

**“An Empirical Investigation on Measuring, Managing and Building Consumer-Based Brand Equity of Selected Higher Education Institutes in Gujarat State, India”**

**SYNOPSIS**

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## LIST OF ABBREVIATIONS

Acronym	Full Form
BE	Brand Equity
CBBE	Consumer Based Brand Equity
HEIs	Higher Education Institutions
COU	Choice of University
UGC	University Grants Commission
NIRF	National Institutional Ranking Framework
SIRF	State Institutional Ranking Framework
NAAC	National Assessment and Accreditation Council
AICTE	All India Council for Technical Education
NEP	National Education Policy
MHRD	Ministry of Human Resource Development
BA	Brand Awareness
OBA	Overall Brand Awareness
WOM	Word of Mouth
BI	Brand Image
AQ	Administrative Quality
PQS	Perceived Quality of Service
PEQ	Physical Environment Quality
CEQ	Core Educational Quality
SFQ	Support Facilities Quality
TQ	Transformative Quality

## 1. INTRODUCTION:

Higher Education sector has witnessed a tremendous increase in the number of Universities/University level Institutions & Colleges since Independence. The number of universities has increased 34 times from 20 in 1950 to 988 in 2021. The sector boasts of 56 Central Universities, 460 State Universities, 430 Private universities, 128 Deemed to be Universities.

In India, "University" means a university established or incorporated by or under a Central Act, a Provincial Act or a State Act and includes any such institution as may, in consultation with the University concerned, be recognised by the University Grants Commission (UGC) in accordance with the regulations made in this regard under the UGC Act, 1956. Every year, millions of students from within the country and abroad, enter these portals mainly for their graduate, post graduate studies while millions leave these portals for the world outside.

Higher Education is the shared responsibility of both the Centre and the States. The coordination and determination of standards in Universities & Colleges is entrusted to the UGC and other statutory regulatory bodies.

The Central Government provides grants to the UGC and establishes Central Universities/Institutions of National Importance in the country. The Central Government is also responsible for declaring an educational institution as "Deemed-to-be University" on the recommendations of the UGC.

At present, the main categories of University/University-level Institutions are: - Central Universities, State Universities, Deemed-to-be Universities and University-level institutions.

### **Central University:**

A university established or incorporated by a Central Act.

### **State University:**

A university established or incorporated by a Provincial Act or by a State Act.

### **Private University:**

A university established through a State/Central Act by a sponsoring body viz. A Society registered under the Societies Registration Act 1860, or any other corresponding law for the time being in force in a State or a Public Trust or a Company registered under Section 25 of the Companies Act, 1956.

**Deemed-to-be University:**

An Institution Deemed to be University, commonly known as Deemed University, refers to a high-performing institution, which has been so declared by Central Government under Section 3 of the University Grants Commission (UGC) Act, 1956.

**Institution of National Importance:**

An Institution established by Act of Parliament and declared as Institution of National Importance.

**Institution under State Legislature Act:**

An Institution established or incorporated by a State Legislature Act.

**University Grants Commission**

The University Grants Commission is a statutory organization established by an Act of Parliament in 1956 for the coordination, determination, and maintenance of standards of university education. Apart from providing grants to eligible universities and colleges, the Commission also advises the Central and State Governments on the measures which are necessary for the development of Higher Education. It functions from New Delhi as well as its six regional offices located in Bangalore, Bhopal, Guwahati, Hyderabad, Kolkata, and Pune.

**The UGC`s mandate includes:**

- Promoting and coordinating university education.
- Determining and maintaining standards of teaching, examination, and research in universities.
- Framing regulations on minimum standards of education.
- Monitoring developments in the field of collegiate and university education; disbursing grants to the universities and colleges.
- Serving as a vital link between the Union and state governments and institutions of higher learning.
- Advising the Central and State governments on the measures necessary for improvement of university education.

<b>Universities</b>	<b>Total No</b>
State Universities	460
Deemed to be Universities	128
Central Universities	56
Private Universities	430
<b>Total</b>	<b>1074</b>

*Table 1.1: Total Number of Universities in the Country as on 25-01-2023:*

## **National Education Policy**

The National Education Policy (NEP) 2020 is a comprehensive framework to guide the development of education in India. It was approved by the Union Cabinet of India in July 2020, replacing the previous National Policy on Education, 1986. The NEP 2020 aims to overhaul the Indian education system to make it more holistic, flexible, multidisciplinary, and suited to the needs of the 21st century.

### **Some key highlights of the NEP 2020 include:**

1. **Early Childhood Care and Education (ECCE):** Emphasis on the importance of ECCE, with a goal to provide universal access to quality early childhood education for children up to six years of age.
2. **School Education:** Focus on Foundational Literacy and Numeracy, flexible curricula, multidisciplinary learning, vocational integration, and continuous assessment reforms. The policy also aims to achieve 100% Gross Enrollment Ratio (GER) in school education by 2030.
3. **Higher Education:** Introduction of a flexible and multidisciplinary approach, multiple entry and exit points, credit transfer, and academic bank of credits to facilitate lifelong learning. The policy also aims to increase Gross Enrollment Ratio (GER) in higher education to 50% by 2035.
4. **Teacher Education and Training:** Reforms in teacher recruitment, training, and professional development to ensure quality educators. The policy also advocates for the establishment of a National Mission for Mentoring to provide support to teachers.
5. **Technology Integration:** Leveraging technology for teaching, learning, and assessment. It promotes the use of online education, digital infrastructure, and the development of digital content in regional languages.

6. **Languages:** Encouragement of multilingualism and the preservation of regional languages. The NEP 2020 advocates for the implementation of a three-language formula, with the mother tongue or local language as the medium of instruction up to Grade 5.
7. **Assessment Reforms:** Shift towards competency-based learning assessments and reduction of the emphasis on board exams.
8. **Regulatory Framework:** Establishment of the Higher Education Commission of India (HECI) to replace the University Grants Commission (UGC) and the All-India Council for Technical Education (AICTE).

Overall, the NEP 2020 aims to transform the Indian education system to meet the demands of the 21st century by focusing on accessibility, equity, quality, affordability, and accountability.

## **1.1 Pillars of Quality Assurance in Indian Higher Education''**

### **All India Council for Technical Education**

AICTE (All India Council for Technical Education) was established under the AICTE Act, 1987, serving as a statutory body responsible for the planning, coordination, and management of technical education processes. Its functions encompass formulating norms and standards for technical education programs, accrediting institutions, promoting quality education, fostering research and development, and ensuring the maintenance of standards and quality in technical education. AICTE oversees various activities including the approval process for new technical institutions, affiliation of existing institutions, accreditation of programs, and providing grants for the development of technical education infrastructure.

### **NAAC (National Assessment and Accreditation Council)**

India has one of the largest and diverse education systems in the world. Privatization, widespread expansion, increased autonomy and introduction of Programmes in new and emerging areas have improved access to higher education. At the same time, it has also led to widespread concern on the quality and relevance of the higher education. To address these concerns, the National Policy on Education (NPE, 1986) and the Programme of Action (PoA, 1992) spelt out strategic plans for the policies, advocated the establishment of an independent National accreditation agency. Consequently, the National Assessment and Accreditation Council (NAAC) was established in 1994 as an autonomous institution of the University Grants Commission (UGC) with its Head

Quarter in Bengaluru. The mandate of NAAC as reflected in its vision statement is in making quality assurance an integral part of the functioning of Higher Education Institutions (HEIs).

The NAAC functions through its General Council (GC) and Executive Committee (EC) comprising educational administrators, policy makers and senior academicians from a cross-section of Indian higher education system. The Chairperson of the UGC is the President of the GC of the NAAC, the Chairperson of the EC is an eminent academician nominated by the President of GC (NAAC). The Director is the academic and administrative head of NAAC and is the member-secretary of both the GC and the EC. In addition to the statutory bodies that steer its policies and core staff to support its activities NAAC is advised by the advisory and consultative committees constituted from time to time.

It assesses institutions based on parameters such as infrastructure, teaching and learning resources, research output, governance, and student services. Accreditation by NAAC, a voluntary process, serves as a quality assurance mechanism, with institutions undergoing rigorous assessments by NAAC peer teams and being awarded grades ranging from A++ to C, thereby enhancing their reputation and credibility

<b>Type of Higher Education Institution</b>	<b>Number of Higher Education Institutions accredited</b>
Universities	362
Colleges	6176
Total	6538

Table 1.2: Total Number of Institutions accredited (Status as on 23/05/2024)

### **NIRF (National Institutional Ranking Framework)**

The National Institutional Ranking Framework (NIRF) was approved by the MHRD and launched by Honourable Minister of Human Resource Development on 29th September 2015. This framework outlines a methodology to rank institutions across the country. The methodology draws from the overall recommendations broad understanding arrived at by a Core Committee set up by MHRD, to identify the broad parameters for ranking various universities and institutions.

NIRF (National Institutional Ranking Framework), an initiative of the Ministry of Education, ranks higher education institutions based on predefined parameters. These parameters span Teaching, Learning, and Resources; Research and Professional Practice; Graduation Outcomes; Outreach and Inclusivity; and Perception, aiming to provide a comprehensive assessment of institutional performance. Institutions submit data related to these parameters, which is then

evaluated and ranked by NIRF. These rankings are widely recognized, serving as benchmarks for assessing quality and performance, guiding stakeholders in making informed decisions, and incentivizing institutions to strive for excellence.

## **1.2 Service Marketing Components and Challenges**

Marketing services is all about promoting value. Doctors, Consultants, lawyers, dentists and a host of other professionals make money by providing services to people. A marketer needs different approach when selling a product and then a marketer is selling a service. Service marketing will be highlighted more against product marketing as higher education institutes comes under the service marketing.

There are few things which a marketer needs to keep in mind when selling a service. In marketing services, intangibility means the inability of a consumer to pre-assess the value of using a service. Unlike a physical product, a service cannot be seen, tasted, felt, heard, or smelled prior to its purchase. This makes it hard to evaluate its quality. For instance, when you go to see a doctor, you cannot see the result unless you commit yourself to sitting in that chair for diagnosis. And because of intangibility factor the customers always tries to look for clues of service quality as there is absence of physical characteristics in the service itself. Customers draw conclusions from what they see that's associated with the service. Customers generally look for factors such as location, people (employees or even other customers), Price, communication, and other relevant factors.

Another component in service marketing is services are heterogeneous. Service business operates through several different elements and interactions. In services business there involves a lot of human touch or interaction and the behaviour of every service provider will be different and unpredictable and so no two services can be identical in their details and results. In the context of higher education institutes from the existing literature there are three possible viewpoints on the problem of heterogeneity: diversification of higher education institutes, selectivity of higher education institutes and heterogeneity of student population. There is a heterogeneity factor from both the ends students who are the customers of higher education and the service provider itself i.e. Higher education institutions. No two HEIs provide same kind of experience when measured on different parameters and even the student's expectations and their perceptions vary. It's a challenge for higher education institutes to adapt or respond to the diversity of the needs and requirements of the society as a whole. The proponents of this view believe that the traditional institutions of higher education, such as classic universities, are no longer useful to meet the demands and interests of an increasingly heterogeneous student population, or to meet the requirements of a rapidly changing economy [Guri-Rosenblit, Sebkova, 2006]. Heterogeneity factor is present in the service sector from service provider's end and from the receiver's end. So

those who are in the business of providing service they come across many challenges and those who bring the best solution to those impediments have a better chance sustain business for a longer period and to gain a competitive advantage over other players.

The variability factor is also one of the challenges in service marketing. Since there is human involvement in service provision means that no two services will be completely identical, they are variable. For example, returning to the same restaurant time and time again for a dinner you will see different levels of customer satisfaction, or speediness of work. If you watch your favourite/favourite music group on YouTube the experience will be the same every time you play it, although if you go to see them on tour when they are live no two performances will be identical for a whole variety of reasons. Even with the greatly standardized McDonalds experience, there are slight changes in service, often through no fault of the business itself. Sometimes Saturday lunchtime will be extremely busy, on other days you may have to wait to go via the drive through. So, services tend to vary from one user experience to another.

