

BRAND IMAGE OF UNIVERSITIES TRAINING ECONOMICS SECTOR: AN ANALYSIS OF 12TH-GRADE STUDENTS' PERCEPTION IN THE BINH TRI THIEN REGION

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ABSTRACT

The study aims to create a perceptual mapping to evaluate the brand images of universities for Economics in 12th-grade students' perceptions in the Binh Tri Thien region. Based on a survey sample of 150 respondents selected by the quota method and the Multi-Dimensional Scaling method, the perceptual mapping displays a combination of six dimensions preferred by 12th-grade students when choosing a university: training quality; brand image; tuition fees and scholarships; learning environment; infrastructure, and benchmark. The university brands selected in the study are National Economics University (NEU), University of Economics Ho Chi Minh City (UEH), University of Economics- the University of Danang (DUE), and University of Economics- the Hue University (HCE). The results obtained give some managerial solutions for the University of Economics- Hue University to improve positioning strategy and brand image.

Keyword: *Perceptual mapping, positioning map, brand image, university brand*

1. INTRODUCTION

Al Ries & Jack Trout (2001) have identified the positioning battle as the battle among brands in customers' minds. Indeed, building a solid brand and establishing a systematic brand strategy in a fiercely competitive market is essential for organizations and businesses in the economy and even in specific sectors such as higher education. Implementing the policy of university autonomy following the Government's Resolution 77, many universities worldwide have widely recognized, interested, and discussed

university branding to attract more and more learners. However, this issue has not been focused on in the education sector in Vietnam. Many schools face difficulties because many believe education is not commercial or is still shy in communication and marketing activities (Anh Tu, 2019). This opinion leads to many universities having delays or defects in brand strategy and not yet building a brand perceptual map as a basis for comparison and evaluation with competitors when choosing the direction to develop a brand strategy.

Based on the Ministry of Education and Training statistics, there are 237 universities, of which 172 are public, and 65 are non-public in Vietnam by 2021. The number of universities in Vietnam has increased sharply. In contrast, the number of candidates participating in the University Entrance Exam from 2015 to 2020 was only about 370,000 candidates/year on average, according to the author's calculations from data published by the Ministry of Education and Training (Ministry of Education and Training, 2021). This reality leads to oversupply in the higher education market, increasing competitive pressure among universities.

In recent years, Hue University of Economics has encountered difficulties and uncertainties about quantity and quality management in admission activities. Due to competitive pressure and the brand strategy perspective, the communication activities of the university are still limited. Regarding the School's Admissions Advisory Board, the school's enrollment resource in the earlier three years has been narrowed, with about 70% of the candidates getting admissions to the Hue University of Economics mainly from the Binh Tri Thien region (Admission Advisory Board, 2020). Therefore, it can be seen that the Binh Tri Thien area is currently an important market that the university needs to pay attention to and strengthen its brand image. However, the school does not have a basis for developing a clear and consistent positioning strategy. Hence, the construction of a perceptual map to evaluate the competitive brand image between the Hue University of Economics and rival universities in the critical market of Binh Tri Thien region, including National Economics University, University of Economics Ho Chi Minh City, University of Economics - the University of Danang, are necessary jobs.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Literature review

2.1.1. Brand and brand in education sector

According to Nguyen Dinh Tho & Nguyen Thi Mai Trang (2007), there are two groups of definitions of a brand: traditional definitions and general definitions. The American Marketing Association defines the traditional view of a brand: "A brand is a name, term, symbol, design, or combination of them, used to identify the goods or services of one seller or a group of sellers and to differentiate them from those of competitors". Many researchers agree with this definition and cite it in their textbooks, such as the Principles of Marketing by Kotler & Armstrong (2018, 226) and Strategic Brand Management: Building, Measuring, and Managing Brand Equity by Parameswaran & Jacob (2015, 2). In this perspective, a brand is a component of a product. Toward a general definition, a brand is a set of attributes that give customers the value they need (Ambler & Styles, 1997). Thereby, the product is a component of the brand, providing functional benefits to the customer, and the other elements of the marketing mix are just components of a brand.

In the education sector, McNally & Speak (2002) defined a brand in higher education is by as a perception or emotion maintained by a buyer or potential buyer, describing experiences associated with dealing with an academic institution, with its products and services. Meanwhile, Bulotaite (2003) argued that when someone mentions the name of a university, it immediately evokes associations, emotions, images, and appearances.

