

FACTORS AFFECTING BRAND VALUE: A CASE STUDY OF VIETNAMESE NON-PUBLIC UNIVERSITIES

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Abstract: In the context of escalating competition, brand value provides strategic advantages that assist non-public universities in enhancing their capacity to attract students, affirming their prestige and fostering sustainable development. This study seeks to examine the factors influencing the brand value of non-public universities from both external perspectives (student perceptions) and internal perspectives (perceptions of faculty and employees). Data was collected from 323 respondents from non-public universities in Hanoi. The results of the analysis of the multivariate regression model identified eight factors influencing the brand value of non-public universities. Four factors, including lecturers, geographical location, employees, and facilities, influence external brand value. Conversely, four key determinants such as leadership, salary and benefits, working environment, and advancement opportunities impact the internal brand value of non-public universities. Based on the research findings, several implications are proposed to enhance the brand value of non-public universities in the future.

Keywords: External brand values, internal brand values, non-public universities.

1. INTRODUCTION

In the context of globalization and intense competition within the sphere of higher education, university brands are increasingly vital in attracting students, faculty, investors, and social partners. The brand not only encapsulates the image and reputation of an educational institution but also serves as the foundation for establishing a sustainable competitive advantage (Chapleo, 2015). In Vietnam, concurrent with the rapid expansion of the private higher education sector, the matter of developing and enhancing brand value for these institutions has become an urgent imperative to bolster competitiveness and solidify their position within the market (Nguyen, 2024).

Brand value has historically been examined chiefly from the viewpoint of external stakeholders, emphasizing customer perception, awareness, loyalty, and trust in the brand (Aaker, 1991; Keller, 2013). Nevertheless, within the sphere of higher education, the formation of the brand encompasses not only societal and student perceptions but also involves officials, lecturers, employees, and students actively engaged in the university's academic and operational environment. These individuals directly contribute to the creation and dissemination of the brand value (King & Grace, 2009). Consequently, assessing internal brand equity concurrently with external brand equity offers a comprehensive perspective, thereby assisting universities in developing their brands sustainably from the internal core outward.

Previous research has primarily concentrated on external brand value, associated with the viewpoints of students, parents, or employers (Nguyen et al., 2021). A comprehensive study by Yaping et al. (2023) further indicates that international literature in the university sector tends to emphasize external factors more prominently, whereas internal aspects such as faculty/staff awareness and brand support are comparatively underexplored. Whisman (2009) and Sujchaphong et al. (2015) both underscore the significance of internal branding as a critical yet frequently overlooked intangible asset within higher education practices. Jiang and Xiao (2024) in their study conducted in China explicitly demonstrate that internal communication, feedback mechanisms, and the collection of internal information are essential components in fostering faculty organizational identity and behaviors that support the brand, which are inherently internal processes. Nevertheless, within the Vietnamese context, internal factors such as the degree of cohesion among lecturers and employees, consensus on organizational vision, and the brand mission have not been adequately addressed, particularly in the realm of private higher education. This oversight results in a theoretical gap in the development of a model that integrates both internal and external factors for the purpose of assessing brand value.

Moreover, although many non-public universities in Vietnam have worked to improve their image externally to attract students, they have also focused equally on building their brand internally by increasing satisfaction, engagement, and commitment among lecturers, employees, and students (Nguyen et al., 2021). Consequently, brands frequently exhibit deficiencies in sustainability and remain susceptible to market fluctuations and intense competition. This situation clearly highlights the practical gap that must be examined to identify a cohesive solution aimed at enhancing both internal and external brand value within non-public universities in Vietnam.

Based on the identified gaps, this research will examine both internal and external brand values, thereby providing empirical evidence and proposing practical solutions to assist non-public training institutions in enhancing their

competitiveness, attracting learners, and simultaneously strengthening internal resources for sustainable development.

2. LITERATURE REVIEW

2.1. Analytical framework

According to Temple (2006), the university's brand is linked to its ability to deliver on academic commitments, service quality, and learning experiences with the goal of enhancing student satisfaction and engagement, as well as creating an external brand image that reflects the university's internal performance in adding value for students and the community. Nguyen and Nguyen (2024) argue that a university's brand reflects the impressions it has built in the minds of students and the community about its knowledge, skills, images, beliefs, and real-world experiences. The studies of Caywood (2012) and Nguyen et al. (2016) found that the brand serves as the foundation for distinguishing between universities and is a key factor in assessing the institution's ability to effectively meet the needs and expectations of students, demonstrating the value and prestige of a higher education institution. According to Frederick et al. (2000), the university's brand is conveyed through the institution's name, logo, and a concise statement that encapsulates its core values. Chapleo (2010) contends that education constitutes a specialized service market. Consequently, university branding emerges as a vital strategy for the effective management of educational establishments. A robust brand facilitates the attraction of highly qualified students, along with skilled lecturers and employees.

The concept of brand value has garnered significant interest among researchers worldwide. Consequently, diverse perspectives and methodologies exist for assessing brand value. According to Aaker (1991), brand value encompasses components such as brand recognition, perceived quality, and brand association. Keller (1993) introduces a brand value model comprising factors including brand awareness, brand meaning, brand perception, and brand resonance. In higher education, a study by Bennert and Ali-Choudhury (2009) identified 10 factors that constitute a university brand, including: the educational identity of a university, the location of the institution, the employability of graduates, the visual image, friendliness, reputation, athletic and social facilities, learning environment, curriculum, and community links. Furthermore, Pham and Nguyen (2018) delineated four components constituting the university's brand value identity: brand awareness, perceived quality, brand association, and brand loyalty. Moreover, Le (2017) indicates that external factors such as geographical location, facilities, lecturers, and employees significantly influence the university's brand.