### **1.3 Branding in Services**

Branding in services encompasses the strategic process of crafting and communicating a distinctive identity, value proposition, and experience for intangible offerings, such as consultancy, hospitality, or education. Unlike tangible products, services rely heavily on perception, trust, and emotional connection to differentiate themselves in competitive markets. Effective service branding involves aligning every touchpoint with the brand promise, from customer interactions to employee behaviour, to cultivate loyalty, enhance reputation, and ultimately, foster long-term relationships with customers. It's about shaping perceptions, evoking emotions, and consistently delivering on promises to create memorable and meaningful experiences that resonate with target audiences.

### **1.4 Branding of Higher Education**

Branding plays a pivotal role in higher education institutes (HEIs), especially in today's globalized and competitive landscape. As HEIs expand and evolve, establishing a strong brand becomes essential for differentiation and market positioning. A well-defined brand communicates the institution's mission, vision, and objectives, helping to bridge the gap between students/stakeholders and the institution itself. Furthermore, branding in HEIs is not just about academic reputation but encompasses the institution's personality, values, and unique offerings. By strategically focusing on branding, HEIs can enhance their visibility, reputation, and ultimately attract and retain students, faculty, and stakeholders.

In the realm of HEIs, brand image serves as a crucial factor in shaping perceptions and influencing decision-making processes for prospective students. A strong brand not only acts as a risk mitigator by simplifying the decision-making process but also serves as a differentiation tool, providing cues to consumers. Factors such as the quality of staff, location, history, and social image significantly contribute to the evaluation of educational quality and, consequently, the perception of the university brand. Through effective brand management strategies, HEIs can enhance their market position, improve rankings, and ultimately impact the selection process for prospective students.

### **1.5 Brand Equity and its Perspectives:**

Brand equity refers to the intangible value that a brand possesses due to the perceptions and experiences associated with it in the minds of consumers. It represents the added value or goodwill that a brand holds beyond its tangible attributes or functional benefits. Brand equity is built over time through consistent marketing efforts, positive customer experiences, and effective brand management strategies. It encompasses various dimensions, including brand awareness, brand loyalty, perceived quality, and brand associations, which collectively contribute to the overall strength and value of the brand.

Brand equity can be understood from several different perspectives, each providing valuable insights into the strength and value of a brand. Here are three key perspectives:

**Customer-Based Perspective:** This perspective focuses on how customers perceive and interact with a brand. It encompasses dimensions such as brand awareness, brand loyalty, perceived quality, and brand associations. From a customer-based perspective, brand equity is built through positive experiences, emotional connections, and consistent delivery of value to consumers. This perspective emphasizes the importance of understanding and fulfilling the needs, preferences, and expectations of target customers to enhance brand equity.

**Financial Perspective:** From a financial perspective, brand equity is viewed as the monetary value attributed to a brand. This can be measured through various methods, such as brand valuation models, financial performance indicators, and market capitalization. Financially strong brands typically command higher prices, generate greater revenues, and enjoy higher profit margins compared to competitors. Brand equity contributes to a company's overall market value and can be a significant driver of shareholder value.

**Strategic Perspective:** The strategic perspective of brand equity focuses on the role of the brand in driving business strategy and competitive advantage. It involves leveraging the brand to achieve business objectives, such as market leadership, differentiation, and expansion into new markets or product categories. From this perspective, brand equity informs strategic decisions related to

marketing, product development, distribution, and customer engagement. Strong brand equity enables companies to build barriers to entry, increase market share, and sustain long-term growth in competitive markets.

## **2. A BRIEF LITERATURE REVIEW.**

The literature review in research is a fundamental aspect that contextualizes the study, pinpoints gaps in existing knowledge, and lays the groundwork for the research. It entails a methodical analysis and synthesis of pertinent academic articles, books, and other materials pertaining to the subject matter. The researcher thoroughly investigated various academic sources, including research papers, scholarly publications, reports, surveys, and conference proceedings, relevant to the research topic. After analysing peer-reviewed journal articles and other published works, a concise literature review was drafted, considering numerous factors identified during the review process. Some of the vital factors include brand awareness, brand image, perceived quality, and brand heritage to name a few that plays a critical role in determining the brand equity of higher education institutes. The review focused on identifying dimensions of brand equity in the context of higher education, factors influencing brand equity, how it is measured and assessed, strategies for enhancing brand equity in competitive education landscape and perceived quality.

### **Reviews of Related Literature:**

1. The article by Gulamiddinovna titled "Methodology for Brand Equity Assessment of Universities in Transformation Period of the Educational System" aims to propose a methodology for assessing the brand equity of universities in the transformation period of the educational system. The study was conducted in Uzbekistan, where the higher education system is currently undergoing significant changes. The author uses a quantitative research method to collect data from a sample of 300 students, faculty members, and administrative staff of a university in Uzbekistan. The study employs statistical tools such as factor analysis and multiple regression analysis to identify the factors that influence the brand equity of universities. The findings indicate that the brand equity of universities is influenced by the reputation of the university, the quality of education, the satisfaction of students, and the alumni network. The proposed methodology can help universities to assess their brand equity, identify areas for improvement, and develop effective branding strategies.
2. A study conducted by Trùng, N. V. T. (2021), on the Factors Effect on Brand Equity In Higher Education, focuses on identifying perceived quality components in higher education and examines

the model of perceived quality and reputation effect on brand equity. The HEI has realised that brand recognition is the main determinant of student's choice and it affects institutions enrolment and so this research was initiated by TRUONG and it contributes significantly in education sector. With qualitative and quantitative research methods, the results confirm the four-factor structure of perceived quality and reputation influence brand equity in the higher education sector. The study asserts that perceived quality is considered a reflective construct, including library services, dining service, physical facilities, and academic staff responsiveness. The study reveals that perceived quality has the most substantial effect on brand equity.

3. Stukalina and Pavlyuk's article, "Using customer-based brand equity model in the higher education context: simulating the current university's brand," published in *Business, Management and Economics Engineering* in 2021, aims to simulate the customer-based brand equity of a Ukrainian university and identify the factors that influence its brand equity. The study seeks to provide insights into the strengths and weaknesses of the university's brand and suggest strategies for improving brand equity in the higher education context. The study was conducted in Ukraine and used a quantitative research method to collect data from 350 students and alumni of the university. The data were analysed using structural equation modelling (SEM) and partial least squares-structural equation modelling (PLS-SEM). The study's findings reveal that brand awareness, perceived quality, brand association, and brand loyalty are significant predictors of customer-based brand equity in the higher education context. The authors suggest strategies for improving brand equity, such as improving the quality of education, promoting the university's unique features, and enhancing the university's reputation. The study's findings can assist universities in developing effective branding strategies to attract more students and enhance their reputation in the competitive higher education landscape.
4. Ostojić and Leko Šimić (2021) conducted a study in Croatia to examine students' perceptions of the brand value of public and private higher education institutions. The objective of the study was to determine whether there were differences in how students perceive the brand value of public and private institutions and to identify the factors that influence these perceptions. The study used a quantitative research method, and data were collected from a sample of 337 students from both public and private higher education institutions in Croatia. The data were analyzed using descriptive statistics and the independent-samples t-test. The study found that students perceive private institutions to have a higher brand value than public institutions, with the main factors influencing their perceptions being the reputation of the institution, the quality of education, and

the location. The study's findings can help public institutions in Croatia to improve their brand value by focusing on these key factors.

5. Tammubua (2021) examined the causal order among dimensions of customer-based brand equity (CBBE) in Indonesian higher education institutions. The study used a research instrument questionnaire with a 5-point Likert scale, and the research sample included 150 students of the Universitas Terbuka in Jayapura. The study used PLS-SEM with SmartPLS version 3 as the supporting software to test research hypotheses. The study found a causal order among the CBBE dimensions with brand awareness having a positive and significant effect on perceived quality. The perceived quality had a positive and significant effect on brand loyalty, and brand awareness indirectly affected brand loyalty through perceived quality. The moderating role of brand association on the relationship between brand awareness and perceived quality was not established. The study provides recommendations for higher education institution management to create brand loyalty by developing brand awareness and building positive perceived quality. This study contributes to the CBBE literature in the higher education sector in Indonesia by examining causal sequences and interactions on the CBBE dimensions.
6. Prabowo, Ghozaly, and Susilo conducted a study with the aim of investigating how marketing mix strategies adopted by private universities influence the development of brand equity, as perceived by potential customers. The sample for the study comprised of 160 senior high school students from Jakarta-Tangerang, and the analytical method used was structural equation modelling (SEM). The findings of the study indicated that the marketing mix strategies implemented by private universities have a considerable impact on their brand equity. The results suggest that private universities should adjust their offerings to align with the expectations of their target customers.
7. According to Syed Ali Abbas (2021), this research focuses on the implementation of brand management, marketing, and promotional practices in Higher Education Institutions (HEIs), particularly in highly competitive regions where there is significant variation in demand and supply between students and HEIs. The main objective of this study is to develop a promotional strategy for universities that will lead to effective brand management in a broader context. The literature review includes concepts such as brand identity, brand personality, identity vs. image, and brand perception. The primary data collection involved the use of questionnaires targeted at graduate and postgraduate students to gain insight into their perception, expectations, and beliefs about the impact of branding and promotional strategies on their selection process. Additionally, unstructured interviews were conducted with higher management from various universities in

Pakistan to understand their views and expectations regarding branding in HEIs. The results were evaluated using SPSS and presented graphically, supporting the premise that branding is a crucial aspect for universities to survive in a hyper-competitive environment.

8. Sefer Ada, Z. Nurdan Baysal, and Senem Seda Şahenk Erkan (2019) conducted a quantitative research study to evaluate service quality in higher education institutions, specifically in the department of education at Marmara and Niğde Omer Halisdemir Universities. The research used a screening model and a data collection tool called the Scale of Service Quality in Higher Education Institutions, which consisted of 28 items and 6 factors. The sample of the study included 886 university students during the 2016-2017 academic year. The study also considered personal variables such as gender, grade, university, and academic success. The findings revealed that female students had higher considerations regarding academic position and institutional image compared to male students. Additionally, 3rd grade students had higher perceptions than 4th grade students in terms of academic position, institutional image, offered diploma programs, and physical opportunities. The academic success of university students was also found to increase in all factors and total scores.
9. One more study was conducted by Ramdan, A. M., Rahayu, A., Hurriyati, R., & Sultan, M. A. (2020) on the role of brand equity in making decisions to choose higher education for new middle-class students. The authors in this research have measured the influence of brand equity dimensions on decision making of new middle-class students in selecting higher education. Quantitative method of data collection was adopted and data was collected through questionnaire which targeted 100 new students from 20 different departments. The dimensions chosen were brand awareness, brand association, quality perception and brand loyalty. The results of this research reveal that brand equity has a significant influence on students' decisions in selecting higher education and from among the dimensions selected for the study awareness and quality perception do not significantly influence decision of middle class in selecting higher education.
10. Febrian and Vinahapsari (2020) conducted a study on the impact of brand equity on purchase intention in the e-commerce industry [1]. The objective of the research was to examine the mediating effect of brand equity on purchase intention and the moderating effect of collectivist culture on this relationship. The study collected data from 300 respondents in Indonesia and used structural equation modeling (SEM) to test the hypotheses. The findings indicate that brand equity has a significant mediating effect on the relationship between customer satisfaction and purchase intention in the e-commerce industry. However, the moderating effect of collectivist culture was

not statistically significant [3]. The study provides insights into the importance of brand equity in influencing customer purchase intention in the e-commerce industry and highlights the need for companies to focus on building and maintaining brand equity. The article also suggests that cultural factors should be considered while designing marketing strategies in the e-commerce industry.

