

THE INFLUENCING FACTORS AND MODEL CONSTRUCTION OF MOBILE INTERNET ON ADVANTAGES AND DISADVANTAGES OF MARKETING MAJOR EDUCATION IN UNIVERSITIES

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ABSTRACT. *The development of mobile Internet has brought many opportunities and challenges to marketing major education in universities. From the perspective of students, through the empirical research, it is found that the advantages and disadvantages of mobile Internet to marketing major education in universities are reflected in the six dimensions which are marketing ability, learning enthusiasm, learning ability, learning time, teaching content and teaching methods. Accordingly, this paper constructs the influencing factors' model of mobile Internet on the pros and cons of marketing major education in universities and puts forward relevant suggestions which are beneficial to marketing major education in the mobile Internet era.*

Keywords: Mobile Internet, Marketing major education in universities, Influencing factors, Model construction

1. **Introduction.** The 40th China Internet Development Statistics Report that China Internet Network Information Center (CNNIC) released showed that as of June 2017, the scale of mobile phone users in China reached 724 million, an increase of 28.3 million by the end of 2016. Mobile instant messaging, online shopping, online takeout and travel booking users were as high as 692 million, 514 million, 295 million and 334 million respectively [1]. Back in January 2016, 2015 Mobile Internet Industry Development Report that Talking Data in the Global Data Summit released showed that by the end of 2015, the people who were born in 1980's, 1990's and 2000's accounted for 73.6% of the number of mobile Internet users, and the younger generation dominated the mobile Internet. Smart phones whose prices were about one thousand yuan accounted for 74.6% of smart phones. The hardware environment of mobile terminals became significantly better. In the 3G, 4G and WiFi environment, the proportion of Internet users was as high as 82.2%, and the user's mobile Internet environment was improving significantly [2]. With the continuous improvement of the dominant position of the mobile Internet and the obvious improvement of the Internet hardware and software environment, the impact of the mobile Internet on various fields has become more and more serious. For enterprises, the mobile Internet market has gradually become the main battlefield of enterprise marketing, marketing competition is becoming increasingly fierce, and the mobile marketing era that the mobile terminal acts as a medium begins to come. For marketing major education in universities, because of the practicality of marketing major and apparent market demand, on the one hand, mobile Internet has brought many convenience and troubles to marketing major teachers and students. On the other hand, the shift of the focus of enterprise marketing has an important influence on the way of cultivating marketing talents in universities.

In short, mobile Internet has directly or indirectly brought important opportunities and serious challenges to marketing major education.

From the current point of view, the researches of domestic scholars on the impact of the mobile Internet on the pros and cons of marketing major education in universities are few and mainly qualitative ones. Yang believed that mobile Internet enables students to become a “bow group”, and increases the difficulty of teaching management of university teachers. She advocated that teachers should use external forces to shield the mobile Internet, increase students’ self-control ability and enrich teaching methods [3]. Hu believed that mobile Internet makes the requirements for marketing talents to knowledge and competence quality become higher. She suggested that universities should establish the goal of cultivating comprehensive marketing management talents, set up the curriculum system scientifically, enrich the teaching methods and establish school-enterprise cooperation mechanism [4]. Wen believed that mobile Internet affects marketing major education in universities from the three aspects which include marketing theories, marketing talents and teaching methods. He suggested that marketing major teachers should put the Internet gene into marketing theory system, train students’ thinking ability, action ability and expression ability, use the advantages of the mobile terminals and combine classroom teaching with online learning [5]. Zhao et al. believed that based on the era background of “Internet + education”, marketing major education in universities should adopt flexible teaching operation mode, cultivate students’ practical ability, develop individually students’ potential, and improve education efficiency [6].

On the basis of the above literature, this paper reveals the influencing factors of the mobile Internet on the pros and cons of marketing major education from the perspective of the students, and constructs the theoretical model and puts forward the corresponding suggestions, which are beneficial to the further expansion of related research and providing the reference value for marketing major teaching.