A study by Judson et al. (2009) that examined internal branding from the perspective of individuals involved in university management and operations found that managers' leadership roles directly influence brand value through organizational structure, development focus, and resource management. Internal brand value is built upon employee experience and engagement (Nguyen, 2015). Le (2017) shows that pay (salary, bonuses, benefits), leadership style, work environment, and chances for advancement are key factors in evaluating internal brands. Based on the theoretical foundation and review of domestic and international studies related to brand value by Keller (1993), Bennert and Ali-Choudhury (2009), Le (2017), To et al. (2021), this study assesses brand value in two aspects: external and internal brand value. Figures 1 and 2 illustrate the research model as follows:

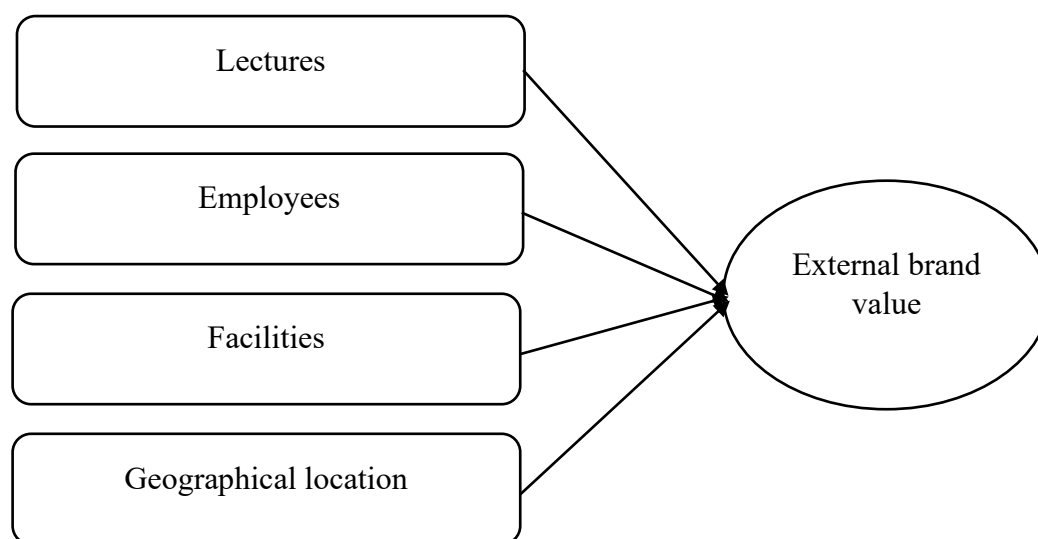


Figure 1. Research model 1
Source: Proposed by the author

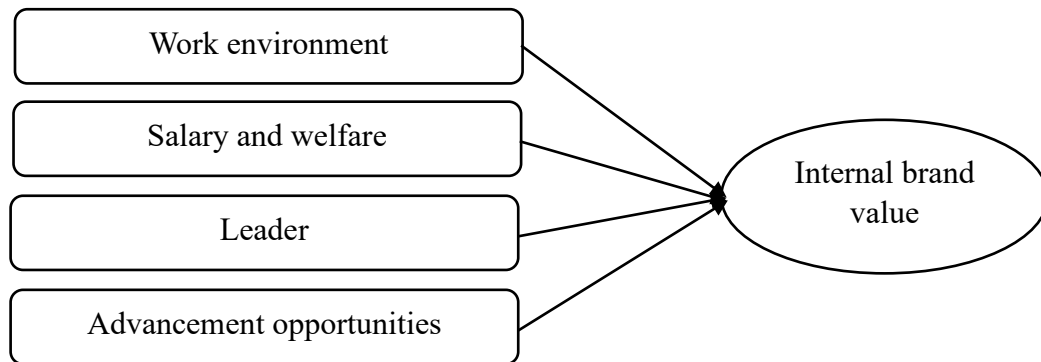


Figure 2. Research model 2

Source: Proposed by the author

2.2. Hypothesis development

Lecturers are the fundamental element that dictates the academic excellence and research reputation of the university. According to signaling theory, academic achievement and faculty reputation function as a "signal" of training and research capacity, which consequently directly influences external brand perception (Spence, 1973). Research conducted by Sung and Yang (2008) indicates that highly qualified and experienced faculty members, together with participation in international research, are contributing factors that enhance the reputation and brand appeal of educational institutions. Furthermore, the quality of teaching and lecturers' ability to connect also help build trust and influence students and parents' choices (Alves & Raposo, 2010). Therefore, lecturers are expected to positively impact the university's external brand reputation. Based on these points, the research hypothesis is formulated as follows:

H1: The lecturer will be positively linked to external brand value.

Administrative and support personnel regularly engage directly with parents, students, and partners, thereby playing a vital role in the educational service experience. According to the service quality theory (Parasuraman et al., 1988), the professionalism, service attitude, and dedication of employees foster customer satisfaction, which subsequently influences the brand image. Research conducted by Mourad et al. (2011) also indicates that administrative support and professionalism in communication significantly influence students' decisions regarding school selection. Consequently, employees possess the capacity to enhance the university's external brand value by enriching stakeholder experiences. Based on the aforementioned arguments, the following research hypothesis is proposed:

H2: The employee will be positively linked to external brand value.