11. Panigrahi and Joshi (2020) conducted a study on developing brand equity through consumers in the pharmaceutical industry. The objective of the research was to determine the relationship between consumer perception, brand awareness, and brand loyalty, and the impact of these factors on brand equity. The study used a survey method to collect data from 200 respondents in India, and it employed regression analysis to test the hypotheses. The findings suggest that consumer perception, brand awareness, and brand loyalty have a significant positive impact on brand equity in the pharmaceutical industry [3]. The study provides insights into the importance of consumer-oriented strategies for developing brand equity in the pharmaceutical industry and highlights the need for companies to focus on creating brand awareness and loyalty among consumers. The article suggests that developing brand equity through consumers is a key factor in the growth and success of companies in the pharmaceutical industry.
  
12. Heer (2020) conducted a study to explore the understanding of university brand equity from the perspectives of public relations and marketing directors. The objective of the study was to investigate how public relations and marketing directors define and measure university brand equity, as well as to identify the factors that contribute to the development and maintenance of university brand equity. The study was conducted in the United States and used a qualitative research approach, specifically semi-structured interviews with eight public relations and marketing directors from different universities. The data was analysed using content analysis. The findings of the study indicated that public relations and marketing directors understand university brand equity as a combination of brand awareness, perceived quality, brand associations, and brand loyalty. They also identified factors such as reputation, unique features, and communication strategies as important for developing and maintaining university brand equity. Additionally, the study revealed that public relations and marketing directors face challenges in measuring university brand equity and aligning it with institutional goals. The study provides insights into the understanding and measurement of university brand equity from the perspective of public relations and marketing directors, which can be useful for developing effective branding strategies in the higher education sector.

13. This paper, authored by Yu, Zhao, and Wang (2020), discusses the growing importance of customer-based brand equity (CBBE) in marketing research and focuses on its structure and measurement. The authors examine the dimensions of CBBE and the interrelationships among them, using data from 3928 consumers of 15 brands in four industries, namely toothpaste, roll film, cell phone, and gym shoes. A CBBE measurement model is developed and analysed, and the paper also provides suggestions for brand management and directions for future research.
14. In their study, Alam, Saeed, and Malik (2020) emphasized the importance of marketing higher education institution brands in the context of global competition and rapid expansion of both public and private institutions. They argued that brand image, defined as consumers' perceptions about a brand, is crucial in influencing behaviours and decision-making processes. The authors aimed to investigate the impact of brand image on brand equity from the perspective of current students and compare the brand equity of public and private sector higher education institutions in the emerging market of Khyber Pakhtunkhwa province in Pakistan. The study used a quantitative research approach with a survey questionnaire administered to a sample of 765 students enrolled in various public and private sector universities in KP. The results showed a significant and positive relationship between brand image and brand equity in higher education institutions, with some differences in branding between public and private sector institutions. The study contributes to the understanding of brand equity in higher education institutions and can help in building quality education brands
15. Rivetta, Rodríguez-Conde, and Olmos Migueláñez (2020) highlight the current interest and emphasis placed on university teachers' training and certification, as it directly impacts the quality of higher education and the competences of professors. The Bologna Plan has brought changes to universities worldwide, prompting modifications to didactic and pedagogical approaches. With these changes and challenges in mind, the authors aim to compare and evaluate the pedagogical training of university professors, while investigating the different models that each university has developed to implement their version of pedagogical training.
16. Muhmurti, S. R., & Selvanayagam, G. (2019) examine the impact of brand equity on students' selection of private higher education institutions in Klang Valley, Malaysia. The objective of the study is to identify the key components of brand equity and the factors that influence students' selection of private higher education institutions in the highly competitive education market of Klang Valley. To achieve their objective, the authors conduct a literature review of brand equity, consumer behavior, and education marketing. The statistical tools used in this study include

descriptive statistics, reliability analysis, correlation analysis, and regression analysis. The authors collect data from 388 students using a self-administered questionnaire. The study finds that brand equity significantly affects students' selection of private higher education institutions in Klang Valley. Specifically, brand awareness, perceived quality, and brand associations are significant predictors of students' selection of private higher education institutions. The authors conclude that private higher education institutions need to focus on building strong brand equity to attract and retain students in the highly competitive education market of Klang Valley.

17. The author Alnsour and Muath Labib Subbah from Jordan conducted a study to find the impact of brand elements on brand equity of Jordanian corporations. Previously many researchers have contributed to the topic brand equity but what makes this research unique is they have taken brand elements as their variables. Previous study focused upon brand awareness, brand image, brand association dimensions. Impact of brand elements such as Brand names, URL's, Logos & Symbols, Characters, Slogans, Jingles and Signage & Packaging and its impact on brand equity. 160 questionnaires were distributed using cluster sampling method to the marketing officers of the corporation. SPSS tool was used for data analysis and it was found that Jordanian corporations most frequently used brand elements are name, logo, symbol, packaging, or signage and that these have positive impact on creating and sustaining brand equity.
18. The author Soni and Govender have studied a very important area i.e., higher education and have established a relation between service quality dimensions and brand equity taking into account the most important stakeholders in higher education i.e., students. This exploratory study seeks to determine whether the SERVPERF dimensions of service quality make significant influencers of the overall brand equity of select (South African) universities, and whether the overall service quality significantly influences the overall brand equity. The authors conducted a survey among a judgmental sample of 400 students from two selected university campuses, using the SERVPERF scale. The data were analysed with inferential statistical methods, such as multiple regression analysis, with the help of SPSS. The findings show tangibles and empathy dimension were significant and positive influencers of the students' perception of the institutions' overall brand equity and the overall service quality as a significant predictor of the overall brand equity.
19. King and Grace (2018) assert that, while academics and practitioners commonly advocate the positive outcomes of employees' awareness of their organization's brand, there is a dearth of evidence concerning the impact of such branding efforts from an employee perspective. The authors propose a third perspective of brand equity, which they refer to as Employee Based Brand

Equity (EBBE). They establish a framework of EBBE dimensions, which represents a substantial contribution to the marketing literature and is highly applicable to service organizations worldwide. The framework delivers benefits such as brand citizenship behaviours, employee satisfaction, intention to remain with the organization, and favourable employee word of mouth, ultimately yielding value to the organization. This paper lays the foundation for future research in this critical yet overlooked area of study.

20. Ram, Nallaluthan, and Hanafi conducted a quantitative research study to examine the factors that affect brand equity in higher education institutions (HEIs) in Malaysia and the relationship between brand equity and student loyalty. A sample of 385 students from various HEIs in Malaysia responded to a self-administered questionnaire, and the collected data were analyzed using structural equation modeling (SEM) and partial least squares-structural equation modeling (PLS-SEM). The results revealed that brand awareness, perceived quality, and brand image significantly influence brand equity and that brand equity significantly affects student loyalty towards HEIs. The study also found that brand image is the most crucial factor in determining brand equity among HEIs in Malaysia, emphasizing the importance of effective branding strategies for attracting students.

21. Effah (2017) conducted a study to assess the applicability of student-based brand equity constructs in university institution preference in Ghana. The objectives of the study were to examine the applicability of the brand equity constructs in the context of higher education institutions in Ghana and to identify the factors that affect students' preference for university institutions. The research employed a mixed-methods approach, using both qualitative and quantitative data. Data were collected from 377 students through a self-administered questionnaire and in-depth interviews with key stakeholders in the higher education sector in Ghana.

The study found that brand equity constructs, such as brand awareness, perceived quality, brand associations, and brand loyalty, were applicable in the context of university institution preference in Ghana. The research also identified several factors that influenced students' preference for university institutions, including the reputation of the institution, academic quality, facilities and resources, and social and cultural factors. The study concludes that the application of brand equity constructs can help universities in Ghana to differentiate themselves from their competitors and improve their competitive advantage. The research recommends that universities in Ghana should develop and implement effective branding strategies to enhance their brand equity and attract more students.

22. The study conducted by Menon and Barani (2016) investigates the dimensions of brand equity in higher education institutions and their impact on student loyalty and preference. The authors review existing literature on brand equity, consumer behaviour, and education marketing to identify the key dimensions of brand equity. They collected data from 400 students enrolled in higher education institutions in Chennai, India, using a self-administered questionnaire and used factor analysis and regression analysis as statistical tools. The study found that brand loyalty, perceived quality, and brand awareness are significant dimensions of brand equity in higher education institutions, and these dimensions have a positive impact on student loyalty and preference. The authors conclude that higher education institutions need to focus on building strong brand equity to attract and retain students in the highly competitive education market. Overall, the study provides insights into the dimensions of brand equity in higher education institutions and their impact on student loyalty and preference.
23. The authors Muqaddas, M. F., & Ahmad, I. in the study makes an attempt to understand important determinants of brand equity that will help IT industry to increase their brand equity. The independent variables in the study are advertising and promotion, research and development and profitability and brand equity being dependent variable. This research paper investigates the impact of advertising & promotion, research & development (R&D) and profitability (return on assets) on brand equity. Data is used from 20 international IT brands for a period of 5 years. The results show that advertising & promotion and profitability have statistically significant impact on brand equity whereas R&D doesn't make significant impact on brand equity. Based on the findings, it is observed that advertising is having the strongest impact on brand equity.
24. Authors Sienaert and Klerk in their research have proposed a very novel approach to reputation building of higher education institutes. Research in HEIs is important and plays a very significant role in building reputation but it is a very linear approach. Looking at the current scenario in HEIs with diverse expectations of stakeholders, transforming society and laterality a non-linear approach where collaboration with stakeholders can be done for making brand more relevant to them and it cannot be excluded. This approach is appropriate in the light of new challenges, trends, shifts in paradigm of strategic communication. This research aims to develop an alternative model for strategic reputation building at higher education institutions.
25. Authors Vu, T. D., Le, T. L., & Hoang, T. T. P. (2016) conducted a study on Measuring Brand Equity for Higher Education a Case Study of CFVG in Vietnam. The author in this study has applied Keller's CBBE model to higher education Institution to measure higher education brand

specifically of CFVG School of Management in Vietnam. Researcher combined qualitative and quantitative method of research and retrospective and prospective higher education students are the research subjects. In qualitative study phase one face to face interview was performed to gain understanding on their feelings, experience, attitude and relationship with the brand and based on it in quantitative study a survey questionnaire was designed and a sample of 328 students and alumni was chosen. The close ended questionnaire was addressing each aspect of Keller's pyramid. This research contributes to the current literature through testing CBBE model in Vietnam higher education market. Practical implications were highlighted for higher education practitioners in their efforts to establish strong brand equity.

26. This research paper by Tina Vukasovic, titled "Building and Managing Brand Equity in International Higher Education: Empirical Evidence from Slovenia," explores the key elements of brand equity for international students in the higher education (HE) sector. The study aims to enhance academic understanding of brand equity in HE and its implications for management practice. The study uses quantitative data collected through a self-completion survey of 185 graduate students in Slovenia to test a model of brand equity in the HE context. The results provide support for the proposed conceptual model, with image-related and awareness-related determinants having the largest impact on brand equity. The study suggests that creating and managing a strong university brand plays a crucial role in the HE market and can serve as a competitive advantage. The findings provide evidence that the customer-based brand equity model can be applied to the HE context and guide marketing activities for universities internationally.
27. Author Gherman and Charles have tried to assess brand equity dimensions of business schools from MBA enrolled students' perspective with specific reference to Peruvian market. Brand equity dimensions brand loyalty, brand association, brand awareness, perceived quality, and overall brand perception given by Aaker (1991) and the study by Yoo et al. (2000), with some alterations a conceptual model is proposed which best describes Peruvian market and B schools in Peru. The study is based on primary data which have been analysed with the use of appropriate statistical tools. The primary data from 900 respondents was collected by conducting an online questionnaire survey on the selected sample units (business schools) in Metropolitan Lima. The analysis suggests that perceived quality seems to be the most important dimension of brand equity, while the overall brand perception is almost always ranked last. This will give better insight to B school managers to design effective marketing strategies to improve their brand equity and gain a higher student share.