2. Empirical Study Process and Model Construction of the Influencing Factors.

2.1. An empirical study on the influencing factors.

2.1.1. *Questionnaire design.* In this paper, the junior and senior students of Marketing Department of Dalian University were chosen as the research object. On the basis of the literature review, the authors first conducted in-depth interviews with some students of marketing major and a marketing expert in Dalian University. Then, based on the extraction and homogeneity of the interview data, the initial questionnaire with 25 items was formed. Finally the initial questionnaire was submitted to the marketing expert to review, and the final questionnaire with 24 items was formed. The first item to the 21st item were investigated on the impact of the mobile Internet on the pros and cons of marketing major education in universities. The 22nd item was investigated on the advantages and disadvantages of mobile Internet for marketing students from the overall angle. The last two items were investigated on the teaching methods that marketing students like in the mobile Internet era.

The previous 22 items of the questionnaire were taken by the Likert 5 scale, with number 1 to 5 to indicate the level of consent. “1” represents totally disagree, “3” represents neutrality and “5” represents complete agreement. The 23rd and 24th items were multiple-choice. In September 2016, the author carried out an exploratory questionnaire survey on the junior and senior students of marketing major in Dalian University. A total of 172 questionnaires were distributed and 170 valid questionnaires were retrieved. The effective rate of the questionnaire was 98.84%.

2.1.2. *Exploratory factor analysis.* The purpose of exploratory factor analysis is to extract several factors which can fully reflect the overall information from multiple items. SPSS 17.0 software acts as the tool of the exploratory factor analysis. Using principal component analysis method, the eigenvalue greater than 1 is regarded as the standard that one factor is extracted. The maximum variance method is used to carry out orthogonal rotation. The items whose absolute values of factor loads are more than 0.5 will be retained. The results show that the KMO value is 0.746, greater than 0.5, the chi-squared value of the Bartlett sphere test is 973.816, and the significance probability is 0.000, less than 1%, which is suitable for factor analysis. There are the eigenvalues of six factors that are greater than 1, so the six factors are extracted, and the cumulative variance contribution rate is 58.64%. Because the factor loads of the 4th, 12th, 14th and 15th items are less than 0.5, the items are deleted. Finally, according to the result of exploratory factor analysis, the questionnaire items are summarized, and the factors from 1 to 6 are respectively named as marketing ability (MA), learning enthusiasm (LE), learning ability (LA), learning time (LT), teaching content (TC) and teaching method (TM), as shown in Table 1.

2.1.3. *Reliability analysis.* The purpose of the reliability analysis is to test the reliability of the extraction factor in exploratory factor analysis. Using SPSS statistical software, the reliabilities of the corresponding items of factor 1 to factor 6 are analyzed respectively and the results are shown in Table 2. According to Table 2, the Cronbach's α coefficient of each factor is greater than 0.6, which shows that the influencing factors of mobile Internet on advantages and disadvantages of marketing major education in universities have passed the reliability test. Based on the factor analysis and the reliability test, we can get a scale of 17 factors, 6 dimensions of the impact of mobile Internet on the pros and cons of marketing major education in universities.

2.2. **Model construction of the influencing factors.** According to the above data analysis, this paper constructs the model of the influencing factors of mobile Internet on advantages and disadvantages of marketing major education in universities, as shown in Figure 1. In this model, the influence of mobile Internet on the pros and cons of marketing major education in universities is reflected in the six dimensions which are marketing ability (MA), learning enthusiasm (LE), learning ability (LA), learning time (LT), teaching content (TC) and teaching methods (TM). The advantages and disadvantages of marketing major education in universities are shown by AD.

3. **Suggestions.** The first suggestion is improving marketing ability effectively by mobile Internet. In the mobile Internet era, the demand for the abilities of marketing talents becomes higher. Teachers should take the market demand as the direction, make full use of convenient and efficient features of mobile Internet, and through some theoretical teaching and practical training, improve students' activity planning and execution ability, communication ability, data analysis ability, innovation ability and comprehensive management ability, etc.

The second suggestion is improving learning enthusiasm effectively by mobile Internet. Mobile Internet provides students with a variety of learning methods and ways to help them learn at any time and place. However, compared to learning, most of the students are more active in games, TV shows and entertainment news of the mobile Internet. Teachers should actively guide students to contact the beneficially physical and psychological knowledge, encourage students to use fragmented time for independent learning, and improve students' learning initiative. For example, teachers can recommend the students some good WeChat official accounts to stimulate students' interest, so that they benefit from the process of browsing these official accounts.