Modern, comfortable, and suitable facilities for learning and research needs are among the most recognizable factors for students and society. According to experiential marketing, facilities are regarded as part of the "brand experience" perceived by students and prospective customers (Schmitt, 1999). Research conducted by Sultan and Wong (2019) demonstrates that contemporary facilities are instrumental in augmenting student satisfaction and loyalty, consequently elevating the university's brand reputation. Accordingly, it can be inferred that the facilities positively impact the perception of external brands. Based on the aforementioned reasoning, the following research hypothesis is proposed:

H3: Facilities will be positively linked to external brand value.

The university's geographic location influences accessibility, employment prospects, and alignment with the local business community. According to Chapman's (1981) theory of university choice, a favorable location constitutes one of the principal factors guiding a student's decision when selecting an institution. The studies conducted by Maringe (2006), Hemsley-Brown and Oplatka (2015) likewise underscore the significance of geographical positioning in augmenting a university's competitive edge and institutional reputation. Consequently, an advantageous location is anticipated to exert a positive impact on brand equity. Based on these considerations, the following research hypothesis is posited:

H4: Geographical location will be positively linked to external brand value.

Internal brand values mirror employees' engagement, dedication, and pride within the organization. Based on the social exchange theory (Blau, 1964), a positive work environment characterized by a supportive culture, amiable colleagues, and favorable working conditions serves to motivate employees to exhibit increased engagement and commitment. Burmann and Zeplin (2005) assert that the working environment is a significant factor in shaping internal brand value through employee engagement. Consequently, the working environment is anticipated to exert a positive influence on the university's brand value. Based on the above arguments, the research hypothesis is proposed as follows:

H5: Work environment will be positively linked to internal brand value.

Compensation, bonuses, and welfare policies serve as essential instruments in motivating personnel and sustaining employee satisfaction. According to fairness theory (Adams, 1965) and expectancy theory (Vroom, 1964), a just and transparent remuneration framework will bolster organizational commitment and foster consensus around the

brand. Research conducted by King and Grace (2009) further indicates that attractive benefits enhance employee trust and foster positive behavior towards the internal brand. Consequently, salaries, bonuses, and welfare exert a favorable influence on internal brand value. Based on the above arguments, the research hypothesis is proposed as follows:

H6: Salary and welfare will be positively linked to internal brand value.

The leader plays a vital role in guiding, supporting, and inspiring lecturers and employees. According to transformational leadership theory (Bass, 1990), leadership has the ability to greatly influence employee engagement and commitment to the organization. Burmann and Zeplin (2005) also emphasize that the role of direct leadership influences the formation of internal brand values through the communication of brand mission and values. Therefore, direct leadership is expected to have a positive impact on internal brand value. Based on the above arguments, the research hypothesis is proposed as follows:

H7: The leader will be positively linked to internal brand value.

Opportunities for advancement and career development play a key role in keeping employees engaged. According to the theory of career development (Hall, 2002), clear promotion opportunities boost motivation and loyalty. Morokane et al. (2016) also showed that career development opportunities help strengthen internal brand value by increasing organizational commitment. Therefore, promotion opportunities positively impact internal brand value. Based on the above arguments, the research hypothesis is proposed as follows:

H8: Advancement opportunities will be positively linked to internal brand value.

3. METHODOLOGY

3.1. Measurement scales

The preliminary scale is derived from and modified based on the research conducted by Bennert and Ali-Choudhury (2009), Le (2017), and To et al. (2021). The author engaged in consultations with marketing experts to analyze the relationship between variables and to calibrate the scale, ensuring its appropriateness for the specific objectives and context of the study. The formal scale depicted in Table 1 comprises 59 observed variables: the external brand value scale encompasses 30 observed variables, while the internal brand value scale includes 29 observed variables. The research employed a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 1: Formal scale

Sign	Items	Sign	Items
External brand value		Internal brand value	
EBV1	Non-public universities with a good reputation.	IBV1	The university's brand image is outstanding, easy to remember.
EBV2	Reliable non-public universities.	IBV2	The university has a prestigious brand in the Vietnamese education system
EBV3	The school's job fair attracts many prestigious businesses.	IBV3	Information about the university is regularly updated
EBV4	Many businesses want to recruit graduates of the university.	IBV4	Lecturers and employees are ready to introduce qualified people to the school
EBV5	Students feel proud when they talk about the school.	IBV5	Lecturers and employees always introduce the University to friends and relatives.
		IBV6	Faculty and employee are proud to work at the school
Lecturer		Work environment	
Lec1	Lecturers have good professional knowledge.	WE1	Colleagues always help each other.
Lec2	Lecturers have easy-to-understand communication methods.	WE2	Colleagues are willing to share their experiences.
Lec3	The lecturers are friendly with the students.	WE3	The workplace conditions are very complete and comfortable.
Lec4	Lecturers are enthusiastic to assist students in academic matters.	WE4	The university provides a full range of machinery and equipment for work.
Lec5	Lecturers teach according to the university's learning materials standards.	WE5	The working culture of the school is very harmonious and fun.
Lec6	Lecturers evaluate learning outcomes accurately.		
Lec7	Learning results are evaluated fairly by lecturers.		
Employee		Salary and welfare	
Emp1	Employee have a respectful attitude towards students.	SW1	Income worthy of performance results