28. The research paper by Pinar et al. (2014) focuses on the dimensions of brand equity for universities. The authors first explain the importance of branding for higher education institutions and the role of brand equity in attracting and retaining students, faculty, and funding. They then discuss the four dimensions of university brand equity, including awareness, perceived quality, brand associations, and loyalty, and examine the antecedents and consequences of brand equity. The authors review the challenges of measuring brand equity for universities, suggesting that a combination of qualitative and quantitative methods can be used to measure brand equity. They provide examples of measurement scales that have been used in previous research. In terms of statistical analysis, the authors use structural equation modeling (SEM) to test the proposed conceptual model of university brand equity. They collected data through a survey of undergraduate students at a public university in the United States and used confirmatory factor analysis (CFA) to confirm the four dimensions of brand equity. They then used SEM to examine the relationships between the dimensions and their antecedents and consequences. The statistical analysis revealed that all four dimensions of brand equity were significant predictors of overall brand equity. The antecedents of brand equity, including academic reputation and marketing efforts, were also found to be significant predictors. Furthermore, the consequences of brand equity, such as increased enrolment and alumni support, were also significant predictors. Overall, the literature review and statistical analysis provide valuable insights into the dimensions of university brand equity and their importance for higher education institutions.
29. Authors Ishaq, M. I., Hussain, N., Asim, A. I., & Cheema, L. J. (2014) studied Brand equity in the Pakistani hotel industry. The research endeavour was to identify the interrelationship of customer-based brand equity dimensions (brand awareness, brand loyalty, brand image, and service quality) in Pakistani hotel industry. Data was collected from 821 consumers who experienced the services of Pakistani five-star hotels from multiple locations. Mediating regression and stepwise regression analyses were applied for investigation of study hypotheses. The study questionnaire includes the demographic profile of the respondents and four dimensions of CBBE includes brand image, brand loyalty, perceived service quality, and brand awareness. To assess the internal consistency and validity of the independent and dependent variables, Cronbach's alpha was applied and confirmatory factor analysis was performed. Correlation and regression analysis was also performed on the data collected. Results pointed out positive and significant influences of service quality on all other dimensions of brand equity whereas partial mediations were endorsed among the variables.

30. The author Cleff T et.al in the study measures the influence of five different types of experiences—sensory (SENSE), affective (FEEL), cognitive (THINK), behavioural (ACT), and relational (RELATE)—on brand equity through an empirical study of Starbucks in Taiwan. The results confirm a large positive impact of brand experience on brand image (i.e., brand attribute, brand benefit, brand attitude), and a somewhat slighter experience on brand awareness (i.e., brand recall and recognition). Sensory and affective dimensions have an especially large effect—with cognitive, behavioural, and relational to a lesser degree. The study proves the significance of experiential marketing for creating brand equity and identifies the most important dimensions of brand experience.

### **3. RESEARCH METHODOLOGY:**

The researcher tried to outline in brief various methodological and procedural steps and conceptual aspects concerning the research methodology of the research study, which primarily includes rationale of the study, research design, objectives, hypotheses, the model used, secondary data sources, sampling designs, data analysis and interpretation of the research study.

#### **3.1 Key Terms of Research Study**

**Following are the key terms of the research study.**

##### **3.1.1 Brand**

According to (Schuiling and Moss, 2004b), a brand is a name that will register the product in the consumer's mind as a set of tangibles, that is rational, and intangible, that is irrational, benefits.

##### **3.1.2 Branding**

Branding is the process of giving a meaning to specific organization, company, products or services by creating and shaping a brand in consumers' minds. It is a strategy designed by organizations to help people to quickly identify and experience their brand, and give them a reason to choose their products over the competition's, by clarifying what this particular brand is and is not.

“Branding is endowing products and services with the power of a brand” (Kotler & Keller, 2015)

##### **3.1.3 Branding of Services**

Branding in services encompasses the strategic process of crafting and communicating a distinctive identity, value proposition, and experience for intangible offerings, such as consultancy, hospitality, education etc.

### **3.1.4 Brand Equity**

Keller (1993, p. 2) defined customer-based brand equity (CBBE) as “the differential effect of brand knowledge on consumer response to the marketing of the brand.”

According to Keller (2013), brand equity is the value that consumers associate with a brand; thus, the power of the brand lies in what customers have learned, felt, heard, and responded to regarding the brand over time.

### **3.1.5 Consumer Based Brand Equity**

Customer-based brand equity is the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller 1993). It occurs when the consumer holds some favourable, strong, and unique brand associations in their memory.

In other words, it can be defined as how much a customer likes the brand and how much this affinity toward the brand influences purchase behaviour.

### **3.1.6 Brand Awareness**

Brand awareness is related to how strong the brand is in the customer's memory which is reflected in the customer's ability to remember or perceive a brand under various conditions (Keller, 2009).

According to Aaker (1991, p. 61), brand awareness is "the ability of buyers to recognize or recall that a brand is a member of a particular product category."

### **3.1.7 Brand Image**

Brand image is the current view of the customers about a brand. It can be defined as a unique bundle of associations within the minds of target customers. It signifies what the brand presently stands for. It is a set of beliefs held about a specific brand.

### **3.1.8 Brand Heritage**

Urde, Greyser, and Balmer define the brand heritage construct as part of a corporate brand identity: "a dimension of a brand's identity found in its track record, longevity, core values, use of symbols and particularly in an organisational belief that its history is important" (2007, pp. 4-5)

### **3.1.9 Perceived Quality**

Perceived quality is a consumer assessment related to the company's ability to create superior product value (Parasuraman, 1998). Some researchers see perceived quality as personal and subjective; consumers assess whether a product is worth buying and become a consumer experience in using a product (Chen, 2001; Kakkos et al., 2015; Olsen, 2002).

### **3.2 Rationale of the Research Study**

The rationale for conducting an empirical investigation on measuring, managing, and building consumer-based brand equity of selected higher education institutes in Gujarat state lies in the importance of building and managing a strong brand in the highly competitive education sector. This research considers selected grant in aid institutions which are in existence for a long period of time, caters to large number of students from different disciplines, have heritage aspect attached to it and more importantly is now facing intense competition from private institutions. So, measuring, managing and building consumer-based brand equity is equally important for grant in aid institutions to compete and grow.

Positive brand equity in education sector is not only important for attracting potential students, but it is also essential for maintaining the loyalty of current students and alumni. A strong brand in the education sector can lead to higher enrolment, improved student satisfaction, improve financial performance, better negotiating power, develop credibility and a positive reputation in the industry.

However, despite the significance of brand building in the education sector because of cropping of new higher educational institutions, there is scarce empirical research as per review of literature that explores the strategies and practices that higher education institutes in Gujarat state are using to measure, manage, and build customer-based brand equity. Therefore, there is a need to conduct an empirical investigation to gain insights into the current branding practices of selected higher education institutes in Gujarat state.

This study will contribute to the literature by providing empirical evidence on the effectiveness of various branding strategies and practices used by higher education institutes in Gujarat state. Additionally, this study will also provide insights into the challenges faced by higher education institutes in building and managing their brands. The findings of this study will be useful for higher education institutes in Gujarat state and other regions who are looking to improve their branding strategies and practices.

### **3.3: Research Gap:**

Despite the significance of brand equity in the education sector, there is a notable lack of research on the subject specifically focused on grant-in-aid institutions in Gujarat. Existing literature predominantly focuses on brand equity in private educational institutions, while grant-in-aid institutions, which play a crucial role in the education system, have received limited attention.

Limited empirical studies exist that explore the factors influencing brand equity and its impact on these institutions. Thus, there is a research gap that necessitates a comprehensive investigation into the brand equity of grant-in-aid institutions in Gujarat to enhance our understanding of its determinants and consequences within this specific context.

Moreover NIRF (National Institutional Ranking Framework), SIRF (State Institutional Ranking Framework), and NAAC (National Assessment and Accreditation Council) rankings have become important factors for grant-in-aid institutions to maintain brand equity. These rankings provide external validation of the quality and performance of educational institutions, thereby influencing public perception and attracting students, faculty, and funding.

### **3.4: Research Objectives**

Studying the brand equity of higher education institutes is paramount due to its multifaceted impact. Different stakeholders evaluate brand equity from their own perspective and the most important stakeholder is students. A robust brand elevates the perceived value of education, allowing institutes to command higher tuition fees and draw in top-tier students. Furthermore, positive brand equity cultivates deep alumni engagement, fostering increased support and contributions. It also aids in recruiting and retaining talented faculty and staff, bolstering institutional strength.

Competition, funding, international collaborations, enhancing global recognition are other factors leading to measuring, managing, and building brand equity.

Research objectives have evolved from research problem statements, research gaps and by in depth study of domain and review literature.

In this reference, the core objective is to identify brand equity dimensions of HEIs and to determine relative importance of CBBE dimensions in creating a strong university brand.

Along with the main objective the subsidiary objective of the research is as follows:

### ***Study 1: Consumer-Based Brand Equity Dimensions in Higher Education Institutes***

- 1) To identify various dimensions of Consumer-Based Brand Equity in Higher Education Institutes based on literature review.
- 2) To test the proposed conceptual model of Consumer-Based Brand Equity in Higher Education Institutes
- 3) To investigate inter-relationships/causal relationships among the Consumer-Based Brand Equity dimensions in the Higher Education Institutes.
- 4) To determine the relative importance of Consumer-Based Brand Equity dimensions in creating a strong university brand.
- 5) To investigate the impact of Consumer-Based Brand Equity dimensions on the perceived overall brand equity of Higher Education Institutes.

### ***Consumer Attributes and Brand Equity in Higher Education Institutes***

- 6) To determine the impact of selected consumer attributes on the brand equity of Higher Education Institutes.

### ***Study 2: Brand Heritage and Consumer-Based Brand Equity in Higher Education Institutes***

- 1) To explore the perception of respondents as to whether and to what extent heritage is present or potentially found in Higher Education Institutes as a Brand
- 2) To determine the impact of brand heritage on the consumers' perceived value of the Higher Education Institutes

## **3.5 RESEARCH HYPOTHESIS:**

To achieve the above-mentioned objectives, a set of hypotheses have been formulated and were tested. Conclusions were drawn based on the test results. The Null hypotheses are mentioned below:

### **Study 1: Consumer-Based Brand Equity Dimensions in Higher Education Institutes (Brand Awareness: Promotional activities and Word-of-Mouth)**

**HO1a:** Promotional activities do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO1b:** Word-of-Mouth does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**(Brand Image: Service attributes, Symbolic attributes, and Provider attributes)**

- **Service Attributes – Price, Perceived Quality, and After-Sales-Service**

**HO2a:** Price does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO2b:** Perceived Quality do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO2c:** After-Sales-Services do not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

- **Symbolic Attributes – Brand Personality, Social Image, and Brand Positioning**

**HO3a:** Brand Personality does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO3b:** Social Image of the brand does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes.

**HO3c:** Brand Positioning does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

- **Provider Attributes – Quality of Staff (Teaching & Non-teaching), Quality of relationship of Staff (Teaching & Non-teaching staff) with customers, Location, Size, History, and international reputation**

**HO4a:** Quality of Teaching staff does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes.

**HO4b:** Quality of Non-teaching staff does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes.

**HO4c:** Quality of relationship of Teaching staff with customers does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO4d:** Quality of relationship of non-teaching staff with customers does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO4e:** Location does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO4f:** Size does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO4g:** History does not have any significant impact on Consumer-Based Brand Equity of Higher Education Institutes.

**HO4h:** International reputation does not have any significant impact on Consumer Based Brand Equity of Higher Education Institutes

### **Consumer Attributes and Brand Equity in Higher Education Institutes**

**HO5a:** Consumers' age does not have any significant impact on brand equity of Higher Education Institutes.

**HO5b:** Consumers' gender does not have any significant impact on brand equity of Higher Education Institutes.

**HO5c:** Consumers' education does not have any significant impact on brand equity of Higher Education Institutes.

**HO5d:** Consumers' income does not have any significant impact on brand equity of Higher Education Institutes.

### **Study 2: Brand Heritage and Consumer Perceived Value Dimensions**

**Ho6a:** There is no significant association between Brand heritage and perceived affective value of Higher Educational Institutes.

**Ho6b:** There is no significant association between Brand heritage and perceived economic value of Higher Educational Institutes.

