Report On

The Competitive Edge of BRAC University: A Comparative Study with Leading Universities

By

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An internship report submitted to the BRAC Business School in partial fulfillment of the requirements for the degree of Bachalors of Business Adminstration

BRAC Business School Brac University October 2023

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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at

Brac University.

2. The report does not contain material previously published or written by a third party,

except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other

degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

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Letter of Transmittal

Ummul Wara Adrita Senior Lecturer and Program Coordinator, WEP BRAC Business School BRAC University 66 Mohakhali, Dhaka-1212

Subject: Submission of Internship Report

Dear Madam,

I am pleased to present my internship report titled "The Competitive Edge of BRAC University: A Comparative Study with Leading Universities", which I have prepared under your esteemed guidance.

I have endeavored to compile the report with relevant information and insights, ensuring its comprehensiveness and accuracy. It is my hope that the report meets your expectations and standards. I eagerly await your feedback and recommendations.

Sincerely yours,

M. Nisorgo Islam

Student ID: 17204007

BRAC Business School

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Date: October 16th, 2023

Non-Disclosure Agreement

This agreement is made and entered into by and between BRAC University and the undersigned student at Brac University.

M. Nisorgo Islam

17204007

Acknowledgment

I would like to express my deepest appreciation to all those who provided me the opportunity to complete this internship report. A special gratitude I give to my internship supervisor, Ummul Wara Adrita, whose guidance, stimulating suggestions, and encouragement helped me to coordinate my project, especially in crafting this report.

I am also grateful to the entire team at the Office of the Registrar at BRAC University, for providing me with all the necessary facilities for the research. I have to thank my colleagues Soyeb Ahmed, Alif Hossain Saad, and Md Shamim Ahmed who provided insight and expertise that greatly enhanced my research experience.

I am also indebted to the faculty and administration at BRAC Business School, particularly those involved in the Marketing major and E-commerce minor, for equipping me with the tools to analyze and interpret business trends.

Last but not least, I wish to thank my friends and family for their constant support, encouragement, and invaluable advice throughout my internship.

Executive Summary

This report, titled "The Competitive Edge of BRAC University: A Comparative Study with Leading Universities," aims to examine the competitive positioning of BRAC University in the context of Bangladesh's higher education landscape. Utilizing a diverse set of metrics including student numbers, faculty demographics, research expenditure, and course offerings, the study compares BRAC University to its key competitors: North South University, Independent University, Bangladesh, American International University-Bangladesh, United International University, University of Liberal Arts Bangladesh, East West University, and Daffodil International University.

The data, sourced from the UGC Annual Reports spanning 2018 to 2021, provided a comprehensive view of performance indicators and facilitated a time-series analysis. Through this analysis, the report identifies trends and potential areas of improvement for BRAC University.

Key findings suggest that BRAC University maintains a consistent student-faculty ratio and stable research expenditure, indicating a balanced growth strategy and a sustained focus on academic quality. Recommendations include leveraging these strengths in marketing efforts and considering research as a potential differentiator in the market.

This report serves as a valuable resource for BRAC University's strategic planning, particularly for initiatives aimed at strengthening its competitive edge in the higher education sector.

Keywords: UGC, Data

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List of Acronyms

UGC: University Grants Commission

SWOT: Strength, Weakness, Opportunities and Threats

BBA: Bachalors of Business Administration

EEE: Electrical and Electronics Engineering

CSE: Computer Science Engineering

Glossary

Competitive Analysis: A strategy where an organization evaluates its competitors to identify their strengths and weaknesses.

Ministry of Education: The government department responsible for the provision, promotion, and regulation of education in Bangladesh.

UGC (University Grants Commission): A regulatory body in Bangladesh which oversees the funding and accreditation of higher education institutions.