Sign	Items	Sign	Items
Emp2	Employee resolve student requests quickly.	SW2	Guaranteed income for the life of yourself and your family.
Emp3	Employees work with a high precision attitude.	SW3	The university consistently implements the salary and bonus policy.
Emp4	Departments are open on time.	SW4	The university has a very satisfactory reward policy.
Emp5	Career counseling activities meet the requirements of students.	SW5	The university has recognized the contribution of lecturers and employee to the development of the university.
Emp6	Activities to support students in good academic performance.	SW6	The welfare policy clearly shows the university's interest in lecturers and employee.
Emp7	The activity supports students in good movements.	SW7	The school organizes annual trips for lecturers and employee.
Facilities		Leader	
Fac1	Classes with a reasonable number of students.	Lea1	Lecturers/employee can communicate frankly with leaders about work-related issues.
Fac2	Classrooms are fully equipped with teaching equipment.	Lea2	Lecturers/employee receive guidance and advice from leaders at work.
Fac3	The classroom facilities work well.	Lea3	Leadership motivates lecturers/employee
Fac4	The library is full of necessary reference materials for students.	Lea4	Leadership creates a sense of comfort for lecturers/employees
Fac5	The library has full space for students to study and research.	Lea5	Leaders' rewards encourage the working spirit of lecturers/ employees.
Fac6	The university's facilities are convenient for learning and living.	Lea6	Leaders are very skillful in rewarding and criticizing lecturers/ employees.
Geographical location		Advancement opportunities	
GL1	The university's campus is conveniently located.	AO1	The university implements a consistent and fair promotion policy.
GL2	The bus station near the school is convenient for students to go to school by public transportation.	AO2	The conditions and requirements for promotion positions are always public.
GL3	The location of the university is close to cafeterias and groceries for students.	AO3	Seniority does not affect job advancement.
GL4	The university's location near companies is convenient for students to work part-time.	AO4	The university always creates opportunities for promotion for capable people.
GL5	There are many affordable hostels around the university for students.	AO5	Educational attainment affects advancement.

Source: Compiled by the author

3.2. Sample size

According to Hair et al. (2010), the minimum sample size for factor analysis is 5:1. Therefore, with 59 observed variables, the required sample size is 295. However, the author distributed 350 questionnaires to account for the possibility that some survey samples might be invalid and discarded during the cleaning process. The convenient non-probability sampling method was employed, including two groups of survey respondents: students assessing the external brand value (Survey Form 1) and lecturers or employees evaluating the internal brand value (Survey Form 2). The survey was conducted at non-public universities in Hanoi city. The data collection period spanned from January to April 2025. Following the removal of invalid samples, a total of 323 valid responses were obtained, comprising 168 students and 171 lecturers or employees.

Survey sample 1 consisted of 62.5% female respondents and 37.5% male students. Most students are in the age group of 18 to 22 years old, making up 92.3%, while 7.7% of transfer or second-degree students are between 23 and 25 years old. Regarding courses, 10.7% are first-year students, 25.0% are sophomores, 36.3% are third-year students, and 28.0% are seniors. Regarding majors, students who participated in the survey primarily came from economics-management majors, making up 43.5%. This was followed by information technology, accounting for 21.4%, language-social studies at 17.9%, and 17.2% from other majors.

Survey sample 2 had 53.8% of respondents who were male and 46.2% who were female. In terms of age, respondents under 30 years old made up 18.7%, those aged 30 to 40 accounted for 43.3%, and those over 40 accounted for 38.0%. Regarding job positions, lecturers comprised 66.1% and employees of functional departments made up 33.9%. Regarding work seniority, 15.8% have less than 3 years, 28.7% have between 3 and less than 5 years, 31.6% have between 5 and less than 10 years, and 24.0% have more than 10 years.

3.3. Data analysis

Hypotheses were tested using multivariate regression. The data analysis process involved reliability analysis, exploratory factor analysis, correlation analysis, and multivariate linear regression analysis. The multivariate regression models are expressed as follows:

(1) Model 1:

$$EBV = \beta_0 + \beta_1 * Lec + \beta_2 * Emp + \beta_3 * Fac + \beta_4 * GL + \varepsilon$$

In which:

EBV (Dependent variable): External brand value

Independent variables (X_i): Lecturer (Lec), Employee (Emp), Facilities (Fac), Geographical location (GL).

β_k : Regression coefficient ($k = 0, 1, 2, 3, 4$).

ε : Random error

(2) Model 2:

$$IBV = \beta_0 + \beta_5 * EW + \beta_6 * SW + \beta_7 * Lea + \beta_8 * AO + \varepsilon$$

In which:

IBV (Dependent variable): Internal brand value

Independent variables (X_i): Work environment (WE), Salary and welfare (SW), Leader (Lea), Advancement opportunities (AO).

β_k : Regression coefficient ($k = 0, 5, 6, 7, 8$).

ε : Random error

4. RESULTS AND DISCUSSION

The results of the second reliability test for model 1, after removing the observational variables Emp3, Emp7, Fac3, Fac4, and GL4 due to a Corrected Item-Total Correlation of less than 0.2, showed that Cronbach's Alpha for the scales exceeding 0.7 indicate high reliability, as recommended by Hair et al. (2010). Additionally, the dependent scale's test results display a Cronbach's Alpha coefficient of 0.827, surpassing the 0.7 threshold, confirming that the scale is reliable (Hair et al., 2010).