2.1.2. Brand equity

Brand equity is the terminology for the value of a brand. David Aaker (1995, 7) defined that: "Brand equity is a set of intangible assets associated with the name and symbol of a brand, which contributes to increase or decrease the value of a product or service to the company and its customers". According to Aaker (1995), brand equity includes five components: (1) Brand awareness; (2) Brand association; (3) Perceived quality; (4) Brand loyalty and (5) Other brand asset values. In particular, brand positioning and the perceptual map are related to the brand association and perceived quality components.

Kotler & Armstrong (2018, 240) stated, "Brand equity is the differential effect that a brand name has on the customer's response to that brand's products and marketing." Accordingly, brand equity is a tool to measure a brand's ability to capture customer preference and loyalty.

2.1.3. Brand perceptual map

When planning positioning and differentiation strategies, marketers prepare a brand perceptual map to show consumers' perceptions of their brand relative to competitors based on essential attributes that attract customers to buy (Kotler & Armstrong, 2018). A brand perceptual map shows how consumers perceive a brand's positioning image. This tool measures a brand's position in the current or past.

According to Bhattacharyya (2014), there are two main methods to build a perceptual map: decomposition and synthesis methods. The decomposition methods include Correspondence Analysis (CA) and Multidimensional Scaling (MDS). Meanwhile, a synthesis approach will be based on a set of different dimensions evaluated on a priority or rating basis, and then the results are combined for an overall assessment.

2.2. Studies about perceptual map

There are few studies on building perceptual maps of university brands in learners' perception over the world.

Ivy (2001) used Correspondence Analysis to analyze how educational institutions in South Africa and the UK use marketing tools to differentiate their brand image. With four university brands selected and 27 marketing characteristics to make a difference, the study used 131 responses in the UK and 43 responses in South Africa. It analyzed where each university is ranked brand position associated with marketing characteristics to help the school build a brand image.

Ghosh et al. (2016) collected secondary data and classified seven criteria to compare the position of universities in developed countries. The results tend to the macro comparison of the status of universities and institutes across countries.

Yavas & Shemwell (1996) built a brand perceptual map by using the Correspondence Analysis technique among eight universities in correlation

with ten dimensions such as quality of teachers, financial ability, reputation, job opportunities, location, campus, etc. to analyze the position of each school in the customer's mind. However, because of the secrecy of the research, the universities in the study were only represented by letters from A to H, not the school's actual name.

Chaubey & Sharma (2016) researched the perceptual map of information and communication technology in higher education to find learners' perceptions as a basis for improvement study. The author relied on the results of interviews with 288 respondents and analytical techniques such as EFA to draw out seven factors used to build the perceptual map. However, because only one object is the information and communication technology, the author used radar charts instead of Correspondence Analysis or Multidimensional Scaling techniques. Therefore, the result was a perceptual map of one object: information and communication technology.

As for domestic studies, there is almost no research related to the perceptual map in the higher education sector, but only partly associated with the brand image of universities.

Vo Thi Ngoc Thuy (2016) conducted a study based on the responses of 967 students from the University of Economics and Law, Vietnam National University Ho Chi Minh City, and other universities having similar training professions. The proposed criteria for assessment were appearance and service space, service quality, personality, and symbolism. However, the results pointed out that five groups of factors affect the school's brand image: Appearance, facilities, service quality, personality, and symbolism.

In a study on university brand promotion, Nguyen Tran Sy & Nguyen Thuy Phuong (2014) used the SEM model to estimate the influence of variables. The results showed that brand image is affected by four factors related to students' attitudes toward communication activities such as advertising programs, career counseling, promotion during training, and word-of-mouth.

Tran Thi Ai Cam & Do Thuy Trinh (2021) investigated university brand development in the students' and employers' perceptions. The study was carried out through two phases: Qualitative research with 57 students and 18 employers; Quantitative analysis with 532 students at Nha Trang

University. The results show that six factors affected the brand image of Nha Trang University, including campus, facilities, teaching quality, service quality, characteristics, and style.