TABLE 1. Results of orthogonal rotation of factor analysis

Items	Factor Variables					
	MA	LE	LA	LT	TC	TM
1) Mobile Internet gives me access to learn more marketing theories	0.073	0.079	0.145	0.043	-0.039	0.809
2) Mobile Internet makes marketing theories meet the needs of era development more	0.475	-0.051	0.149	0.042	-0.012	0.531
3) Mobile Internet makes the role of traditional marketing theories decline	-0.056	-0.062	0.045	-0.035	0.862	0.100
4) Mobile Internet has spawned many marketing theories, and makes me too busy to attend to all	0.134	-0.243	0.273	0.287	0.035	0.337
5) Mobile Internet is conducive to improving the mobile Internet thinking of marketing talents (that are focus, extreme, reputation, fast)	0.670	0.292	0.121	0.027	0.008	-0.029
6) Mobile Internet is conducive to improving the activities' planning and execution ability of marketing talents	0.682	0.080	-0.052	0.058	0.008	0.308
7) Mobile Internet is conducive to improving the marketing talents' online and offline communication skills	0.795	0.138	0.104	-0.062	-0.082	-0.007
8) Mobile Internet is conducive to improving the data analysis abilities of marketing talents	0.636	0.144	0.186	-0.045	0.002	0.114
9) Mobile Internet reduces the effect of traditional marketing experience and abilities of marketing talents	0.004	0.026	-0.013	0.245	0.765	-0.219
10) Mobile Internet makes the requirements for marketing talents' innovation ability become higher	0.152	0.012	0.784	0.033	0.109	0.161
11) Mobile Internet makes the requirements for marketing talents' comprehensive abilities become higher	0.034	0.157	0.818	0.066	0.011	0.078
12) Through social media, teachers and students can get time-sensitive and representative marketing cases	0.309	0.493	0.088	0.070	-0.053	0.248
13) Mobile Internet makes teaching examination mode more diverse	0.151	0.418	0.146	0.036	-0.048	0.599
14) Mobile Internet makes it easier for teachers to find marketing materials	0.232	0.381	0.329	0.223	-0.145	0.214
15) It is difficult to choose the synchronous and practical theory teaching textbooks	-0.138	0.302	-0.161	0.414	0.161	0.302
16) Marketing teaching programs cannot keep up with the needs of the mobile Internet era	-0.002	0.340	0.067	0.521	0.377	0.159
17) Mobile Internet enables me to do my own learning anytime, anywhere	0.150	0.770	0.033	-0.025	0.095	-0.041
18) Mobile Internet prompts me to get much richer and fresher marketing knowledge	0.333	0.655	0.316	-0.021	-0.074	0.075
19) Mobile Internet gives me access to gain knowledge by a variety of ways and means	0.238	0.417	0.550	0.017	-0.117	0.106
20) Mobile Internet takes up a lot of my study time	0.058	-0.084	0.158	0.766	-0.010	0.104
21) The massive information makes me at a loss as to how to learn and what to learn	-0.054	0.000	-0.014	0.855	0.069	-0.099
Eigenvalues	4.888	2.340	1.466	1.314	1.088	1.230
Explain the percentage of variance	12.449	10.476	9.829	9.426	7.514	9.000

TABLE 2. Reliability analysis of the influencing factors

Reliability	MA (four items)	LE (two items)	LA (three items)	LT (three items)	TC (two items)	TM (three items)
Cronbach's α	0.731	0.662	0.701	0.648	0.611	0.644

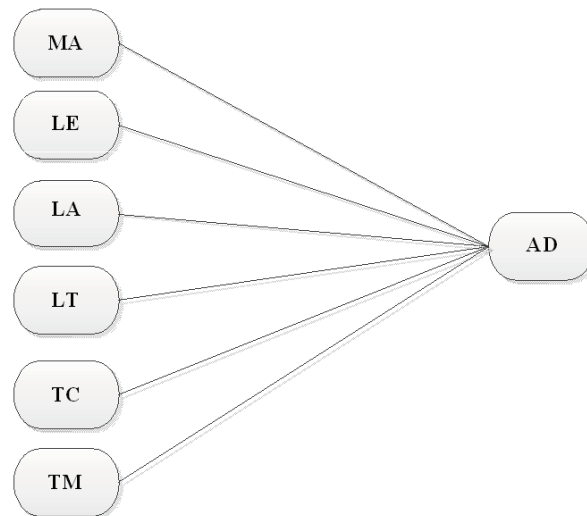


FIGURE 1. The model of the influencing factors of mobile Internet on advantages and disadvantages of marketing major education in universities