Chapter 1: Overview of Internship

1.1 Student Information

I, M. Nisorgo Islam, am currently enrolled in the Bachelor of Business Administration (BBA) program at Brac Business School, Brac University. My Student ID is 17204007. My undergraduate program began in the fall of 2017, and I anticipate graduating in 2023 with specializations in marketing and e-business.

1.2 Internship Information

I am delighted to have the opportunity to serve as an Intern in the Office of the Registrar at Brac University for three months beginning on July 1, 2023. Brac University, which has established itself as one of the most prestigious higher education institutions in Bangladesh, is presently located at 66, Mohakhali, Dhaka - 1212, Bangladesh. By 2023, the university is anticipated to move to its permanent campus, which is strategically located in the center of communication at KHA 224, Progati Sarani, Merul Badda, Dhaka 1203.

1.2.1 Internship Company Supervisor's Information

As an Intern in the Office of the Registrar at Brac University, I reported to and worked under the supervision of Mr. Md. Shamim Ahmed, who is presently serving as Brac University's Deputy Registrar and Deputy Controller of Examinations. Mr. Shamim is additionally a senior Lecturer of Finance and Strategic Management at Brac Business School.

1.2.2 Job Scope

Working Hours and Initial Orientation:

As an intern in the Office of the Registrar at BRAC University, I adhered to a work schedule that commenced at 9:30 AM and concluded at 5:00 PM, five days a week, excluding Fridays and Saturdays. My initial month was designed to serve as an acclimation period, during which I was familiarized with the organization's work culture. My organizational supervisor played a crucial role in this phase, introducing me to my colleagues and delineating my roles and responsibilities. This orientation provided me with valuable insights into the essential functions of the Office of the Registrar and its constituent units.

Primary Responsibilities:

- Handling Admission Queries: Addressing inquiries from potential students or guardians regarding the admissions process.
- Report Preparation: Compiling data and insights related to the admission queries to facilitate better decision-making.
- Inbound Prospect Forwarding: Directing incoming inquiries to appropriate departments to expedite issue resolution.
- Data Gathering: Collecting data on private universities in Bangladesh for competitive analysis and research purposes.

Additional Responsibilities:

- Data Translation: Interpreting data received from the Ministry of Education and the University Grants Commission.
- Data Analysis and Summary Reports: Assessing data and generating comprehensive reports summarizing the academic performance of private universities from 2018 to 2021.
- Meeting Minutes: Drafting minutes for specific organizational meetings to ensure effective communication and documentation

Projects Completed:

During my tenure, I completed a significant project focused on competitive analysis of the University Grants Commission's data for the years 2018-2021.

Events Organized:

- A Tour of Excellence with Milestone College: An informative and exploratory event aimed at fostering a sense of academic achievement and exploration.
- A Tour of Excellence with The Aga Khan School: A similar event designed to inspire academic excellence and showcase the educational opportunities available at BRAC University.

Overall, my internship at the Office of the Registrar at BRAC University was an enriching experience, offering a comprehensive understanding of the various facets involved in managing a key administrative department within an educational institution.

1.3 Internship Outcomes

1.3.1 Student's Contribution to the Company

During my internship, I was assigned duties that were both essential and time-sensitive. Notably, my principal assignment involved competitive analysis, for which I reviewed annual reports from the University Grants Commission (UGC), translated pertinent data, and compiled statistics on various private universities. This material was essential for the executive leadership of BRAC University to comprehend the institution's position relative to its rivals. The report I generated was intended for upper-level management, necessitating exhaustive error-checking.

In addition to conducting a competitive analysis, I conducted research on foreign universities to identify courses that are innovative and distinctive. This study seeks to inform BRAC University's future curriculum development for both undergraduate and graduate programs, ensuring that the institution remains at the forefront of academic innovation.

1.3.2 Benefits to the Student

Working as an intern for a large organization like BRAC University has been incredibly rewarding. As a Marketing and E-Business student, the theoretical frameworks I had been exposed to were predominantly geared towards corporations and marketing agencies. This apprenticeship in a higher education institution broadened my knowledge to include the distinctive operational and marketing strategies utilized by universities.