**Ho6c:** There is no significant association between Brand heritage and perceived functional value of Higher Educational Institutes.

**Ho6d:** There is no significant association between Brand heritage and perceived social value of Higher Educational Institutes.

## **3.6 Research Design**

Research design outlines the methodical approach taken to conduct a study and tackle its research questions or objectives. It involves decisions about the methodology, how data will be collected, the techniques for sampling, and the procedures for analysing data. Essentially, it acts as a roadmap for researchers to gather, analyse, and interpret data in a systematic manner to achieve their goals. A well-planned research design aims to minimize bias, enhance validity and reliability, and ensure that the study yields credible and valuable findings.

Since the study focuses on identifying and analysing factors influencing choice of university, identifying brand equity dimensions of HEIs, and studying which dimension is more vital from students' perspective a descriptive research design is deemed to be the most appropriate.

Descriptive design defines and describes the researches who, what, when, where, why and how, which are some of the questions raised in this study. It involves a sound and scientific analysis of data with the help of measure of central tendency, measures of variation, hypothesis testing, correlation, and the regression analysis. Thus, it is also an analytical design of research.

### **3.7 Scope and Coverage of the Research Study**

The scope of this empirical investigation focuses on measuring, managing, and building consumer-based brand equity within selected higher education institutes in Gujarat State, India. This study delves into three primary dimensions: brand awareness, brand image, and brand heritage, providing a comprehensive understanding of how these elements influence the overall perception, value and choice of educational institutions made by the students. The coverage includes collecting data from current students (pursuing higher education), who are the primary stakeholders and directly influenced by the branding strategies of their higher education institutes. By analysing the perspectives of current students, the study aims to offer valuable insights into the effectiveness of existing branding efforts by the Grant-in-Aid higher education institutes and identify the areas of improvement. This research is crucial for Grant-in-Aid higher educational institutions aiming to enhance their market position, attract prospective students, and build a sustainable brand that resonates with both current and future stakeholders. The findings will contribute to the academic discourse on brand equity in the context of higher education and provide actionable recommendations for policymakers and administrators to strengthen their institutional brand equity.

(PTO)

### 3.8 Proposed Conceptual Model of Brand Equity in Higher Education Service

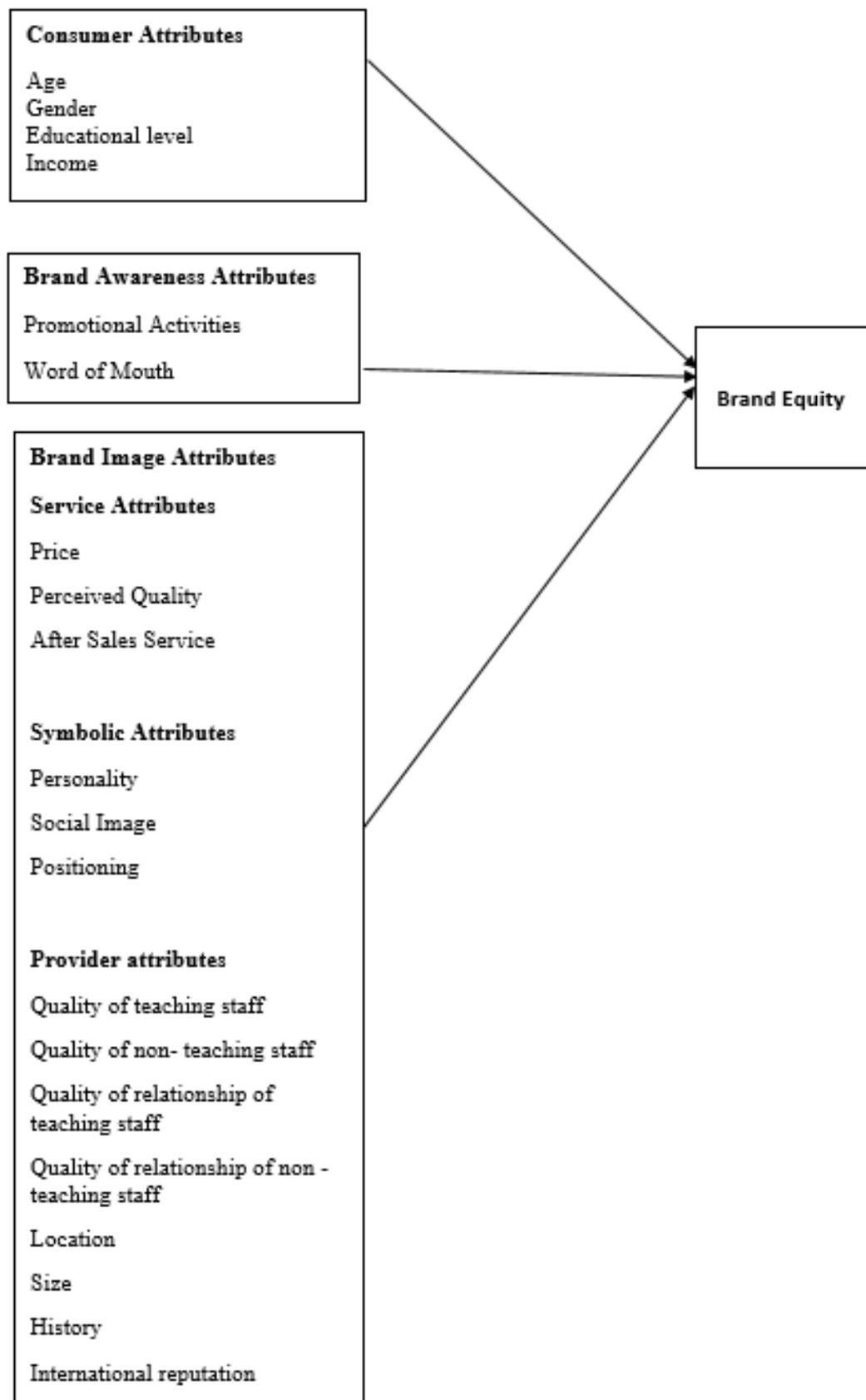


Fig.1 Proposed Conceptual Model of Brand Equity in Higher Education Service

**Study: 2 Brand Heritage and Perceived Value Dimensions**

**Study 2.1: Antecedents of Brand Heritage**

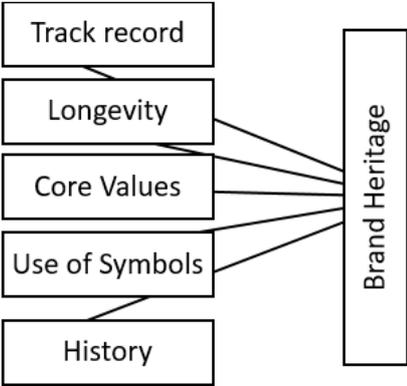


Fig 2 Antecedents of Brand Heritage

**Study 2.2: Brand Heritage and Consumer Perceived Value Dimensions**

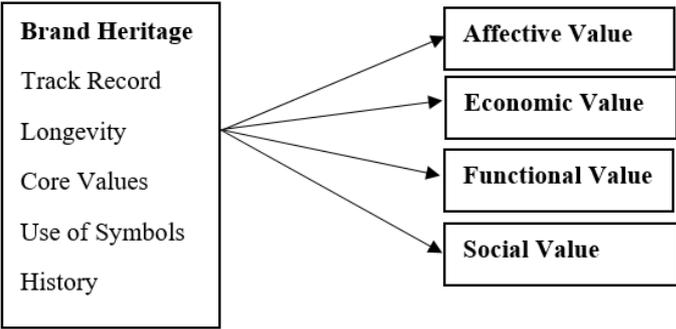


Fig 3: Brand Heritage and Consumer Perceived Value Dimensions

To achieve the research objectives, extensive review of literature was undertaken by the researcher and a conceptual model was developed as given in Fig 1. The model incorporates independent and dependent variables. Brand awareness, brand image and brand heritage are the independent variables of this research and brand equity is the dependent variable. The main aim of conceptual framework is to identify the impact of independent variables on Brand equity.

**3.8.1 Consumer attributes**

These relate to the consumers own socioeconomic characteristics with the brand. In the proposed model consumer attributes were included age, gender, level of income and level/type of education (Lockwood and Hadd 2007).

### **3.8.2 Brand awareness**

Brand awareness is related to how strong the brand is in the customer's memory which is reflected in the customer's ability to remember or perceive a brand under various conditions (Keller, 2009). According to Aaker (1991, p. 61), brand awareness is "the ability of buyers to recognize or recall that a brand is a member of a particular product category."

#### **Promotional activities**

Promotional activities are defined in research as strategic efforts that encompass various marketing tools and techniques to inform, persuade, and influence consumers towards a product or service. These activities aim to enhance consumer awareness, stimulate interest, and ultimately drive purchasing behaviour.

#### **Word of Mouth**

Katz and Lazarsfeld (1966) describes WOM as the exchange of marketing information between consumers, which plays a fundamental role in shaping their behaviours and attitudes toward products and services.

### **3.8.3 Brand Image**

Brand image is the key driver of brand equity, which refers to consumer's general perception and feeling about a brand and has an influence on consumer behaviour Zhang (2015).

Brand image can be defined as perceptions about a brand as reflected by the cluster of associations that consumers connect to the brand name in memory (Rio, A., B., Vazquez, R., Iglesias, R. (2001).

#### **3.8.3.1 Service attributes**

These relate to attributes such as the perceived quality of the education service (Kurz, Scannell, and Veeder 2008; Chen 2008), range of courses, study method and quality management.

#### **Price**

Price here refers to tuition fees to be paid by prospective students. For the HE institution, price is important, as an important source of revenue. Tang, Tang & Tang (2004) held that the number of universities relying on tuition as a basic source of revenue is increasing. Price has a major influence on marketing strategies, because most students and parents are concerned about the financial implications of attending the university (Pugsley 2004:125; Pennell & West 2005; Hemelt & Marcotte, 2011). An increase in tuition fees has a significant negative effect for student enrolment (Dearden, Fitzsimons & Wyness, 2011)

### **Perceived Quality**

Perceived quality is a consumer assessment related to the company's ability to create superior product value (Parasuraman, 1998). Some researchers see perceived quality as personal and subjective; consumers assess whether a product is worth buying and become a consumer experience in using a product (Chen, 2001; Kakkos et al., 2015; Olsen, 2002).

### **After Sales Service**

After Sales service refers to the support and assistance provided to students after they have enrolled in a program or course. This includes services such as academic advising, career counselling, alumni networking opportunities, and ongoing assistance with coursework or research projects. In the realm of higher education, after-sales service plays a crucial role in building and maintaining brand equity by ensuring student satisfaction, fostering loyalty, and enhancing the overall educational experience.

#### **3.8.8.2 Symbolic attributes**

This encompasses associations relating to brand personality and identity and in proposed model, represents the overall image, social responsibility, innovation and international area orientation of the faculty (Cheng and Tam 1997).

### **Perceived Brand Personality**

Perceived brand personality in the context of brand equity research on higher education institutes refers to how individuals perceive the characteristics, traits, and values associated with a particular university or college.

### **Perceived Social Image**

"Perceived social image" in the context of research on brand equity of higher education institutes refers to the subjective impressions and opinions that individuals hold about a particular institution within their social circles or society at large. It encompasses how the institution is perceived in terms of its reputation, social standing, and the esteem it commands among various stakeholders such as students, alumni, employers, and the public.

### **Perceived Brand Positioning**

Perceived brand positioning in the context of brand equity for higher education institutes refers to how a university or college is perceived and positioned in the minds of its target

audience, including students, faculty, alumni, and other stakeholders. It encompasses factors such as the institution's reputation, image, identity, perceived quality of education, unique selling propositions, and overall value proposition compared to its competitors.

### **3.8.3 Provider attributes**

Provider attributes typically refer to the characteristics or qualities associated with the educational institution itself. These attributes can include factors such as reputation, faculty expertise, quality of education, facilities, research output, alumni success, and institutional culture, among others.

