

# THE AHP ANALYSIS OF UNIVERSITY MARKETING COMMUNICATIONS BASED ON PROMOTION MIX: EVIDENCE FROM KOREA

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## ABSTRACT

*Recently, Korean universities are experiencing difficulties due to the decrease of the school-age population caused by low birth rates and the situation is even more difficult for regional universities located outside Seoul and the metropolitan areas. Thus, universities have to carry out active marketing communication activities to secure their student quota. Universities have carried out various promotional activities, but such activities have been practiced based on available budget, without consideration of efficiency. Thus, this study utilized the Analytic Hierarchy Process (AHP) analysis to examine what type of marketing communication activities can be effective other than the traditional print and online advertisements, and examine the priorities of those activities. The results showed that of the first level factors, the importance weight of advertisement was highest followed by sales promotion, public relations (PR), and personal selling. Such results imply that although universities are placing great emphasis on personal selling activities such as admission briefing sessions in high schools and university admission exhibitions, such efforts should be placed on other activities.*

*Of the second level factors, Out of Home (OOH) advertisements, advertorials, and university posters posted in the walls of corridors and stairways of high schools showed high importance weight. This result implies that a sufficient amount of budget should be assigned to such fields. Also, television advertisements were analyzed to be less suitable due to their high expenses. Lastly, university posters posted in high schools showed the highest importance weight in the sales promotion field. Moreover, these university posters provided in high schools showed the highest importance weight after online advertisements in the total ranking of the second level factors.*

**Keywords:** University Marketing Communications, Promotion Mix, Regional University, AHP

## INTRODUCTION

Recently, Korean universities are experiencing difficulties due to the decrease in the school-age population caused by low birth rates. The situation is even more difficult for regional universities. According to the National Statistical Office, the number of university-age population has decreased from 660,000 in 2015 to 510,000 in 2020, and will further decrease to 450,000 in 2025, and 220,000 in 2065. According to the Ministry of Education, in 2021, the number of students that will enroll in universities will be smaller than the quota of students that universities can accept, and schools will fall short of 56,000 students. Currently, regional universities are placing great effort to recruit students, but if they fail in their recruitment, they will have to close certain departments or even schools as a whole (Kim & Lim, 2019). Regional universities that are experiencing difficulties in recruiting their student quota will suffer from lack of finances, and thus, the quality of education they can provide will decrease as well. When the quality of education decreases, such schools will continue to fail in recruiting their student quota. It is expected that Korea's school-age population will decrease at a faster rate than the current status quo. Already, some schools are losing departments or shutting down as a whole because they have not recruited

the required student quota, and such phenomena will continue to increase (Yoon, 2012).

Students consider various factors when choosing which university to enter. They consider factors such as scholarships, tuition fees, quality of education, the distance to commute to school, employment rates, gaining knowledge, increasing their self-esteem, the reputation of schools, and more (Broekemier & Seshadri, 1999; Hurwitz, 2012; Oh, 2015). The history of the university, tradition, size, specialties, scholarships, degree of internationalization, social reputation, and employment rates are also considered important along with the possibility of further improvement, social recognition, school campus and surrounding environments (Wilson & Adelson, 2012; Akter & Reback, 2014). There are many studies that have analyzed such factors. However, regional universities show poor impact on such factors except for a few of those factors such as distance to commute, employment rates, and scholarships. Hence, an analysis that considers the reality of regional universities is necessary.

High-ranking universities have images that have been created for a long period of time, and their name values are high (Ha & Moon, 2013). They often appear in the media, and thus, the necessity of marketing activities to attract students is not as high as it is for regional universities (Lee, 2003). Regional universities need to carry out active marketing promotional activities to increase their name value to attract students to enroll in their schools. Regional universities have carried out various promotional activities, but most of them have been practiced based on the available budget rather than considering the efficiency of those activities. Thus, this study attempted to examine which marketing communication activities would be effective other than the traditional activities such as newspaper and online advertisements, and rank those activities according to their priority.

Although it is necessary to invest a sufficient amount of budget to increase a school's name value, there are many universities that do not have a sufficient amount of finances. This study will utilize the AHP analysis to find what activities should be prioritized out of the promotional activities being carried out. Through such analysis, this paper will help regional universities establish promotional strategies for recruiting students and provide a guideline for regional universities to decide on media and budget establishment.