Furthermore, the position required me to interact with multiple university departments, ranging from admissions to academic affairs. This interdepartmental collaboration deepened my understanding of the interdependent roles each unit performs in ensuring the efficient operation of the university's ecosystem.

In addition to technical and functional knowledge, the apprenticeship contributed to my personal growth. I refined skills such as time management, effective communication, quick decision-making, and work-life balance, which are valued in any professional environment.

1.3.3 Difficulties/Problems Encountered

While the internship was an overwhelmingly beneficial learning opportunity, it was not devoid of obstacles. Due to disorganized recordings in the UGC and other online sources, data collection posed a significant challenge. In addition, internal policy restrictions on data sharing prevented me from including certain confidential information in my report. To circumvent this, I relied heavily on secondary data sources, which presented their own set of limitations in terms of reliability and breadth.

Despite these obstacles, the skills and insights I gained during my internship have been invaluable, providing me with both the hard and social skills necessary for career advancement.

1.3.4 Recommendations

By my internship at Brac University, I was able to delve deeply into my specific areas of interest, namely Marketing and E-Business. However, prospective interns' experience could be enhanced by providing specialized training in data analysis techniques and key marketing metrics. In addition, easing restrictions on internal data sharing would considerably improve the quality of interns' research reports. Alternatively, enhanced access to primary data may produce comparable outcomes.

Lastly, I would recommend that Brac University diversify the disciplines in which it offers internships. By expanding these opportunities beyond the Office of the Registrar to other important functional areas, students would be able to better align their internships with their academic concentrations. This diverse experience would not only serve as an essential learning aid, but it would also better prepare students for a variety of career paths in the future.

Chapter 2: Organization Part

Overview, Operations, and Strategic Audit

2.1 Introduction

Objective

The primary objective of this report is to analyze the current operational landscape of Brac University, identifying any areas of inefficiency or potential for optimization. I intend to identify data sets that could be analyzed to improve performance by gaining a comprehensive understanding of the institution's operations.

Methodology

I utilized both primary and secondary sources to acquire and analyze qualitative and quantitative data for this comprehensive report. My supervisor played a significant role in facilitating access to these resources. To acquire insight into operational procedures, interviews were conducted with coworkers from multiple departments. In addition, essential organizational documents, such as Brac University's Employment Policies, Accounting Manual, and Annual Report, were rigorously examined in order to comprehend its financial health and management protocols.

Scope

This report covers numerous aspects of Brac University's current operations, such as management, marketing, finance and accounting, operations, and information technology. The report functions as a guide to the university's ongoing operations and their financial impact.

Limitation

Limitations on data exchange posed the greatest challenge during the writing of this report. Thanks in part to the assistance of my coworkers, alternative methods were discovered to collect the necessary data despite this limitation.

Significance

The primary advantage of completing this report is gaining a comprehensive understanding of how the various departments of Brac University collaborate to realize a unified vision. This insight revealed both the assets and weaknesses of the institution. In addition, this report has enhanced my knowledge of the distinctive characteristics of service sector operations, in

comparison to those of the manufacturing sector. It has enriched my specialized focus on operations management in a significant way.

2.2 Background

Brac University, founded in 2001, has distinguished itself as one of Bangladesh's premier private educational institutions. The university adopts a liberal arts educational model, which fosters innovative thought and substantially enriches the higher education landscape in the nation. The university's mission is to uphold the most rigorous academic standards while meeting the changing demands of our modern society.

The mission of Brac University is to instill in its students a commitment to contributing to national development, economic growth, and community improvement. This philosophy is profoundly rooted in BRAC's legacy of creating solutions to problems arising from extreme poverty. The guiding principle of the institution is "Inspiring Excellence."