Table 1. Comparison of the characteristics of studies on perceptual maps in the education sector

Authors	Object characteristics of perceptual map	Analytical methods	Method limitation
Ivy (2001)	Brands and communication tools. The objects of the survey are staffs in universities.	Correspondence analysis, brand position comparison based on qualitative data.	Using the nominal scale, the information meaning is not much and focusing on communication activities.
Ghoshet et al. (2016)	Universities in developed countries. There are no perceptual dimensions of learners.	Using secondary data, comparison method.	The comparison is macro, no primary data.
Yavas & Shemwell (1996)	Brands and brand characteristics selected by customers.	Correspondence analysis, brand position comparison based on qualitative data.	Using the nominal scale, the information meaning is not much
Chaubey & Sonal Sharma (2016)	The field of information & communication technology. The perceptual characteristics of learners.	Using Radar chart, comparing the position high and low of brand in each dimensions.	Compare dimensions of an object, internal.

Source: Compiled by the author

2.3. Research gap

In synthesizing studies domestic and abroad, the author found that the research on perceptual maps in the world has been done quite a lot, but in the education sector, it is pretty limited. There are almost no domestic studies on perceptual maps in the education sector and only a few studies on learners'

perception of school brand images. In addition, the methods in the studies over the world to build brand perceptual maps in the education sector mostly used the analysis by qualitative data, the nominal scale through Correspondence analysis or Radar chart. Therefore, there are research gaps in terms of methods and research area scope. This study fills two gaps: (1) Using the quantitative scale, primary data, multi-directional measurement technique instead of nominal scale, using Correspondence analysis; (2) This is the first study conducted in the education sector in the Binh Tri Thien region.

3. METHODOLOGY

For qualitative research, in-depth interviews were conducted with 12 students divided into two groups: (1) a group of 6 students in Hue and (2) 6 students from Quang Tri and Quang Binh. Qualitative research aims to identify the dimensions students are interested in when choosing a university to build a perceptual map.

For quantitative research, this study used a sampling survey of 150 elements according to the quota of students wishing to select universities of economics major in every province by direct personal interview method. To have a basis for quota allocation, the author quickly interviews the need to choose economic majors of 300 students in each province. Then, the authors calculated the proportion of students wishing to select the economic majors in each province out of the total number in all three provinces. The results were used for allocating the quota to divide a survey sample of 150 elements (Table 2).

Table 2. Estimate and distribution of survey sample

Provinces	Quang Binh	Quang Tri	Thua Thien Hue	Total
Total number of students in 2021	11.536	8.251	12.801	32.588
Number of students quick-interviewed	300	300	300	900
Number of students choosing to major in Economics	74	69	81	224
Percentage of students choosing economic majors by province	33,04	30,80	36,16	100,00
Allocate to sample	50	46	54	150

Source: Center of Educational Communication (2021) and the authors' calculations

With the aim of building a perceptual map and comparing competitive brand images in students' perception, the study proposed to implement the following analytical process and framework:

Table 3. Research Procedure

Procedure	Content	Methods
Stage 1	Identify the dimensions that 12th-grade students in the Binh Tri Thien region use to choose a university to study Economics major.	Discussion with 2 groups of students in Thua Thien Hue and Quang Binh, Quang Tri.
Stage 2	Identifying competitor brands of Hue University of Economics in the Binh Tri Thien region.	Discussion with the Board of Directors of Hue University of Economics.
Stage 3	Build a brand perceptual map of universities in the perception of 12th graders based on the dimensions students use to choose a university. Compare and evaluate the position of university brands in the field of Economics.	Multidimensional Scaling (MDS). The weight assigned to an object on dimensions and Radar charts.

Source: Hoang Trong & Chu Nguyen Mong Ngoc (2008) and author's suggestions

4. RESULTS AND DISCUSSION

Regarding sample characteristics, there are 50 students from Quang Binh, accounting for 33.04%, 46 students from Quang Tri with 30.8%, and 54 students from Thua Thien Hue province with 36.16% (Table 4). For gender characteristics, 118 respondents are female, accounting for 78.67%, and 32 male respondents, accounting for 21.33%. This feature is similar to the gender input statistics of the Vietnam National University Ho Chi Minh City, with an overwhelming percentage of women in the humanities and social sciences university group (Ha Anh, 2019). Regarding academic performance, most students need to choose an economics major with 90.67% of good and higher academic levels, of which a relatively good level of education accounts for 73.33%.