## LITERATURE REVIEW

### Marketing Communications for University Promotions

The necessity and importance of marketing communication to increase universities' name values are constantly increasing (Sung & Kim, 2004). The four factors of the Marketing Mix include product, price, place, and promotion; the core of promotion is communication with consumers and can be further categorized into advertisement, public relations (PR), personal selling, and sales promotion – these four are referred to as the Promotion Mix (Keller, 2003). University promotion is not limited to PR of the Promotion Mix, and includes all four of the Promotion Mix. Promotional activities must be carried out in a coherent manner with the segmentation, targeting, and positioning (STP) of the product and brand (Kotler & Fox, 1995; Galaty, Allaway & Kyle, 2016).

PR refers to activities that alert the product to the media to trigger consumers' willingness to purchase the product without using expenses (Kotler & Fox, 1995). The most representative PR is presenting products or brands in newspaper articles, and recently many advertorials – paid advertisements that are carried out in the form of articles – are used often in university promotions.

Sales promotion refers to the various methods used to make consumers purchase items at the final sales contact (Keller, 2003; Chae & Lee, 2015). Activities such as providing writing supplies and souvenirs that have university logos or characteristics engraved on them can be seen as sales

promotion. Similar to advertisements or the other promotion mix, sales promotion can be effective only if it is planned and carried out with a consistent message.

Personal selling refers to the activity of salespersons meeting the consumers in person and publicizing the merits of the product and brand. The role of personal selling in university promotions is crucial since it is important to deliver accurate information regarding the qualifications of applications, application processes, scholarship availabilities, strengths of each departments, social advancements after graduation, and future visions.

## Literature Review

Communication methods are chosen depending on the budget assigned to the marketing communication activities. Businesses with a small amount of budget cannot use communication methods that require a lot of budget such as television or print advertisements. In such cases, activities that require less budget such as sales promotions, or advertisements in radios and local daily newspapers are often used (Ahn, Kim & Ryu, 2014). The characteristics of the products also influence the decision of the promotion mix. For instance, products that are technically complex require more information to potential consumers, and thus, personal selling can be more effective than other communication methods. Products that require high-involvement may be more burdensome for consumers when purchasing, and thus, personal selling is often used (Kotler & Fox, 1995).

Studies that have examined universities' marketing communication methods include studies that analyzed the factors that influenced the decision of schools, those that analyzed the images of schools, and those that studied the media used for university marketing communications.

Lee (2000) stated that most of the workers that were responsible for universities' marketing communication did not major the field, or had little work experience in marketing, and thus, more effort must be spent on increasing their professionalism and establishment of an independent system for university promotions.

Ji & Lee (2006) presented promotion methods based on strategies to improve regional universities' images. They explained that when applying for universities, students were influenced by the advice of friends and family, Internet searching such as school websites, and school promoting catalogs in that order. However, the influence of ATL (Above the Line) was low, and thus, they stated that promotion strategies depending on ATL should be changed.

Sung & Cho (2007) analyzed the utilization of media in the process of choosing a university. Based on a survey carried out on all the freshmen students in a university, they found that students had encountered online and face-to-face media the most, while, promotional materials and admission briefing sessions were relatively less encountered. They analyzed that the most useful method was to use online media such as school websites and Internet websites.

Kim & Han (2012) analyzed the influence of advertisements and newspaper articles on students. Results showed that articles were mostly more persuasive than advertisements, but in the case for university communication strategies, advertisements and press promotion must be carried out simultaneously while considering their complementary roles. They also stated that a synergic effect can be seen when advertisements and press promotions have a consistent message based on the IMC (Integrated Marketing Communication) strategy.

Ko (2010) carried out a study on freshmen students that entered regional community colleges to prove the effectiveness of promotions using the Internet. The results showed that freshmen students in regional community colleges were influenced more by offline media rather than online media. The reason that the Internet media is relatively less important for regional community colleges is because these colleges go to nearby local high schools to recruit freshmen students, and are also strengthening promotional activities by meeting students in person to explain

how to apply to their schools.

Such previous studies examined various communication activities used for promoting universities. Of the various marketing communication activities, this study will find the promotional activities that are suitable for regional universities’ situations, and also examine the ranking of those activities.

## METHODOLOGY

### AHP Analysis

This study used the Analytic Hierarchy Process (AHP) analysis to rank the marketing communication activities for improving regional universities’ images. When marketing communication activities are chosen based on customs, preference of decision makers, and without proper strategic analysis, the effect of marketing cannot be high (Saaty, 2008). The AHP analysis can differentiate the main and sub factors of decision-making problems which are hard to analyze in quantity, and then deduce the importance weight of each category based on pairwise comparison (Saaty, 2008). The analysis can check the consistency of the respondents – who are professionals by structuring the respondents’ decision-making models based on the intuitive decisions made by the respondents (Saaty, 1995). The hierarchy structure of decision-making is built by the brainstorming of the professionals. The AHP analysis is used widely in appropriating budget and making important decisions since it can identify the importance weight of factors with only a small number of respondents and can also be applied easily (Saaty, 2008).