The third suggestion is improving learning ability effectively by mobile Internet. In the mobile Internet era, marketing students not only need to systematically study the marketing courses of Marketing, Network Marketing, Customer Management, Brand Management and so on, but also need to grasp certain entrepreneurial theories and legal knowledge. In addition, many students often seem at a loss when they face the massive information on the mobile Internet. The pressure of learning and the huge amount of information require students to improve their learning abilities in order to adapt to the mobile Internet era. Teachers should make full use of the rich knowledge and convenience of mobile Internet, combine with their own teaching experience, on the one hand, encourage students to innovate, discover the fun of learning and put forward some learning methods and learning paths for students to refer to, on the other hand, find and solve the existing problems in the process of learning, guide students effectively learning and improve their learning abilities.

The fourth suggestion is utilizing learning time effectively by mobile Internet. The variety of things on the mobile Internet makes many students immersed for a long time, making them turn into a “bow group”. In this regard, on the one hand, teachers should set a good example to improve the self-control ability of students according to the phones. Teachers’ words and deeds will have some influence on students’ psychology and behavior. Teachers should obey the class rules, build a good example for students, make students identify themselves psychologically, on the other hand, teachers need to improve their teaching content and teaching methods so that the classrooms become much more interesting (specifically seeing the below).

The fifth suggestion is updating teaching content effectively by mobile Internet. To a certain extent, mobile Internet reduces the effect of traditional marketing theories (4P theory, etc.), traditional marketing experience and abilities (price war, TV ads, etc.). Students want teachers to take full advantage of the mobile Internet, teaching more vivid, timeliness knowledge. If the teachers mainly teach traditional knowledge, then the enthusiasm of students will become lower, and the application of courses will decline. Therefore,

teachers should put the mobile Internet gene into marketing theory system, point out the important changes in the field of marketing, and choose the time-sensitive and representative textbooks and case materials.

The sixth suggestion is updating teaching methods effectively by mobile Internet. Teaching methods can be divided into non-traditional teaching methods and traditional teaching methods. In general, in the mobile Internet era, the non-traditional teaching methods are as follows: practice teaching, flipped classroom, distance education, network open courses (MOOC, etc.). Traditional teaching methods mainly include: case discussion, role play, theory teaching, action teaching (such as entrepreneurship training courses), video playback and computer simulation methods. According to the multi-response variable analysis of the 23rd and 24th items, it can be concluded that: (1) in the teaching methods, marketing students who like practice teaching, flipped classroom, traditional way, network open course and distance education respectively account for 30%, 23%, 19%, 16% and 12%; (2) in the traditional teaching methods, students who like case discussion, action teaching, video playback, role play, computer simulation and theory teaching respectively account for 23%, 21%, 20%, 17%, 12%, 7%. It can be seen that most students prefer non-traditional teaching methods, especially practice teaching and flipped classroom. Flipped classroom was promoted by Salman Khan which reverses traditional lecturing because students learn content before class through readings and prerecorded videos, freeing lectures for hands-on activities and discussion [7,8].

4. Conclusion.

4.1. Main findings. The empirical research shows that the influence of mobile Internet on advantages and disadvantages of marketing major education in universities is mainly reflected in the six dimensions which are marketing ability, learning enthusiasm, learning ability, learning time, teaching content and teaching methods. The research model constructed in this paper tells us that in order to make the mobile Internet have more positive impact on marketing major education in universities, marketing major teachers must regard the above six factors as the focus of teaching.

4.2. Limitations and prospects. This paper only chooses the junior and senior students of Marketing Department of Dalian University as the research object. Therefore, the sample may lack representativeness and cannot accurately reflect the overall situation of marketing major education in universities. In the formal study of the future, we may expand the survey to different universities in China, testing whether the above model is also applicable in different universities in China.

In teaching practice, teachers should try to choose practice teaching and flipped classroom methods in the future. Taking practical teaching as an example, universities can establish school-enterprise cooperation mechanism, employing a number of excellent marketing staffs to teach students regularly. Teachers may teach the students on the enterprise spot in order to make students understand the corporate marketing activities easily. Teachers can also take the specific marketing activities as students' homework in order to cultivate students' interest and abilities in practice. In addition, in the traditional teaching mode, teachers should reduce the monotonous theory teaching and add some nice cases and videos to the courses in order to make their teaching more attractive.

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