Table 4. Sample characteristics

Characteristics		Frequency	Percentage
Province	Quang Binh	50	33,04
	Quang Tri	46	30,80
	Thua Thien Hue	54	36,16
Gender	Male	32	21,33
	Female	118	78,67
Academic performance	Excellent	3	2,00
	Very good	23	15,33
	Good	110	73,33
	Lower	14	9,33
Total		150	100,00

Source: Survey in 2021

Assessing the level of brand awareness of universities, the statistical results in Table 5 show that Hue University of Economics and Danang University of Economics have total percentages of awareness at all levels with 100% of students. The figures for the University of Economics Ho Chi Minh City and the National Economics University are 97.33% and 94.67%, respectively. These figures may be cause University of Economics- the University of Hue and University of Economics- the University of Danang are located in and around the Binh Tri Thien region. In addition, it is possible that because the academic characteristics of the students in the survey sample are mainly at a good level, the subjects focus their attention on schools with mid-range admission standards, such as the University of Economics- the University of Danang and University of Economics- the University of Hue.

Table 5. Brand awareness of the 4 surveyed schools

Brand Awareness Levels	Hue University of Economics		Danang University of Economics		University of Economics Ho Chi Minh City		National Economics University	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Top Of Mind	38	25,33	45	30,00	36	24,00	31	20,67
Spontaneous Brand Awareness	104	69,33	102	68,00	94	62,67	61	40,67

Organizing Institutions:

Can Tho University - Hue University of Economics - Tay Nguyen University - Sofia University, Bulgaria

Helped Brand Awareness	46	30,67	48	32,00	52	34,67	81	54,00
Total of three levels of Brand Awareness	150	100,00	150	100,00	146	97,33	142	94,67
Unfamiliarity	0	0,00	0	0,00	4	2,67	8	5,33
Total	150	100,00	150	100,00	150	100,00	150	100,00

Source: Survey in 2021

The first level of brand awareness (TOM - Top of Mind) is strongly related to the level of customer decision consideration (Ballantyne et al., 2006).

As the statistical results, Danang University of Economics currently has the highest position, with 45 students recognized at the TOM level, accounting for 30%, followed by the Hue University of Economics with 38 students recognizing TOM, accounting for 25.33%. These figures for the University of Economics Ho Chi Minh City and National Economics University are 24% and 20.67%, respectively.

Statistics on the dimensions that students are interested in when deciding to choose a university, the results obtained six characteristics with rankings arranged according to the most significant influence, as shown in Figure 1.

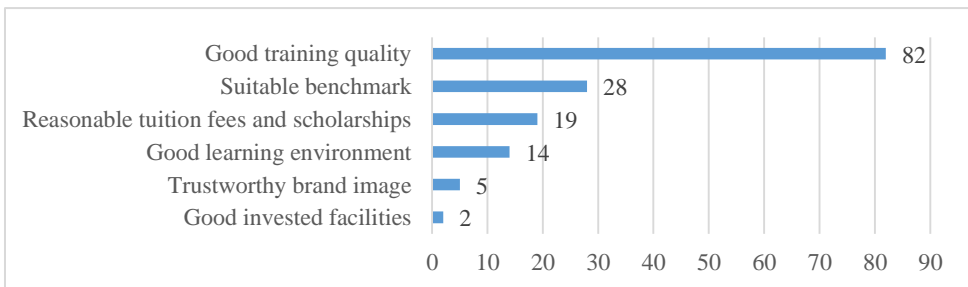


Figure 1. Students' first preference for characteristics of university

Source: Survey in 2021

Training quality is the dimension students are most concerned about when choosing a university, with 82/150 students considered, accounting for 54.67%, followed by the benchmark with 28/150, making up 18.67%. The third most important dimension is tuition and scholarships, with 19 students choosing, corresponding to 12.67%. The learning environment is a vital dimension ranked fourth with 14/150 students selected, with 9.33%. The two characteristics, brand image and facilities have a low priority in student perception.

Constructing a perceptual map using Multidimensional Scaling with the following input parameters:

Survey sample size: 150 elements.

Six dimensions include (1) Good training quality, (2) Trustworthy brand image, (3) Reasonable tuition fees and scholarships, (4) Good learning environment, (5) Good invested facilities, and (6) Suitable benchmark.

Four brands surveyed include the Danang University of Economics (DUE), University of Economics Ho Chi Minh City (UEH), Hue University of Economics (HCE), and National Economics University (NEU).