Table 1: Cronbach's Alpha and EFA of model 1

Items	Loadings			
	1	2	3	4
Lec4		0.823		
Lec2		0.801		
Lec6		0.795		
Lec1		0.778		
Lec5		0.762		
Lec3		0.754		
Lec7		0.737		
Emp5			0.816	
Emp2			0.807	
Emp4			0.789	
Emp1			0.765	
Emp6			0.751	
Fac1	0.794			
Fac6	0.780			
Fac5	0.772			
Fac2	0.763			
GL3				0.827
GL2				0.812
GL1				0.793
GL5				0.785
KMO = 0.792, Sig. = 0.000				
Cronbach's Alpha	0.816	0.854	0.804	0.831
Eigenvalue	4.571	3.822	2.584	1.246
% of Variance	40.275	58.661	69.451	78.194
KMO = 0.811, Sig. = 0.000				
EBV1	0.838			
EBV5	0.814			
EBV3	0.805			
EBV4	0.796			
EBV2	0.785			

Items	Loadings			
	1	2	3	4
Cronbach's Alpha	0.827			
Eigenvalue	1.982			
% of Variance	78.514 %			

Source: Analysis results from SPSS 26

The independent variable EFA results of model 1 demonstrated that the KMO measure was 0.792, and the significance value (Sig) of Bartlett's test was below 0.05, indicating that the data were statistically significant. At an eigenvalue of 1.246, which exceeds 1, four factors were extracted, accounting for a total variance of 78,194%, thereby indicating that these four factors explain 78,194% of the data variation. Furthermore, factor loadings greater than 0.7 suggest that the observed variables are of high quality (see Table 1).

The exploratory factor analysis (EFA) results for the dependent variable of Model 1 indicate that the Kaiser-Meyer-Olkin (KMO) coefficient is 0.811, and the factor loadings exceed 0.5. At an Eigenvalue threshold of 1.982, all five observed variables were consolidated into a single factor with a cumulative variance of 78.514%, demonstrating a highly convergent scale. Consequently, the scales used in Model 1 attain both convergent and discriminant validity.

Table 2: Cronbach's Alpha and EFA of model 2

Items	Loadings			
	1	2	3	4
WE1				0.835
WE2				0.819
WE3				0.807
WE4				0.789
WE5				0.776
SW1		0.824		
SW3		0.810		
SW4		0.791		
SW5		0.783		
SW6		0.767		
SW7		0.752		
Lea1	0.817			
Lea3	0.795			
Lea4	0.783			
Lea5	0.779			
Lea6	0.762			
AO1			0.803	
AO2			0.799	
AO3			0.781	
AO4			0.775	
KMO = 0.814, Sig. = 0.000				
Cronbach's Alpha	0.821	0.814	0.807	0.833
Eigenvalue	3.918	2.205	1.739	1.153
% of Variance	43.524	50.741	62.938	77.986
KMO = 0.802, Sig. = 0.000				
IBV1	0.823			
IBV2	0.819			
IBV3	0.807			
IBV4	0.785			
IBV5	0.773			
IBV6	0.765			
Cronbach's Alpha	0.820			
Eigenvalue	1.947			
% of Variance	78.136			

Source: Analysis results from SPSS 26

The initial reliability assessment of Model 2 revealed that the observed variables SW2, SW5, and Lea2 exhibited Corrected Item-Total Correlations of 0.127, 0.103, and 0.247, respectively, all below the threshold of 0.3. Consequently, the scale was subsequently omitted, and a second analysis was undertaken. The results of this subsequent reliability evaluation demonstrated that the Cronbach's Alpha coefficients for the scales exceeded 0.5, and the Corrected Item-Total Correlations surpassed 0.3, thereby indicating a scale with satisfactory reliability (Hair et al., 2010).

The independent variable EFA results of model 2 with a KMO of 0.814 and a Sig value of Bartlett's test of 0.000 prove that the data are consistent and statistically significant. At the Eigenvalue level of 1,153 greater than 1, there are 4 factors extracted with a total variance of 78,136% and a factor loading greater than 0.5. The dependent variable of EFA results of model 2 showed that the KMO reached 0.802 with the Sig. value of Bartlett's test reaching 0.000, proving that the data were consistent and statistically significant. At the Eigenvalue level of 1,947 greater than 1, only 1 factor is extracted with a total variance greater than 50% and a factor load coefficient greater than 0.5 satisfying the requirements recommended by Hair et al. (2010). Therefore, the scales of model 2 reach convergent and discriminant validity.

Table 3: Correlation analysis of model 1

	EBV	Lec	Emp	Fac	GL
EBV	1	0.542**	0.531**	0.558**	0.505**
Lec	0.542**	1	0.213**	0.189**	0.247**
Emp	0.531**	0.213**	1	0.172**	0.185**
Fac	0.558**	0.189**	0.172**	1	0.236**
GL	0.505**	0.247**	0.185**	0.236**	1

*significant at $p < 0.05$, **significant at $p < 0.01$

Source: Analysis results from SPSS 26

The results of the correlation analysis indicate that all independent variables in Model 1 were positively correlated and statistically significant with the dependent variable "external brand value" at $p < 0.01$, with correlation coefficients exceeding 0.4. There was a low to moderate correlation between independent factors ($r < 0.3$), suggesting no evidence of multicollinearity, thereby rendering it appropriate for linear regression analysis (see Table 3).

Table 4: Correlation analysis of model 2

	IBV	WE	SW	Lea	AO
IBV	1	0.515**	0.597**	0.543**	0.588**
WE	0.515**	1	0.221**	0.203**	0.194**
SW	0.597**	0.221**	1	0.186**	0.179**
Lea	0.543**	0.203**	0.186**	1	0.188**
AO	0.588**	0.194**	0.179**	0.188**	1

*significant at $p < 0.05$, **significant at $p < 0.01$

Source: Analysis results from SPSS 26

The results of the correlation analysis indicated that the independent and dependent variables in Model 2 exhibited a strong positive relationship, as evidenced by a correlation coefficient exceeding 0.4 and a significance level below 0.05 (Hair et al., 2010). Concurrently, no indication of multicollinearity among the independent variables was observed, rendering the data appropriate for subsequent analyses (see Table 4).

