutions' enjoyment is good?	-.072	.034	-.082	-2.117	.035

a. Dependent Variable: How willing you are to take online classes?

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