The RSQ coefficient measures the analysis fit. That is the square of the correlation coefficient indicating the portion of the data variance explained by the measurement data, in other words, the portion of the explanatory variance of the multivariate measurement. The larger this coefficient is, the better the data fit, and the minimum RSQ of 0.6 is acceptable. In addition, the Stress coefficient represents the multidimensional scaling quality that measures the degree of nonconformity. The lower the value of this coefficient, the more suitable the multidimensional scaling. If this coefficient has a value of 0.1, then the measurement is appropriate; 0.05 is suitable; 0.025 is a very good fit, and 0 is perfect (Kruskal & Wish, 1978).

Table 6. Coefficients of multidimensional scaling fit

Group	Stress Coefficient	RSQ Coefficients
Dimension	0,03077	0,99723
Brand	0,00381	0,99998

Source: Survey in 2021

The estimated results of Stress and RSQ coefficients show that the model is suitable (Table 6). Therefore, the analysis results reflect the correct position of the brands in the students' perception.

From the perception map shown in Figure 2, the study used a perpendicular projection from the point of a brand to the corresponding dimensions. The projection of the brand on the dimensions in the direction of the positive arrow and farther from the origin shows that brand awareness is strong in that dimension (Hoang Trong & Chu Nguyen Mong Ngoc, 2008).

Regarding the criteria that training quality is the first preference, students get the best awareness at the University of Economics Ho Chi Minh City, followed by the National Economics University. The positions of these two schools toward the training quality arrow are pretty farther than Danang University of Economics and Hue University of Economics. With the training quality dimension results, students perceive that the University of Economics Ho Chi Minh City and National Economics University are in the top four surveyed schools. The middle position is the Danang University of Economics. Hue University of Economics has the weakest awareness of students' perception in terms of training quality.

With the benchmark dimension that students have a second interest in, students are aware of the only Hue University of Economics as a suitable benchmark out of 4 schools. However, with the characteristics that most of the students in the survey sample have good academic performance, the perception that the Hue University of Economics has a suitable benchmark compared to the student's ability comes from the reason that the benchmark of the Hue University of Economics is the lowest among the four schools.

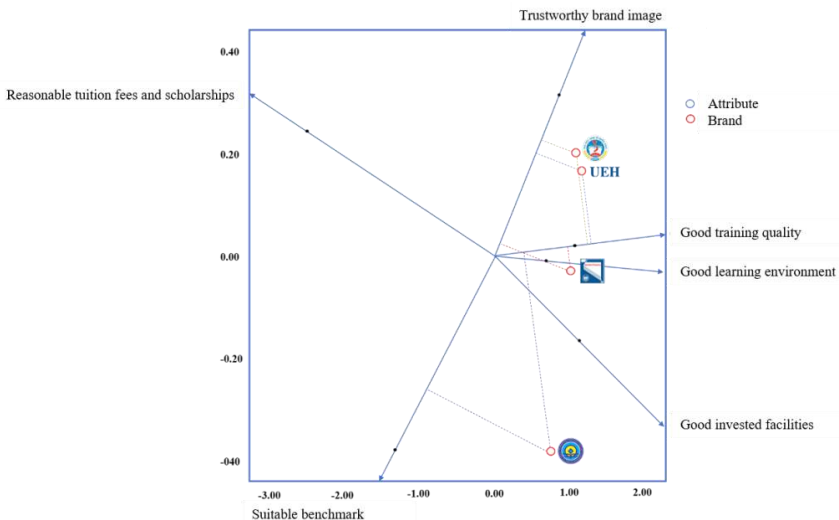


Figure 2. Brand perceptual map of 12th-grade students in Binh Tri Thien region for 4 universities training Economics majors

Source: Survey in 2021

Regarding the dimension of a good learning environment, students are aware of the University of Economics Ho Chi Minh City, National Economics University, and Danang University of Economics quite well. Hue

Organizing Institutions:

Can Tho University - Hue University of Economics - Tay Nguyen University - Sofia University, Bulgaria

University of Economics is not well aware of this feature because Hue is not a city directly under the Central Government. Hence, the level of investment and the higher education environment are not as good as that of centrally cities such as Hanoi, Ho Chi Minh City, and Da Nang.

Of the four schools, the University of Economics Ho Chi Minh City and National Economics University are two schools students highly appreciate for their reputation. Besides, the awareness for the Danang University of Economics has a somewhat weak reputation, while the Hue University of Economics is not well perceived in this regard.