Table 5: Linear regression analysis of model 1

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	Std	Beta			Tolerance	VIF
1	Constant	1.862	0.028		5.231	0.004		
	Lec	0.341	0.035	0.353	4.587	0.001	0.624	1.769
	Emp	0.274	0.021	0.291	5.629	0.007	0.539	1.185
	Fac	0.267	0.030	0.275	4.425	0.000	0.347	1.672
	GL	0.315	0.025	0.336	4.388	0.002	0.412	1.648

F = 114.859, Sig. = 0.000

R² = 0.774, Adjusted R² = 0.769, Durbin-Watson = 1.825

a. Dependent variable: EBV

Source: Analysis results from SPSS 26

The findings from the analysis of the multiple linear regression model indicate that the model has an R² value of 0.774 and an adjusted R² of 0.769. This suggests that approximately 76.9% of the variance in the dependent variable is accounted for by four predictors within the model, while the remaining 23.1% is attributable to factors outside the model and stochastic error. Moreover, the Durbin-Watson statistic confirms that the assumption of no first-order autocorrelation is not violated. Additionally, the results of the ANOVA analysis and the F-test demonstrate a significance value (Sig.) of 0.000, indicating that the linear regression model adequately fits the data.

The results of the testing of the research hypotheses demonstrated that the significance level of the scales was below 0.05, and the Variance Inflation Factor (VIF) for the independent variables was less than 2, indicating the absence of multicollinearity. Furthermore, regression diagnostic assessments, including scatterplots, histograms, and P-P plots, indicate that the residuals are randomly distributed, conform to standard assumptions, and do not violate the premises of the multivariate linear regression model. Specifically, the scatterplot exhibits randomly dispersed points around the mean of 0, which do not form any regular geometric pattern, thereby confirming that the assumptions of linearity and homoscedasticity are satisfied. The histogram of the residuals demonstrates a distribution that approximates a standard normal distribution, with the curve closely aligning with the frequency histogram when the mean is approximately 0 and the standard deviation is near 1, reflecting a residual distribution consistent with the standard normal distribution. The P-P Plot of the normalized residuals indicates that the data points are appropriately aligned along the 45-degree diagonal, thereby affirming the assumption of normality for the residuals, which is not violated. Consequently, hypotheses H1 through H4 are supported. The regression equation of Model 1, based on the standardized Beta coefficients, is as follows:

$$EBV = 0.353*Lec + 0.336*Emp + 0.291*Fac + 0.275*GL + \varepsilon$$

Thus, four factors are positively related to the external brand value of non-public universities, in decreasing order: lecturers, geographical location, employees, and facilities.

Table 6: Linear regression analysis of model 2

Model		Unstandardized coefficients		Standardized coefficients	t	Sig.	Collinearity statistics	
		B	SD	Beta			Tolerance	VIF
1	Constant	1.587	0.024		4.315	0.000		
	WE	0.262	0.019	0.284	5.296	0.001	0.634	1.832
	SW	0.290	0.032	0.308	4.638	0.006	0.591	1.792
	Lea	0.319	0.021	0.337	4.792	0.000	0.627	1.808
	AO	0.223	0.038	0.259	5.913	0.002	0.608	1.731
F = 123.467, Sig. = 0.000								
R ² = 0.793, Adjusted R ² = 0.778, Durbin-Watson = 1.792								
a. Dependent variable: IBV								

Source: Analysis results from SPSS 26

The analysis results in Table 6 show that R² was 0.793 and the adjusted R² was 0.778, demonstrating that the model has a high level of explanatory power. Additionally, the Durbin-Watson value was 1.792, indicating that the first-order autocorrelation assumption was not violated. Furthermore, the results of the ANOVA analysis and the F-test also demonstrate that the statistical value derived from R² has a Sig value of 0.000. Additionally, the total regression sum of squares exceeds the sum of the residual squares, indicating that the model accounts for the majority of the variance in the dependent variable. Therefore, the linear regression model aligns with the data. The testing of research hypotheses demonstrated that the factors possessed a significance level below 0.05, and the variance inflation factor (VIF) of the independent variables was under 2, indicating that no multicollinearity issue was present. Furthermore, testing the assumption of the standard distribution of the residuals indicates that the standard deviation is approximately 1 and the mean is close to 0. Therefore, the hypothesis of a standard distribution of residuals in the construction of the regression model is not violated. The P-P Plot demonstrates that the observed points are not significantly dispersed from the expected line, thereby confirming that the distributional assumption remains intact.

Thus, the hypotheses from H5 to H8 are accepted, and the regression equation of model 2, based on the standardized Beta coefficient, is as follows:

$$IBV = 0.337*Lea + 0.308*SW + 0.284*EW + 0.259*AO + \varepsilon$$

Four factors affecting the internal brand value of non-public universities in a decreasing degree are: leadership, salary and welfare, work environment, and advancement opportunities.

5. DISCUSSION AND IMPLICATIONS

The findings of the study affirmed that both external factors (such as lecturers, employees, facilities, and geographical location) and internal factors (including work environment, salary and welfare, leaders, and advancement opportunities) exhibit a positive correlation with the brand value of non-public universities. These findings substantiate the principles of signaling theory, which posits that universities convey competence and prestige to external audiences through faculty, facilities, and support services (Spence, 1973; Sung & Yang, 2008). Simultaneously, the findings align with social exchange theory and internal branding theory, which identify the work environment, salary, leaders, and career opportunities as fundamental elements underpinning internal brand commitment (Burmman & Zeplin, 2005; Blau, 1964).