Brac University, which is authorized by the Ministry of Education and accredited by the University Grants Commission (UGC), conducts its courses in English, making them accessible to a global audience. Over the years, the university has earned a reputation for providing devoted, personalized support to its constituents and for nurturing a tech-savvy campus culture.

Beyond academics, Brac University has been a pioneer in Bangladesh's scientific and educational developments. BRAC Onnesha, the nation's first Nanosatellite, and BRACU Mongol-Tori, a competitive Mars rover, have raised the bar nationally in the disciplines of science and education

In 2018, the university ranked 228th out of 400 in the QS Asia University Rankings, making it the highest-ranking private university in Bangladesh for that year.

2.2.1 Vision Mission and Objectives

On February 24, 2020, in Sylhet, the Senior Management of Brac University came to a consensus on a new set of vision, missions, and objectives.

Mission

- To create and share knowledge
- To uphold human values
- To promote sustainability

Vision

• To be a proud, global institution from Bangladesh

Objectives - By 2024

- Bangladesh's international university
- Bangladesh's student centric university
- A research university with impact

The Senior Management team of the university has set their sights on achieving these objectives by 2024, demonstrating their unwavering commitment.

2.2.2 Organizational Structure

Through its numerous Schools, Departments, Institutes, and Centres, Brac University provides its students with cutting-edge higher education and a pleasant learning experience.

Schools

- Brac Business School
- Graduate School of Management
- James P. Grant School of Public Health
- School of Architecture and Design
- School of Data and Sciences
- School of Engineering
- School of Humanities and Social Sciences
- School of Law
- School of Life Sciences

Departments

- Department of Architecture
- Department of Computer Science and Engineering
- Department of Economics and Social Sciences
- Department of Electrical and Electronic Engineering
- Department of English and Humanities
- Department of Mathematics and Natural Sciences
- Department of Pharmacy

Institutes

- Brac Institute of Educational Development
- Brac Institute of Governance and Development
- Brac Institute of Languages

Centers

- Center for Climate Change and Environmental Research
- Center for Emotional Intelligence and Innovation
- Center for Entrepreneurship Development
- Center for Inclusive Architecture and Urbanism
- Center for Peace and Justice
- Professional Development Center

2.3 Management Practices

2.3.1 Decision-Making Processes

Brac University is governed by its Board of Trustees (BoT), which is the ultimate authority in terms of policy formulation and the upkeep of educational and administrative standards. Complementing the Board of Trustees, the Syndicate serves as the university's highest executive body, responsible for regulating and supervising research, administration, and operational management.

In addition, the Academic Council, which consists of Academic Heads, plays a crucial role in determining the educational orientation of the university. It recommends academic policies and outlines the courses and curricula intended to maintain the institution's alignment with rigorous educational standards.

2.3.2 Employment Protocols

Detailed in the Employment Guideline, the recruitment and selection procedures at Brac University strive for clarity, fairness, and ethical conduct. The policy is applied uniformly across the workforce and expressly prohibits discrimination against any gender, including women and transgender individuals.

In addition, Brac University is committed to hiring, promoting, and retaining employees solely on the basis of their individual merit, regardless of age, gender, ethnicity, race, sexual orientation, or social background. This strategy is consistent with the university's dedication to equal employment opportunities. It should be noted that the university prohibits the employment of individuals under the age of 18, whether for temporary or permanent positions.

2.3.3 Recruitment Strategy

The primary objective of Brac University's recruitment strategy is to attract, evaluate, and onboard talent that correlates with the institution's short-term and long-term goals. The university's recruitment efforts are strictly aligned with its overarching corporate strategy. This

assures a steady flow of qualified candidates, thereby expanding the institution's pool of skills and knowledge. The university employs methods such as newspaper advertisements, targeted headhunting, campus outreach, and unsolicited CVs as part of a multifaceted strategy. The formalized and well-structured recruitment procedure ensures that only the most qualified candidates are chosen. Note that anyone convicted by a court of law is automatically disqualified from employment consideration at the university.