The AHP analysis is a nonparametric methodology that sets out to calculate the importance weight unlike other statistical analyses that are based on probability, and thus, analysis is possible even if the sample size is small since the respondents are professionals (Saaty, 1994).

In order to set the hierarchy tree for marketing promotional activities used for university promotions, an analysis of the promotional activities per universities as well as a review of previous literature were carried out. Then, professionals carried out brainstorming to set the hierarchy category. Afterwards, through a Focus Group Interview (FGI), the detailed marketing communication activities deduced by the professionals were chosen and grouped based on similarities of the Promotion Mix. The hierarchy tree of the university marketing communication activities can be seen in Table 1.

<b>Table 1</b>		
<b>HIERARCHY TREE OF UNIVERSITY MARKETING COMMUNICATION ACTIVITIES</b>		
	<b>1st level Factor</b>	<b>2nd level Factor</b>
University Promotional Activities	Advertisement	TV ad. (Subtitle)
		Print ad. (Newspaper, Magazine)
		Radio ad.
		OOH ad. (Bus, Subway, Signage, Billboard)
		Online ad. (Banner, Blog, Keyword, SNS)
	PR	Newspaper articles (School)
		Advertorials
		Newspaper articles (People)
	Personal Selling	University admission exhibitions
		Admission briefing sessions in high schools
	Sales Promotion	Catalogs, Leaflets
		Promotion materials
		University posters posted in high school walls

### Characteristics of the Sample

This study carried out a survey from February to April 2020, with professors and advertising and marketing professionals whose work were related to promoting schools and departments in universities. A total of 50 surveys were distributed. 6 of the answers were excluded due to responseset error or sampling bias error. Thus, a total of 44 responses were used to carry out the AHP analysis. The standard for consistency ratio is 10 percent, and when the ratio exceeds 10 percent, the reliability is low, and thus, the answer is excluded from the analysis or the survey is carried out again (Saaty, 1983). Of the 44 responses, 6 of the responses had a consistency ratio over 10 percent, and thus, they were also excluded. Hence, a total of 38 responses were used to carry out the analysis. Table 2 shows the characteristics of the respondents.

	<b>Category</b>	<b>N</b>	<b>Percent (%)</b>
Group	Univ. Professor	10	26.3
	Univ. Staff	8	21.1
	Account Executive	14	36.8
	Creative Director	6	15.8
	Total	38	100
Degree	Bachelor	12	31.6
	Master	16	42.1
	Ph.D.	10	26.3
	Total	38	100
Work experience	below 3yr.	4	10.5
	3yr.- below 5yr.	12	31.6
	5yr.- below 10yr.	16	42.1
	10yr. and over	6	15.8
	Total	38	100

Of the 38 respondents, 10 were university professors and 8 were staff members in charge of promoting school admissions. 20 worked in advertising agencies, and of those 20 respondents, 14 were account executives while 6 were creative directors. In terms of work experience, 4 had work experience below 3 years, 12 had work experience between 3 to less than 5 years, 16 had work experience between 5 to less than 10 years, and 6 had work experience of 10 years or more.

### RESULTS

Table 3 shows that of the first level factors, advertisement showed the highest importance weight with 0.402 followed by sales promotion (0.241), PR (0.186), and personal selling (0.171). Currently, many schools are placing great emphasis on personal selling activities such as admission briefing sessions in high schools and university admission exhibitions. This is because these activities require relatively less budget than other activities. The analysis result, however, shows that the importance weight of personal selling is lowest.