## **Study 2:**

### **3.8.4 Brand Heritage and Consumer Perceived Value Dimensions**

Urde, Greyser, and Balmer define the brand heritage construct as part of a corporate brand identity: "a dimension of a brand's identity found in its track record, longevity, core values, use of symbols and particularly in an organisational belief that its history is important" (2007, pp 4-5)

#### **Track Record**

The element track record is related to the established performance that the brand or company has related to, such as certain values and promises over time. (Urde 1997)

#### **Longevity**

In brand heritage research, longevity refers to the duration over which a brand has been established and recognized. It reflects the brand's ability to endure over time, maintaining its relevance and connection with consumers across different periods and market conditions.

#### **Core Values**

Core values are long held by the brand and form the base for the positioning expressed as a promise or covenant" through external and internal communications (Urde, 2007).

#### **Use of Symbols**

In brand heritage research, symbols play a crucial role in conveying a brand's historical identity and values. Symbols such as logos, emblems, packaging, and design elements act as tangible representations of a brand's legacy, helping to create a sense of continuity and authenticity over time. They serve as visual cues that connect consumers to the brand's past, reinforcing trust and emotional attachment (University Digital Conservancy).

## **History**

History refers to the long-term existence and track record of a brand, encompassing significant achievements, milestones, and the sustained adherence to core values over time.

### **Affective value**

Affective value encompasses the emotional responses elicited by a brand's heritage, which can enhance consumer loyalty and trust by fostering a deeper emotional connection with the brand. The affective value derived from brand heritage reflects consumers' emotional ties and the sentimental value they place on the brand's history and legacy (Emerald Insight) (Emerald Insight)

### **Economic value**

Economic value refers to the financial worth or benefit derived from the historical significance, reputation, and legacy associated with a brand. It encompasses the tangible and intangible assets that contribute to a brand's market position, pricing power, and customer loyalty over time.

### **Functional value**

Functional value typically refers to the tangible or utilitarian benefits that consumers derive from a brand's historical legacy or heritage. These benefits could include the reliability, durability, performance, or efficiency of products or services associated with the brand's longstanding reputation and tradition.

### **Social value**

Social value reflects consumers' connections to the brand's heritage, traditions, and narratives, fostering a sense of identity, belonging, and pride among its stakeholders.

Social value typically refers to the significance that a brand holds within society beyond its functional attributes. It encompasses the emotional connections, cultural meanings, and historical associations that consumers attach to the brand.

## **3.9 Sources of Information**

### **3.9.1 Primary data:**

Primary data was collected through Non-Disguised Close-ended Questionnaire from students of selected higher education in Gujarat state, India. Appropriate five-point Likert scales ranging from 1 (strongly agree) to 5 (strongly disagree) was used for obtaining responses on various parameters of the study. The questionnaire was pre-tested through a pilot study and based on the outcomes of the pilot study, necessary changes were made before administering the final questionnaire.

Appropriate Likert scales were used depending upon the parameters/variables under study.

### **3.9.2 Secondary data:**

The secondary data is collected from authentic and reliable sources like published research papers, published articles, research reports, newspapers, and various authentic websites. The other data which will be used for the purpose of the study is taken from books, e-books, internet literatures, magazines, journals, and electronic media through both online and offline mode.

### **3.10: Designing of Structured Non- Disguised Questionnaire:**

The researcher conducted an extensive review of literature from both Indian and international sources to identify relevant variables for the study. Following this comprehensive review, the most appropriate variables were selected for drafting the questionnaire. Consumers were asked to rate their perception in relation to awareness, image, and heritage of selected Grant in Aid higher educational institutes to measure brand equity using Likert Scale. Age, Gender, Educational Qualification, Annual Income were among the selected demographic variables.

Pilot testing was done on the structured non- disguised questionnaire before finalizing the instrument. Following is the list of selected references used for drafting the questionnaire.

- Consumer attributes ((Lockwood and Hadd 2007).
- Brand awareness (Lasser *et al.*, 1995; Aaker, 1996; Netemeyer *et al.*, 2004; Buil *et al.*,2008; Tong and Hawley, 2009)
- Perceived quality (Aaker, 1991, 1996; Buil *et al.*, 2008; Pappu *etal.*, 2005, 2006; Yoo *et al.*, 2000; Yoo and Donthu, 2001; Tong and Hawley, 2009),
- Promotion activities (Chen 2008).
- Service attributes (Kurz, Scannell, and Veeder 2008; Chen 2008),
- Symbolic attributes (Cheng and Tam 1997)
- Brand Heritage Wiedmann et al. (2011a, 2011b )

### **3.11: Reliability and Validity of the Research Instrument:**

The reliability test is performed to determine whether the scale used in the survey can offer consistent and reliable results or if the same scale has been assessed repeatedly. The reliability test determines the level of variance in each scale and reports the results derived by putting one variable against another. Cronbach alpha values range from 0 to 1. The closer the Cronbach alpha is to one, the better the reliability. The higher the value, the greater the covariance and correlation between the examined variables.

<b>Sr. No</b>	<b>Construct</b>	<b>Cronbach's Alpha</b>
<b>1.</b>	<b>Factors Influencing Choice of University</b>	.951
<b>2.</b>	<b>Brand Awareness</b>	
2.1	Overall Brand Awareness	.875
2.2	Promotional Activities	.916
2.3	Word of Mouth	.847
<b>3.</b>	<b>Brand Image</b>	
3.1	<b>Service Attributes</b>	
3.1.1	<b>Perceived Price</b>	.812
3.1.2	<b>Perceived Quality of Service</b>	
3.1.2(a)	<b>Administrative Quality</b>	
	Attitude and Behaviour	.912
	Administrative Process	.805
3.1.2(b)	<b>Physical Environment Quality</b>	
	Support Infrastructure	.832
	Learning Setting	.895
	General Infrastructure	.772
3.1.2 (c)	<b>Core Educational Quality</b>	
	Attitude and Behaviour	.910
	Curriculum	.729
	Pedagogy	.861
	Competence	.901
3.1.2 (d)	<b>Support Facilities Quality</b>	
	Core Cells and Committees	.890
	Other facilities	.840
3.1.2 (e)	<b>Transformative Quality</b>	.933
3.1.3	<b>Service Benefits</b>	
3.1.3(a)	Employability	.900
3.1.3(b)	Personal Development	.948
3.1.3(c)	Pursue my Passion	.903
3.1.3(d)	Sociability and Networking	.917
3.1.4	<b>After sales service</b>	.951

3.2	<b>Provider Attributes</b>	
3.2.1	Location	.864
3.2.2	Size	.911
3.2.3	University Reputation	.936
3.3	<b>Symbolic Attributes</b>	
3.3.1	Perceived Social Image	.937
3.3.2	Perceived Brand Positioning	.919
3.3.3	Perceived Brand Personality	.917
<b>4.</b>	<b>Brand Heritage</b>	
4.1	Track Record	.909
4.2	Longevity	.951
4.3	Core Values	.957
4.4	Use of Symbols	.924
4.5	History	.951
<b>5.</b>	<b>Students Perceived Value Dimensions</b>	
5.1	Affective Value	.935
5.2	Economic Value	.901
5.3	Functional Value	.944
5.4	Social Value	.914

Table 1.3: Reliability check of Structured Non- Disguised Questionnaire

The constructs used to measure the factors influencing the choice of university demonstrate high reliability (0.951), indicating consistent measurement. The Brand Awareness construct is also reliable, with promotional activities (0.916) and overall brand awareness (0.875) showing high reliability. Brand Image exhibits good to very high reliability across various sub-components, including administrative quality (0.912), learning setting (0.895), and transformative quality (0.933). Provider attributes, such as university reputation (0.936) and size (0.911), are highly reliable. Symbolic attributes, like perceived social image (0.937) and brand personality (0.917), also show very high reliability. Brand heritage constructs, including core values (0.957), history (0.951), and longevity (0.951), are measured with very high reliability. Lastly, the students' perceived value dimensions, including affective (0.935), functional (0.944), and social values (0.914), exhibit very high reliability, ensuring consistent measurement across these constructs.

<b>Sr. No</b>	<b>Construct</b>	<b>Average Mean Score</b>
1.	<b>Factors Influencing Choice of University</b>	3.7
2.	<b>Brand Awareness</b>	
2.1	Overall Brand Awareness	4.11
2.2	Promotional Activities	3.66
2.3	Word of Mouth	3.91
3.	<b>Brand Image</b>	
3.1	<b>Service Attributes</b>	
3.1.1	<b>Perceived Price</b>	3.92
3.1.2	<b>Perceived Quality of Service</b>	
3.1.2(a)	<b>Administrative Quality</b>	
	Attitude and Behaviour	3.80
	Administrative Process	3.72
3.1.2(b)	<b>Physical Environment Quality</b>	
	Support Infrastructure	3.83
	Learning Setting	3.62
	General Infrastructure	3.91
3.1.2 (c)	<b>Core Educational Quality</b>	
	Attitude and Behaviour	4.00
	Curriculum	3.69
	Pedagogy	3.70
	Competence	3.95
3.1.2 (d)	<b>Support Facilities Quality</b>	
	Core Cells and Committees	3.76
	Other facilities	3.54
3.1.2 (e)	<b>Transformative Quality</b>	3.86
3.1.3	<b>Service Benefits</b>	
3.1.3(a)	Employability	4.00
3.1.3(b)	Personal Development	3.94
3.1.3(c)	Pursue my Passion	3.86
3.1.3(d)	Sociability and Networking	3.87
3.1.4	<b>After sales service</b>	3.96
3.2	<b>Provider Attributes</b>	

3.2.1	Location	4.10
3.2.2	Size	3.94
3.2.3	University Reputation	4.05
3.3	<b>Symbolic Attributes</b>	
3.3.1	Perceived Social Image	4.08
3.3.2	Perceived Brand Positioning	3.98
3.3.3	Perceived Brand Personality	3.95
<b>4.</b>	<b>Brand Heritage</b>	
4.1	Track Record	3.71
4.2	Longevity	3.76
4.3	Core Values	3.76
4.4	Use of Symbols	3.90
4.5	History	4.05
<b>5.</b>	<b>Students Perceived Value Dimensions</b>	
5.1	Affective Value	3.84
5.2	Economic Value	3.84
5.3	Functional Value	3.84
5.4	Social Value	3.83

Table 1.4: Validity of Structured Non-Disguised Questionnaire

The researcher computed the mean scores for all the scales used in the structured non disguised questionnaire and all items within each scale. The results showed less variance in the specified scale categories and a similar average on scales of level of importance, level of preference, level of frequency, level of agreement/disagreement etc. Additionally, majority of the responses ranged between 3 to 5 on a 5-point Likert Scale. Thus, the validity of the scale is automatically established.

### 3.12 Sampling Decision of the Research Study

#### 3.12.1: A Representative Sample:

The samples of this research study were the students from selected Grant in Aid Higher Educational Institutes across the Gujarat.

### **3.12.2: Sampling Design**

The sample design for this PhD research on Measuring, Managing and Building Consumer-Based Brand Equity of Selected Higher Education Institutes in Gujarat State, India the researcher followed a non-probability sampling technique. Specifically, a purposive sampling technique is used to select the higher education institutes in the state.

Purposive sampling is a type of non-probability sampling where the researcher has selected the sample based on their judgment or criteria. In this case, the criteria for selection include the accreditation status, recognition by the UGC, number of enrolled students, geographical location of Gujarat and years in operation. The researcher has selected the higher education institutes that meet these criteria, which are representative of the population of higher education institutes in Gujarat State, India.

### **3.12.3: Sampling method:**

Convenience sampling method is used for the collection of primary data.

### **3.12.4 Sampling Frame**

Sampling frame consist of the list, published list of sampling unit or group of consumers identified target population. The sample frame comprises of the actual (current students of the Higher Educational Institutes under study) in the State of Gujarat.

### **3.12.5 Sample Size Determination**

A sample of 1380 respondents were selected from 4 Grant -in-Aid institutes of Gujarat. This size was determined by using the formula proposed by Naresh K. Malhotra (2007) 'Marketing Research' – An applied orientation' 6<sup>th</sup> Edition, Pearson. Page number 364. Before finalizing this, a pilot test was conducted with the sample size of 200.