2.3.4 Compensation Structure

The compensation for each position at Brac University is determined by the distinct Job Profiles. Significantly, the institution's minimum compensation exceeds the government-mandated minimum of BDT 8,250, demonstrating its dedication to employee welfare.

2.4 Marketing Practices

Brac University has effectively established itself as Bangladesh's preeminent private educational institution. With the addition of additional schools and departments, this number is expected to rise. In accordance with its vision of becoming a global institution based in Bangladesh, the university seeks to be a hub for international scholars in addition to serving domestic talent.

2.4.1 The Seven Ps of Service Marketing

This section will utilize the marketing mix framework to analyze the university's marketing initiatives. The Seven Ps—Product, Price, Place, Promotion, People, Process, and Physical Evidence—will be analyzed in depth to determine how Brac University molds its offerings to appeal to its target market.

Product

Brac University's primary product in the sphere of higher education is the variety of degree programs it offers. The university ensures that course materials remain current and aligned with both student requirements and global trends by continually updating its curriculum. This dedication to academic innovation attracts an ever-growing number of students.

Price

In the updated context of 2023, the "Price" element of the marketing mix pertains to Brac University's revised tuition and additional fees. The cost per academic credit has increased to BDT 7,500, while the additional semester fees, which include IT facilities, library access, and student activities, have risen to BDT 8,500. In addition, prospective students must pay a one-time, non-refundable fee of BDT 30,800 for admission. Despite these modifications, the

university continues to provide a vast selection of scholarships, making it an attractive option for students seeking a high-quality education.

Place

Strategically located in Mohakhali, in the heart of the city, Brac University experiences an optimally accessible location. This is an important factor for prospective students, who prioritize accessibility to public transportation and safety when choosing a college. In addition, a new campus is currently being constructed in Merul Badda, another central area renowned for its connectivity, which promises to further enhance the university's allure.

Promotion

The "Promotion" aspect entails the numerous channels utilized by Brac University to reach its target audience. Historically, the university has announced admission cycles through prominent advertisements in nationally recognized periodicals. Recently, it has expanded its promotional efforts to digital platforms, such as its Facebook page. In March 2021, Vice-Chancellor Vincent Chang convened a luncheon for principals from leading Dhaka schools and colleges as part of Brac University's intensified community outreach initiatives. In addition to expressing gratitude for their educational contributions during the pandemic, this gathering lay the groundwork for future collaborations, continuing the tradition of attracting a significant number of students from these institutions

People

The team at Brac University consists of all individuals involved in the student journey, from prospective students to alumni. This includes the academic staff, administrative staff, and support staff. Notably, the academic staff's reputation has a significant impact on the institution's credibility. The recent addition of esteemed national and international faculty with extensive experience in higher education enhances Brac University's reputation. Such enhancements play a crucial role in how prospective students evaluate the educational quality and overall student services of the university.

Process

Processes at Brac University span from handling inquiries to the declaration of results, including admissions and examinations. The university's commitment to expediting these procedures will likely increase student satisfaction. In accordance with its new vision, Brac University aspires to adopt a student-centered approach. This ensures that the experiences of students are at the vanguard of decision-making, thereby increasing the university's appeal to both domestic and international applicants through positive word of mouth.

Physical Evidence

Physical evidence refers to the tangible components associated with the services rendered. When contemplating a university, prospective students consider various factors, such as teaching aids

and campus infrastructure. With the ongoing construction of Brac University's permanent campus and the addition of esteemed academic and administrative members, the institution is ideally positioned to positively influence the decisions of prospective students.