It is worth noting that the research model shows a strong connection between external brand values and internal brand values. External brand value is strongly influenced by factors related to external perception (lecturers, employees, facilities, and geographical location). In contrast, internal brand value depends on internal experience (work environment, salary and welfare, leaders, and advancement opportunities). This finding complements prior research, which has frequently concentrated on a single dimension of impact or externality (Alves & Raposo, 2010; Mourad et al., 2011), or from internal perspectives (King & Grace, 2009; Morokane et al., 2016).

Practically, the study's findings offer managers of non-public universities a more comprehensive approach to developing and sustaining a brand in higher education. Based on these findings, some implications are suggested as follows:

For external brand value, non-public universities must simultaneously implement policies to develop lecturers, enhance staff service quality, invest in facilities, and leverage their geographical location. This approach helps create a strong and sustainable image in the minds of students and society. Focus on investing in improving the quality of lecturers through periodic professional training, updating modern teaching methods, and creating an academic environment that encourages creativity and innovation. In addition, the development of a lecturer evaluation mechanism associated with feedback from students will contribute to improving the quality of training and building brand trust. The university should leverage its location by creating a learning support ecosystem, collaborating with nearby businesses, developing utility services around the campus, and enhancing communication to incorporate the location into its brand promotion strategy. Furthermore, it is essential to develop a comprehensive training plan for professional development, enhance the awareness and work ethic of employees within the functional departments, and provide training in service skills, communication skills, and professional etiquette. This aims to establish an efficient, friendly, and consistent workflow. Additionally, it is necessary to equip and upgrade work equipment and information networks, thereby enabling employees to serve promptly and comprehensively, meeting the needs of students during their tenure at the university and also after graduation. The university should also advocate for investment in modern, fully equipped classrooms, comfortable libraries, and welcoming learning environments. Additionally, it is essential to construct dormitories to facilitate convenient living, foster collective learning and communication, encourage participation in sports to promote health, and reduce family expenses.

Regarding internal brand value, non-public universities must formulate a comprehensive human resource development strategy, encompassing leadership, remuneration policies, working environment, and promotion opportunities. When lecturers and employee feel respected, properly appreciated, and have opportunities for professional growth, they are more likely to remain committed and voluntarily promote a positive image of the university externally. This approach contributes to establishing a robust, genuine, and sustainable brand foundation. Non-public universities are advised to regularly implement training programs focusing on leadership skills, human resource management, motivational strategies, and effective communication for deans and department heads. Concurrently, these institutions should establish a two-way feedback mechanism, enabling employees to provide suggestions to leadership, thereby facilitating adjustments in management styles and fostering a democratic and cohesive working environment. Furthermore, non-public universities must establish and enhance salary, bonus, and welfare policies with an emphasis on fairness, transparency, and competitiveness. Compensation should be determined based on job position, task completion level, and actual contributions. Additionally, it is essential to focus on intangible benefits such as healthcare support, spiritual well-being, and educational assistance for employees' children in order to increase employee satisfaction and loyalty. Investment should be made in cultivating a professional and amicable working environment, thereby creating conducive conditions for organizational development. Non-public universities should promote a culture of collaboration and information sharing, whilst simultaneously ensuring that the material conditions and resources necessary to support work are sufficient and easily accessible. Regular organization of collective, professional, and internal cohesion activities is essential to reinforce teamwork and uphold a constructive working environment. Furthermore, advancement policies ought to be formulated with clarity and transparency, fostering motivation among cadres, lecturers, and employees to advance their careers. Non-public universities should publicly disclose the criteria for promotion consideration, organize training and refresher courses to prepare for higher positions, and concurrently develop a detailed career development roadmap enabling individuals to clearly see their opportunities and prospects within the organization.

6. CONCLUSION

The primary objective of this study was to assess factors influencing the brand value of private universities. The analysis indicates that eight internal and external factors impact the brand value of such institutions. Nonetheless, the study possesses certain limitations, including the scope of the survey, intermediate variables not incorporated into the two proposed models, and the lack of differentiation analysis based on university type between public and private institutions. Consequently, future research should consider expanding the sample scope and incorporating additional factors such as organizational culture, the extent of internationalization, and the influence of digital technologies on the development of university brand value.