**Table 3**  
**HIERARCHY RESULT OF UNIVERSITY MARKETING PROMOTIONAL ACTIVITIES**

1st Level Factor		2nd Level Factor			Total Weight	Total Rank
Item	Weight	Item	Weight	Rank		
AD	0.402	TV ad. (Subtitle)	0.164	4	0.066	9
		Print ad. (Newspaper, Magazine etc.)	0.175	3	0.07	8
		Radio ad.	0.106	5	0.043	12
		OOH ad. (Bus, Subway, Billboard etc.)	0.269	2	0.108	3
		Online ad. (Banner, Blog, Keyword, SNS)	0.286	1	0.115	1
PR	0.186	Newspaper articles (School)	0.336	2	0.062	10
		Advertorials	0.524	1	0.097	4
		Newspaper articles (People)	0.14	3	0.026	13
PS	0.171	University admission exhibitions	0.456	2	0.078	6
		Admission briefing sessions in high schools	0.544	1	0.093	5
SP	0.241	Catalogs, Leaflets	0.315	2	0.076	7
		Promotion materials	0.216	3	0.052	11
		University posters posted in high school walls	0.469	1	0.113	2

In case of the second level factors of the advertisement field, the importance weight of online advertisements was the highest with 0.286, followed by OOH advertisements (0.269), print advertisements (0.175), television subtitle advertisements (0.164), and radio advertisements (0.106). The importance of online advertisements is already well known, and thus, the relatively higher importance weight of OOH advertisements – advertisements on buses, subways, bill boards, etc. – compared to print advertisements is noticeable. The low importance weight of television advertisements may be caused by the high expense required for television commercials, and thus, such advertisements may be inappropriate for school promotions.

In case of the second level factors of the PR field, advertorials – advertisements in the form of editorials – showed the highest importance weight with 0.524. Advertorials were followed by newspaper articles related to schools (0.336), and newspaper articles related to people (0.140). These results imply that sufficient budget for advertorials must be prepared when planning the budget for school promotional activities.

In case of the second level factors of the personal selling field, admission briefing sessions in high schools showed the highest importance weight with 0.544 followed by university admission exhibitions (0.456).

Lastly, in case of the second level factors of the sales promotion field, university posters presented in the walls of high schools showed the highest importance weight with 0.469, and was followed by catalogs or leaflets (0.315), and promotional materials such as writing supplies, post-its or souvenirs (0.216). The results imply that the most effective strategy to promote universities is interacting with high schools. In the total ranking of the second level factors, university posters provided in high schools ranked second after online advertisements. OOH advertisements and advertorials also showed high rankings. Newspapers advertisements, radio advertisements, and television subtitle advertisements, however, showed relatively low rankings.

### CONCLUSION AND DISCUSSION

Due to the decrease of the school-age population, regional universities are spending a great amount of expense and effort in marketing promotional activities to increase their school name value and enhance their school image. This study utilized the AHP analysis to find the priority

ranking of the promotional activities carried out by regional universities. The implications of the results are as follows.

First, in the advertisement field, online advertisements showed the highest importance weight. With the advent of the smartphone, the importance of online advertisements has been increasing continuously. Regional universities and their departments are not well-known to the public, and a lot of their departments are composed of practical majors, and thus, it is necessary to increase the online promotional activities of these schools and their majors. OOH advertisements showed the second highest importance weight and this may be due to the relatively less budget OOH advertisements require compared to television or print advertisements. Television advertisements showed relatively low importance weight due to budget limits. The reason that television advertisements are carried out in the form of subtitles, commercial breaks and station breaks require a lot of expenses. Other than television commercial breaks, providing the school campus as a background for television dramas could be a method to increase school brand awareness. Radio advertisements showed the lowest importance weight in the advertisement field; this may be due to the fact that students rarely listen to the radio these days.

Second, in the PR field, advertorials showed the highest importance weight. Advertorials are advertisements in the form of editorials and although they seem like newspaper articles, they are planned advertisements that are paid for. During university application seasons, advertorials that introduce university campuses, majors and various activities can be seen quite often. Since advertorials can also be searched online, advertorials should be further utilized through major and local newspapers.

Third, in the personal selling field, admission briefing sessions held in high schools showed the highest importance weight, and was followed by university admission exhibitions. Many regional universities visit high schools to carry out admission briefing sessions. Since regional universities usually have departments with practical majors, a lot of time is required in the admission briefing sessions to explain those majors. However, since the personal selling field showed the lowest importance weight in the first level factor, universities must abstain from placing too much resources into this field.

Lastly, in the sales promotion field, university posters provided in the walls of high schools showed the highest importance weight. The university posters provided in high schools also ranked second in the total ranking of the second level factors. Recently, posters and catalogs of universities are provided on the walls of corridors and stairways of high schools. Students spend most of their time in school and are constantly exposed to these posters and catalogs. Exposure to such posters can be very effective compared to the expense required to post these advertisements. The high ranking of such posters in high schools serves as evidence of their high effectiveness. Schools with low promotion budgets should keep this in mind and assign more budget into this field.

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