Detailed calculation of sample size is shown in Annexure II

### **3.12.6 Sampling Media**

The sampling media for this PhD research on Measuring, Managing and Building Consumer-Based Brand Equity of Selected Higher Education Institutes in Gujarat State, India is a non-disguised questionnaire. The questionnaire was not disguised, and the respondents knew that they were participating in a research study.

#### **4. Data Analysis and Interpretation of the Research Study**

To test the formulated hypotheses, the researcher has used suitable statistical tools and appropriate statistical software for data analysis and interpretation. The data was analysed by SPSS version 21. The researcher had applied tests like Frequency count, Descriptive statistics (Mean and Standard Deviation), Factor analysis, Correlation and Regression. To check the reliability of the constructs, Cronbach Alpha was calculated. The universities selected for data collection were Sardar Patel University, The Maharaja Sayajirao University, Veer Narmad South Gujarat University and Saurashtra University.

The data analysis has offered results on important factors affecting choice of university, students' perception towards brand equity dimensions of higher education institutes. Students' perception towards brand heritage dimensions of higher education institutes and students perceived value dimensions were analysed in relation to higher education.

#### **5. Findings and Implications of the study:**

##### **5.1 Measuring Brand Equity**

- The researcher thoroughly investigated various academic sources, including research papers, scholarly publications, reports, surveys, and conference proceedings, relevant to the research topic. After analysing peer-reviewed journal articles and other published works, a concise literature review was drafted, considering numerous factors identified during the review process. Some of the common and widely surveyed vital factors include brand awareness, brand image, perceived quality, and brand heritage to name a few that plays a critical role in determining the consumer-based brand equity of higher education institutes
- The research identifies several significant factors influencing university choice, emphasizing the importance of geographic location (loading = .735) and career/employment opportunities (loading = .822) as primary considerations. Brand awareness is notably linked to the recognition of specialized programs (loading = .843) and degree programs (loading = .871). Regarding brand image, perceived price fairness (loading = .864) and the problem-solving capabilities of administrative staff (loading = .853) stand out as crucial elements.

High communalities indicate transformative qualities like developing critical thinking skills (loading = .851) and personal development aspects such as better talent management (loading = .803), highlighting their importance. Brand heritage factors, such as a consistent track record of

quality education (loading = .732) and the ability to form constructive relationships (loading = .776), are also highly valued.

Students' perceived values emphasize the significance of the university's commitment to quality education (loading = .783) and its positive social image (loading = .766), which contribute substantially to their overall satisfaction. These significant loadings indicate that these factors are strongly associated with students' perceptions and choices, reflecting their critical role in shaping the university's appeal and reputation.

- The conceptual model proposed was tested using multiple regression analysis for the whole sample.

The regression analysis examining the conceptual model of brand equity, with brand equity as the dependent variable and brand awareness, brand image, and brand heritage as independent variables, revealed a significant and strong model fit. The R-squared value of 0.92 indicates that 92% of the variability in brand equity is explained by these factors.

Consumer characteristics have a significant impact on perceptions of brand equity along with other constructs relating to the awareness dimensions of brand equity. Even brand awareness has a direct impact on consumer's assessments of the value of the brand. In line with the above findings, a range of symbolic, service and provider attributes are also found to be significant.

Of the symbolic attributes, social image (i.e. the extent to which university is viewed positively) and personality (i.e. the extent to which university is seen as displaying attributes such as honesty, sincerity etc.) both have a positive impact on brand equity. Interestingly, perceived brand positioning (In terms of market leadership) also has a significant impact on brand equity. All service attributes were found to be significant; price (measured in terms of value offered), perceived quality of service and service benefits (enhancing employability opportunities) all had a significant and positive impact on brand equity.

From among the various sub constructs, the overall brand awareness, promotional activities and word of mouth had relatively more significant impact as compared to other sub constructs.

Surprisingly, among the provider attributes, all except location and size were significant or marginally significant. However, university reputation had a significant positive impact on brand equity.

Overall, then, the evidence suggests that consumer attributes, especially age, gender and income level had a negative impact on the brand equity of higher education institutes. Needless to mention,

family experience of university (Parents and older siblings of the current students) of university had a more than moderate impact on the choice of HEIs by the students.

Marketing activities which were primarily expected to increase brand equity by increasing awareness were also found to be insignificant. Brand image related factors -namely symbolic, provider and service-related attributes were generally but not universally significant which suggested that at least in relation to HEIs and in keeping with the literature (lovelock,1991, D chernatony, 2001), Image-related dimensions were far more important as drivers of brand equity than awareness –related ones.

- To investigate the interrelationships/ causal relationships among the consumer-based brand equity dimensions in the higher education institutes, the researcher has conducted Karl Pearsons correlation analysis between independent variables - Brand Awareness, Brand Image, and Brand Heritage. The correlation analysis revealed significant positive relationships between the independent and dependent variables. Brand image (Karl Pearson coefficient and brand awareness showed a strong correlation ( $r = 0.71$ ), indicating that higher brand awareness is associated with a better brand image. Similarly, brand image and brand heritage were strongly correlated ( $r = 0.87$ ), suggesting that a rich brand heritage enhances brand image of Higher education institutes. Additionally, brand awareness and brand heritage were also significantly correlated ( $r = 0.66$ ), demonstrating that well-known brands often have a robust heritage. These correlations indicate that brand image, brand awareness, and brand heritage are significantly interrelated.
- To evaluate the importance of each brand equity dimension for university branding, the summated mean scores for each of the core and supporting brand equity dimensions were calculated. The means, standard deviations, and correlation coefficients for all the brand equity dimensions were tabulated. As expected, because all the dimensions are measuring the multi-dimensional concept of consumer-based brand equity, all of them are significantly correlated. The mean value of dimensions ranges from a low of 3.76 (Brand Awareness) to a high of 4.13 (Brand Heritage) on a 5-point scale, all the brand equity dimensions are perceived as important in varying degrees for creating a strong university brand and brand equity.

The analysis revealed that among the three dimensions—brand awareness, brand image, and brand heritage—brand heritage holds the highest relative importance. This finding indicates that consumers place a greater emphasis on the perceptions and associations they have with the university's brand heritage, which comprises of track record, longevity, core values, use of symbols and history. Among these dimensions History plays a more significant role in perceived

brand heritage while the other four dimensions play almost a similar role, though significant. A strong Brand Heritage not only influences customer preferences and loyalty but also enhances the brand's ability to differentiate itself in a competitive market. This suggests that HEI's should prioritize strategies that maintain and communicate the same in promotional strategies, as it plays a crucial role in selecting a particular Higher education institute.

- To investigate the impact of identified consumer-based brand equity dimensions on the perceived overall brand equity of Higher education institutes Karl Pearsons correlation analysis was conducted between brand awareness and measured brand equity, brand image and measured brand equity and brand heritage and measured brand equity of selected higher education institutes. The analysis reveals significant insights. The Pearson correlation coefficient between Brand Awareness and Overall Brand Equity is 0.770, indicating a strong positive relationship. This means that increased brand awareness is associated with higher overall brand equity, and the p-value of 0.000 confirms that this correlation is statistically significant at the 0.01 level.

The correlation between Brand Image and Overall Brand Equity is even stronger, with a coefficient of 0.929. This extremely strong positive correlation suggests that a more favourable brand image significantly enhances overall brand equity. The statistical significance is also confirmed by a p-value of 0.000.

Similarly, the correlation between Brand Heritage and Overall Brand Equity is also very strong, with a coefficient of 0.903. This indicates that a well-established brand heritage positively impacts the perceived overall brand equity, and this correlation is statistically significant, as evidenced by the p-value of 0.000.

Among the three dimensions analysed, Brand Image exhibits the highest correlation with overall brand equity (0.929), followed by Brand Heritage (0.903) and then Brand Awareness (0.770). This suggests that while all three dimensions significantly impact overall brand equity, enhancing the brand image should be prioritized as it has the strongest influence on perceived brand equity in higher education.

- In addition, the researcher put an effort to study the impact of selected consumer attributes viz. Age, Gender, Education, and Income on the perceived brand equity of higher education institutes. The analysis demonstrated that these three factors—age, income, and education—play crucial roles in shaping brand equity of higher education institutes. Consumers of different age groups exhibit varying perceptions and loyalties towards choice of higher education institutes, often influenced by their generational experiences and needs. Similarly, income levels affect brand

equity, as students coming from higher income families may prefer premium and reputed higher education institutes and show greater brand loyalty. Educational attainment of parents and elder siblings also impacts choice of higher education institutes and its brand equity, with more educated families likely to be more discerning and informed about brand choices, thus affecting their brand perception and loyalty. Interestingly, the study found that gender does not significantly impact brand equity of higher education institutes. This suggests that while demographic factors such as age, income, and education are pivotal in brand equity formation of higher education institutes, gender alone does not create a substantial difference in how students perceive or value brands. This insight is valuable for higher education institutes and its marketers aiming to tailor their strategies, emphasizing the need to consider age, income, and education more heavily in their branding efforts while recognizing that gender might not require as targeted an approach.

- In order to explore the perception of respondents as to whether and to what extent brand heritage is present or potentially found in the higher education institutes selected for the study, the researcher has developed various constructs (Based on literature review) viz. Track record, longevity, Core values, Use of Symbols and History consisting of positive statements measuring each construct. The responses were taken on 5-point Likert Scale measuring the level of agreement/Disagreement on various items of various constructs. The mean scores of all 5 constructs were calculated and accordingly the findings are presented. The mean scores for all 5 constructs ranged between 3.71 (Track Record) to 4.05 (History). The mean scores for longevity (3.76), core values (3.76) and Use of Symbols (3.90) were almost similar to each other indicating the presence of these 3 dimensions in the brand heritage of their relevant higher education institutes. From among all the 5 dimensions History as a dimension was perceived to be highly present in the higher education institutes. Hence, Higher education institutes authorities and marketers should focus on history of their institutes to promote brand equity of their education institutes.
- The analysis of the correlations between brand heritage and various dimensions of perceived value in higher education institutes reveals strong positive relationships across all measured aspects. The Pearson correlation coefficient between brand heritage and economic value is 0.722, indicating a substantial positive correlation significant at the 0.01 level ( $p = 0.000$ ). This suggests that institutions with a stronger sense of brand heritage are perceived as offering higher economic value to students.

The correlation between brand heritage and functional value is even stronger, at 0.812, also significant at the 0.01 level ( $p = 0.000$ ). This implies that a well-established brand heritage

significantly enhances the perceived functional value, suggesting that students view these institutions as more effective and capable of providing quality education.

Similarly, the relationship between brand heritage and affective value is notably strong, with a Pearson correlation coefficient of 0.806, again significant at the 0.01 level ( $p = 0.000$ ). This indicates that brand heritage has a significant influence on the emotional attachment and positive feelings students associate with the institution.

Finally, the correlation between brand heritage and social value stands at 0.805, signifying another strong positive correlation significant at the 0.01 level ( $p = 0.000$ ). This suggests that brand heritage greatly enhances the perceived social value, indicating that students perceive these institutions as having prestigious social standing and offering better networking opportunities.

In summary, the data indicates that brand heritage significantly impacts all measured dimensions of perceived value in higher education institutes. Among the four dimensions, functional value shows the highest correlation with brand heritage (0.812), followed closely by affective value (0.806) and social value (0.805). Economic value, while still strongly correlated, has the lowest correlation (0.722) among the four dimensions. This underscores the importance of maintaining and promoting brand heritage to enhance overall student perceptions and institutional value across all areas, with a particularly strong impact on the perceived functional value.

## **6. Recommendations and Suggestions of the Research Study:**

Based on the comprehensive analysis of factors influencing consumer-based brand equity in higher education institutes, several key recommendations can be drawn to enhance the effectiveness of university branding strategies. Firstly, it is essential for higher education institutions to focus on enhancing their brand heritage, given its significant impact on overall brand equity. Institutions should actively promote their historical achievements, core values, and longevity through various marketing channels. Highlighting a rich brand heritage not only differentiates the institution in a competitive market but also fosters greater emotional attachment and loyalty among students.