Conducted the Paired Sample T Test to compare students' assessment of the Hue university of Economics to other universities in the survey sample. The results obtained are as follows in Table 7.

The mean difference between Hue University of Economics and other universities is negative for the dimension of good training quality and good brand image. The test results are obtained with a Sig 2-tailed value higher than 0.05. So with 95% reliability, it can be confirmed that students in the Binh Tri Thien region perceive the training quality and brand image of Hue University of Economics as much weaker than the other three schools.

Table 7. Paired Sample T Test

Tiêu chí	Mean				Mean difference between HCE and			Sig. of the test between HCE and		
	HCE	NEU	DUE	UEH	NEU	DUE	UEH	NEU	DUE	UEH
Good training quality	3,19	4,19	3,85	4,25	-0,99	-0,66	-1,06	0,08	0,06	0,08
Trustworthy brand image	3,23	4,20	3,73	4,11	-0,97	-0,50	-0,89	0,05	0,09	0,11
Reasonable tuition fees, scholarships	4,09	3,22	3,55	3,30	0,87	0,54	0,79	0,08	0,1	0,11
Good learning environment	3,20	3,98	3,91	4,15	-0,78	-0,71	-0,95	0,1	0,05	0,09
Good invested facilities	3,26	4,25	3,89	4,31	-0,99	-0,63	-1,05	0,11	0,11	0,07
Suitable benchmark	3,99	3,53	3,85	3,75	0,46	0,14	0,24	0,08	0,06	0,06

Source: Survey in 2021

The average rating of the University of Economics, Hue University for quality is 3.19 and 3.23, respectively (in the range of 2.6 to 3.4 - the average value of the Likert scale). Whereas the schools in the survey sample were all rated either agree or strongly agree (training quality of University of Economics Ho Chi Minh City or National Economics University brand image).

In terms of a good learning environment, the results of the pairwise comparison test of the Hue University of Economics are also rated at an average level, lower than that of students for the University of Economics Ho Chi Minh City (4.15), National Economics University (3.98) and Danang University of Economics (3.91).

The test results also acknowledge that other schools have more appreciation for facilities than the Hue University of Economics. In particular, students highly appreciated the facilities of the University of Economics Ho Chi Minh City (4.31) and National Economics University (4.25). The average value of the two schools is from 4.2 to 5, which means that students strongly agree with the assessment that the facilities of the two schools are well invested.

Besides the bad points, the two criteria highly appreciated by students at the Hue University of Economics are tuition fees, reasonable support scholarships (4.09), and appropriate benchmark (3.99). The difference values between Hue University of Economics and three schools in these two criteria are all positive. The Sig 2-tailed is more significant than 0.05, so with 95% confidence, tuition fees and benchmark are two criteria that students consider the Hue University of Economics to have an advantage over the other three schools.

5. MANAGEMENT IMPLICATIONS FOR HUE UNIVERSITY OF ECONOMICS

The research results show that the student's perception of the Hue University of Economics is relatively weak compared to other universities in the survey research. Subjectively, students' perceptions may not be comprehensive and accurate toward universities' actual dimensions and manifestations. However, objectively, 2/5 dimensions students care about when choosing a university: training quality; reputation and brand image are also two standards that prestigious and objective university ranking organizations of the world such as QS (Quacquarelli Symonds), THE (Times

Higher Education), ARWU (Shanghai Academic Ranking of World Universities)) care, and evaluation. From that, some managerial implications for the Hue University of Economics drawn from this study are as follows:

Firstly, the school needs to pay attention and urgently invest in building a systematic brand strategy, analyzing and choosing appropriate brand positioning images, and regularly creating perceptual maps of each group of target objects to evaluate the difference between the desired positioning image and the perception of the target groups.

Secondly, the Hue University of Economics has many advantages and positive information. However, the promotion of the communication and marketing department makes the image and information of the university less known to the public students. This leads to students and society's perceptions that may be deviated from reality. Therefore, establishing a communication and marketing department should build a brand strategy.

Third, the quality of training is not only the most essential dimension of students when choosing a school but also a necessary criterion for rankings. Therefore, schools need to invest more in training quality aspects, such as establishing policies to improve the professional qualifications of the staff, developing training quality management policies, and having solutions to control the process of implementing the quality of training.

Finally, the school should have a policy to encourage faculty and staff to publish science in prestigious journals to improve rankings and the quality of the lectures and teams.

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