REFERENCES

1. Aaker, D. A. (1991). *Managing brand equity*. New York: Free Press.
2. Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267-299). Academic Press.
3. Alves, H., & Raposo, M. (2010). The influence of university image on student behaviour. *International Journal of Educational Management*, 24(1), 73-85. <https://doi.org/10.1108/09513541011013060>
4. Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-31. [https://doi.org/10.1016/0090-2616\(90\)90061-S](https://doi.org/10.1016/0090-2616(90)90061-S)
5. Bennert, R., & Ali-Choudhury, R. (2009). Prospective Students' Perceptions of University Brands: An Empirical Study. *Journal of Marketing for Higher Education*, 19(1), 85-107. <https://doi.org/10.1080/08841240902905445>
6. Blau, P. M. (1964). Justice in Social Exchange. *Sociological Inquiry*, 34(2), 193-206. <https://doi.org/10.1111/j.1475-682X.1964.tb00583.x>
7. Burmann, C., & Zeplin, S. (2005). Building brand commitment: A behavioural approach to internal brand management. *Journal of Brand Management*, 12(4), 279-300. <https://doi.org/10.1057/palgrave.bm.2540223>
8. Caywood, C. L. (2012). *The handbook of strategic public relations and integrated marketing communications*. McGraw-Hill.
9. Chapleo, C. (2010). What defines “successful” university brands?. *International Journal of Public Sector Management*, 23(2), 169-183. <https://doi.org/10.1108/09513551011022519>
10. Chapman, D. W. (1981). A model of student college choice. *The Journal of Higher Education*, 52(5), 490-505. <https://doi.org/10.2307/1981837>
11. Frederick, D., Kuratko, D. F., & Hodgetts, R. M. (2000). *Entrepreneurship: Theory, process, and practice* (5th ed.). South-Western College Publishing.
12. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th Edition). Pearson, New York.
13. Hall, D. T. (2002). *Careers in and out of organizations*. Sage Publications.
14. Hemsley-Brown, J., & Oplatka, I. (2015). *Higher education consumer choice*. Palgrave Macmillan.
15. Jiang, S. F., & Xiao, F. (2024). How Teachers Contribute to the Sustainability of the University Brand: Evidence from China. *Sustainability*, 16(9), 3793. <https://doi.org/10.3390/su16093793>
16. Judson, K. M., Aurand, T., Gorchels, L., & Gordon, G. L. (2009). Building a university brand from within: University administrators' perspectives of internal branding. *Services Marketing Quarterly*, 30(1), 54-68. <https://doi.org/10.1080/15332960802467722>
17. Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
18. King, C., & Grace, D. A. (2009). Employee Based Brand Equity: A Third Perspective. *Services Marketing Quarterly*, 30(2), 122-147. <https://doi.org/10.1080/15332960802619082>
19. Le, Q. H. (2017). *Data Analytics in Business*. Ho Chi Minh City: Ho Chi Minh City Economic Publishing House.
20. Maringe, F. (2006). University and course choice: Implications for positioning, recruitment and marketing. *International Journal of Educational Management*, 20(6), 466-479. <https://doi.org/10.1108/09513540610683711>
21. Morokane, P., Chiba, M., & Sloan, P. (2016). Analysing the role of employee brand ambassadorship in corporate branding. *Journal of Business Research*, 69(8), 3041-3048.
22. Mourad, M., Ennew, C., & Kortam, W. (2011). Brand equity in higher education. *Marketing Intelligence & Planning*, 29(4), 403-420. <https://doi.org/10.1108/02634501111138563>
23. Nguyen, B., Yu, X., Melewar, T. C., & Hemsley-Brown, J. (2016). Brand ambidexterity and commitment in higher education: An exploratory study. *Journal of Business Research*, 69(8), 3105-3112. <https://doi.org/10.1016/j.jbusres.2016.01.026>
24. Nguyen, D. N. (2024). Access to higher education and its contribution to human capital in Vietnam. *Journal of Economics and Development*, 329(2), 104-111.
25. Nguyen, G. T., Tran, N. M., & Dang, Q. V. (2021). The factors affecting the brand equity of Dong Thap University - Research based on students. *Dong Thap University Journal of Science: Social Sciences and Humanities Issue*, 10(6), 29-39.
26. Nguyen, N. H., & Nguyen, T. T. L. (2024). Effects of brand equity on satisfaction, university reputation and student's word-of-mouth intention. *Journal of Finance-Marketing Research*, 15(3), 76-91. <https://doi.org/10.52932/jfm.vi3.417>
27. Nguyen, T. T. (2015). Factors affecting employee brand support behavior in higher education: Empirical evidence at Ho Chi Minh City University of Economics. *Journal of Asian Business and Economic Studies*, 26(6), 134-152.
28. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

29. Pham, T. H., & Nguyen, T. D. (2018). Enhance the brand value of the university. *Vietnam Journal of Science and Technology*, 8, 22-24.
30. Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1-3), 53-67. <https://doi.org/10.1362/026725799784870496>
31. Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355-374. <https://doi.org/10.2307/1882010>
32. Sujchaphong, N., Nguyen, B., & Melewar, T. C. (2015). Internal branding in universities and the lessons learnt from the past: the significance of employee brand support and transformational leadership. *Journal of Marketing for Higher Education*, 25(2), 204-237. <https://doi.org/10.1080/08841241.2015.1040104>
33. Sultan, P., & Wong, H. Y. (2019). How service quality affects university brand performance, university brand image and behavioural intention: The mediating effects of satisfaction and trust. *Total Quality Management & Business Excellence*, 30(7-8), 767-786. <https://doi.org/10.1057/s41262-018-0131-3>
34. Sung, M., & Yang, S. U. (2008). Toward the model of university image: The influence of brand personality, external prestige, and reputation. *Journal of Public Relations Research*, 20(4), 357-376. <https://doi.org/10.1080/10627260802153207>
35. Temple, P. (2006). Branding higher education: Illusion or reality? Perspectives: Policy and Practice in Higher Education, 10(1), 15-19. <https://doi.org/10.1080/13603100500508215>
36. To, A. D., Nguyen, T. T. A., Truong, T. M. D., Tran, T. T. M., & Vo, T. M. T. (2021). Factors Affecting Brand of Tay Do University. *Journal of Science Research and Economic Development*, 12, 146-161.
37. Vroom, V. H. (1964). *Work and motivation*. Wiley.
38. Whisman, R. (2009). Internal branding: a university's most valuable intangible asset. *Journal of Product & Brand Management*, 18(5), 367-370. <https://doi.org/10.1108/10610420910981846>
39. Yaping, X., Nguyen, T. T. H., Nguyen, H. N., Phan, D. Q., Cao, T. K., & Dao, T. H. A. (2023). University brand: A systematic literature review. *Heliyon*, 9(6), e16825. <https://doi.org/10.1016/j.heliyon.2023.e16825>