Additionally, while brand awareness is important, this study reveals that brand image has a more substantial impact on perceived brand equity. Therefore, universities should prioritize efforts to improve their brand image by ensuring high perceived quality, fairness in pricing, and excellent administrative support. These factors are crucial in shaping positive student perceptions and enhancing the overall reputation of the institution.

Moreover, the findings suggest that geographic location and career opportunities are significant determinants of university choice. Hence, institutions should leverage their geographic advantages and emphasize the career prospects they offer, including strong industry connections and employability outcomes. This approach not only attracts prospective students but also reinforces the institution's commitment to student success and satisfaction.

The study also highlights the importance of understanding the diverse demographic attributes of consumers, such as age, income, and educational background, which significantly influence brand equity perceptions. Higher education marketers should develop targeted strategies that cater to these specific demographic segments, ensuring that marketing messages resonate with their unique needs and preferences. Interestingly, gender does not significantly impact brand equity perceptions, indicating that gender-neutral marketing approaches can be effective.

Furthermore, given the strong correlations between brand heritage and various dimensions of perceived value, universities should maintain and communicate their heritage consistently. This includes showcasing the institution's track record of quality education, use of meaningful symbols, and the historical significance of the institution. These elements collectively enhance the perceived functional, affective, economic, and social value of the institution.

In conclusion, higher education institutions aiming to strengthen their brand equity should adopt a holistic approach that encompasses enhancing brand heritage, improving brand image, leveraging geographic and career opportunities, and developing targeted demographic strategies. By focusing on these areas, institutions can significantly enhance their appeal and reputation, ultimately attracting and retaining more students and fostering long-term loyalty.

## **7. Limitations of the Research Study:**

Certain limitations to the current study point the way for further research.

- First, it is important to remember that the model has only been tested in higher education and in one country, so it is best to proceed with caution when extrapolating conclusions from these results.

Nonetheless, the analysis in this paper at least offers a framework for future research on service brand equity.

- Second, the sample only represents four Grant in Aid Higher education institutes in the State of Gujarat rather than the entire population.

- Third, whereas other studies could focus on brand equity from other views, such as the financial perspectives, the researchers only consider one brand equity, customer-based brand equity.
- As the data is collected through the questionnaire there is possibility that respondents may not be fully loyal in answering the questions
- Due to lack of interest as well as knowledge, respondents may not fill up the questionnaire properly
- Finally, the study did not track the prospective students going to be enrolled in the Grant in Aid Higher education institutes in the State of Gujarat.

## **8. Directions of Future Study:**

Several directions for future research do exist. The expansion of international HE markets and how it affects brand perception should be the subject of future research.

- The researcher has used the model proposed by Kellar and Aaker to study the brand equity of higher education institutes. Future studies can be conducted by taking models proposed by previous researchers.
- Addition of constructs, apart from those considered in the present study, can also serve an effective area for future research.
- There are also considerable opportunities to compare brand equity metrics between grant-in-aid institutes in Gujarat and those in other states to identify regional variations and factors influencing brand perception.
- Future research could also focus on conducting qualitative research, such as interviews or focus groups, to delve deeper into students' perceptions, experiences, and preferences regarding grant-in-aid institutes, providing richer insights into brand equity drivers.
- To make research more holistic in nature, the scope of similar studies can be expanded by including perspectives from other stakeholders, such as faculty, alumni, and administrators, to understand how their perceptions and interactions contribute to overall brand equity.
- Further, longitudinal studies can be conducted to track changes in brand equity indicators over time, capturing trends, shifts, and the impact of various interventions or external factors on brand perception and loyalty.
- The sample for this research study is selected Grant in Aid universities from Gujarat. For further research private universities can be taken, a comparative study between private vs Grant in Aid institutes can also be done.

- There are also considerable opportunities to apply the modified framework of the determinants of brand equity in service industry adopted in this research to another service other than the higher education institutes.

Despite the wide range of studies that highlight brand extension strategy as a primary outcome of brand equity in the product market, it is also noted that more research is still needed to determine the function of brand equity in establishing brand extension strategies in service sectors. Researchers are urged to reconsider the concept and its dimensions and develop and evaluate new measures utilising multi-country data considering the drawbacks of Aaker's conceptualisation of consumer-based brand equity. The significance of researching brand equity internationally has grown due to globalisation. However, little research has compared the construct's effects on various societies or cultures. This indicates that more knowledge is required to comprehend brand equity and how the process affects consumer responses in various countries.

### **Selected References:**

Ada, S., Baysal, Z. N., & Erkan, S. S. Ş. (2019). An evaluation of service quality in higher education: Marmara and Niğde Omer Halisdemir Universities' department of education students. *Journal of Education and Practice, 10(16), 52-62.*

Alam, W., Saeed, T., & Malik, Z. K. (2020). Role of brand image on brand equity: A comparative study of public and private sector higher education institutions of Khyber Pakhtunkhwa. *Journal of Marketing for Higher Education, 30(2), 186-208.*

Charles, V., & Gherman, T. (2015). student-based brand equity in the business school's sector: An exploratory study. *The new educational review, 42(4), 165-176.*

Chen, C. F., & Tseng, W. S. (2010). Exploring customer-based airline brand equity: Evidence from Taiwan. *Transportation journal, 49(1), 24-34.*

Clarke, K. (2009). Building customer-based brand equity in higher education: Applying brand equity theory to an international higher education marketing context.

Cleff, T., Lin, I. C., & Walter, N. (2014). Can You Feel It? -The effect of brand experience on brand equity. *IUP Journal of Brand Management, 11(2), 7.*

Dangarwala, U., & Bhatia, K. D. (2013). An Empirical Study of Brand Equity Dimensions for Selected Consumer Durables among Selected Students of Vadodara city. *Global Research Analysis, 2(1).*

Effah, E. A. (2017). Assessing the applicability of student-based brand equity constructs in university institution preference in Ghana (*Doctoral dissertation, London Metropolitan University*).

Febrian, A., & Vinahapsari, C. A. (2020). Brand equity is mediated in influencing purchase intentions on e-commerce. *Test Engineering and Management, 82, 3703-3710.*

Gilitwala, B., & Nag, A. K. (2022). Understanding effective factors affecting brand equity. *Cogent Business & Management, 9(1).*

Girard, T., & Pinar, M. (2021). An empirical study of the dynamic relationships between the core and supporting brand equity dimensions in higher education. *Journal of Applied Research in Higher Education*, 13(3), 710-740.

Gulamiddinova, Z. N. (2022). Methodology for Brand Equity Assessment of Universities in Transformation Period of the Educational System. *Asian Journal of Technology & Management Research (AJTMR) ISSN*, 2249(0892).

Heer, D. F. (2020). Exploring the Understanding of University Brand Equity: Perspectives of Public Relations and Marketing Directors. *Journal of Business and Management*, 22(7), 49-57.

Ishaq, M. I., Hussain, N., Asim, A. I., & Cheema, L. J. (2014). Brand equity in the Pakistani hotel industry. *Revista de Administração de Empresas*, 54, 284-295.

Jeon, J.-E. (2024). The impact of brand concept on brand equity. *Journal of Brand Management*, 21(3), 456-478.

Khanna, M., Jacob, I., & Chopra, A. (2019). Promoting business school brands through alumni (past customers)-Analysing factors influencing their brand resonance. *Journal of Promotion Management*, 25(3), 337-353.

King, C., & Grace, D. (2018). Employee-based brand equity: A third perspective. *Journal of Product & Brand Management*, 27(2), 158-167.

Menon, V. P., & Barani, G. (2016). Dimensions of brand equity: An investigation on higher education institutions. *Asian Journal of Research in Social Sciences and Humanities*, 6(5), 353-359.

Moghaddam, A. H., Asadollah, H., Garache, M., & Charmahali, A. A. (2024). Designing and explaining brand equity model in higher education. *European Online Journal of Natural and Social Sciences*, 2(3).

Mourad, M., Meshreki, H., & Sarofim, S. (2020). Brand equity in higher education: Comparative analysis. *Studies in Higher Education*, 45(1), 209-231.

- Muhammad, S. A., & Muath, L. S. (2018). Impact of brand elements on brand equity: An applied study on Jordanian corporations. *African Journal of Marketing Management*, 10(3), 17-27.
- Muhmurti, S. R., & Selvanayagam, G. (2019). Brand equity in selecting a private higher education institution in Klang valley. *BERJAYA Journal of Services & Management*, 12, 78-89.
- Muqaddas, M. F., & Ahmad, I. (2016). Determinants of brand equity: an empirical study of IT industry. *SEA–Practical Application of Science*, IV, 3(12), 555-560.
- Nam, J. H. (2008). The antecedents and consequences of brand equity in the hospitality industry. *University of Surrey (United Kingdom)*.
- Ostojić, M., & Leko Šimić, M. (2021). Students' perceptions of public vs. private higher education institution brand value in Croatia. *Sustainability*, 13(17), 9767.
- Panigrahi, C. M. A., & Joshi, V. (2020). Developing brand equity through consumers: A study of pharmaceutical industry. *Journal of Management Research and Analysis*, 7(4), 159-166.
- Perera, C. H. (2024). The role of customer-based brand equity in higher education: A two-country study. *International Journal of Educational Research*, 30(1), 89-112.
- Perera, C. H., Nguyen, L. T. V., & Nayak, R. (2023). Brand engagement on social media and its impact on brand equity in higher education: Integrating the social identity perspective. *International Journal of Educational Management*, 37(6/7), 1335-1359.
- Pinar, M., Trapp, P., Girard, T., & Boyt, T. E. (2014). University brand equity: An empirical investigation of its dimensions. *International Journal of Educational Management*.
- Prabowo, H. A., Ghozaly, F., & Susilo, A. (2021). Building strong brand equity in higher education through marketing mix strategy: Research on private universities in Indonesia. *Journal of Marketing for Higher Education*, 31(1), 97-115.
- Raj, T., Nayak, V. M., & Ali, M. A. (2010). Customer based brand equity in banking sector-A study. *Osmania Journal of International Business Studies*, 5(1and2), 117-121.

Ram, B. R., Nallaluthan, K., & Hanafi, N. B. (2017). Brand Equity in Higher Education Institutions in Malaysia.

Ramdan, A. M., Rahayu, A., Hurriyati, R., & Sultan, M. A. (2020). The role of brand equity in making decisions to choose higher education for new middle-class students. *In Advances in Business, Management and Entrepreneurship* (pp. 25-27). CRC Press.

Rivetta, M. S., Rodríguez-Conde, M. J., & Olmos Migueláñez, S. (2020). *European higher education: a comparative analysis to evaluate the pedagogical training of professors and to investigate the different models developed by universities.*

Shahaida, P., Rajashekar, H., & Nargundkar, R. (2009). A conceptual model of brand-building for B-schools: an Indian perspective. *International journal of commerce and management*, 19(1), 58-71.

Soni, S., & Govender, K. (2018). The relationship between service quality dimensions and brand equity: Higher education students' perceptions. *Central European Management Journal*, 26(3), 71-87.

Stukalina, Y., & Pavlyuk, D. (2021). Using customer-based brand equity model in the higher education context: simulating the current university's brand. *Business, Management and Economics Engineering*, 19(2), 272-288.

Syed Ali Abbas (2021). Brand management of higher education institutions. *Journal of Brand Management*, 28(2), 164-170.

Tammubua, M. H. (2021). Customer-Based Brand Equity in Indonesia's Higher Education Institution. *Journal of Management and Entrepreneurship Research*, 2(2), 105-118.

Tong, X., & Hawley, J. M. (2009). Measuring customer-based brand equity: Empirical evidence from the sportswear market in China. *Journal of product & brand management*.

Trùng, N. V. T. (2021). The Factors Effect on Brand Equity In Higher Education. *Journal Of Science and Technology-Iuh*, 51(03).