2.5 Financial Overview of Brac University

2.5.1 Accounting Practices

The financial indicators of Brac University provide insight into its operational efficacy and durability. The diligent Finance and Accounts Department plays a vital role in enhancing operational effectiveness and facilitating management decision-making. Under the direction of Mr. Ariful Islam as Chief Financial Officer, the department upholds the highest standards. Internal and external audits are conducted by Brac University in accordance with regulatory frameworks established by the University Grants Commission (UGC) and Ministry of Education. An enterprise selected from a cohort supplied by the Ministry of Education conducts an annual external audit to ensure the authenticity and accuracy of accounting and administrative data. While Brac University respects the IFRS standards endorsed by ICAB, it primarily adheres to the UGC's "Private University Financial Report (PUFR)", which is consistent with Bangladesh Accounting Standards (BAS), International Accounting Standards (IAS), and International Financial Reporting Standards (IFRS).

2.5.2 Financial Performance

In order to evaluate the financial performance of Brac University over the past five years, a series of ratios were calculated that focused on liquidity, asset management, debt management, and profitability. The following ratios were calculated to evaluate the performance:

Figure 1: Yearly comparison of current ratio of BRAC University (2015 - 2019)

The Blue bars represent the ratio for each year, with a trendline (R2 = 0.701) indicating a moderate but steady decline in liquidity. Beginning at a robust 2.51:1 in 2015, the ratio decreased slightly to 2.49:1 in 2016, dropped significantly to 1.38:1 in 2017, rebounded slightly to 1.71:1 in 2018, and settled at 1.41:1 in 2019. Despite the fact that Brac University's assets still outweigh its liabilities, the declining trend over the past five years indicates the need for a closer examination of its financial trajectory.

Total Asset Turnover

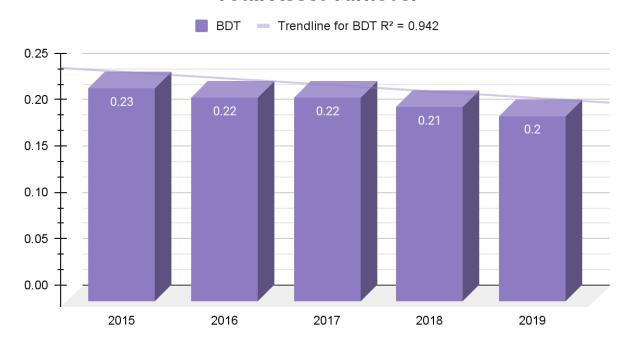


Figure 2: Yearly comparison of total asset turnover of BRAC University (2015 - 2019)

From 2015 to 2019, the graph depicts Brac University's Total Asset Turnover. This ratio indicates the effectiveness with which a company generates sales revenue from its assets. Each year's revenue is represented by a purple bar, with a trendline (R2 = 0.942) indicating a significant decline over time. Beginning at 0.23 in 2015, the turnover decreased to 0.22 in 2016 and 2017, 0.21 in 2018, and 0.20 by 2019. The consistent decline over the past five years suggests that Brac University's utilization of its assets to generate revenue has become less efficient over time.

Debt Management Ratio

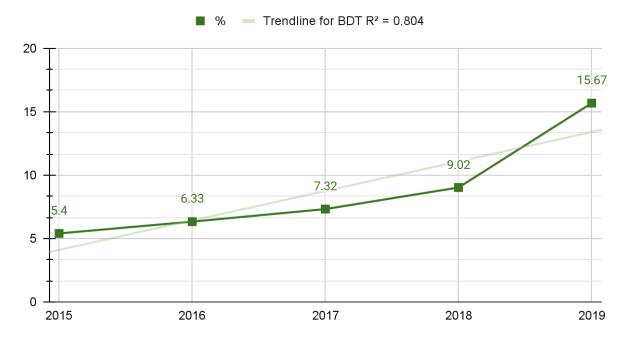


Figure 3: Yearly comparison of the debt management ratio of BRAC University (2015 - 2019)

From 2015 to 2019, the graph depicts Brac University's Debt Management Ratio. This ratio, expressed as a percentage, measures the university's operational reliance on debt financing. The green trendline, with an R2 value of 0.804, exhibits a sharp upward trajectory over the five-year period, indicating a growing reliance on debt. The data indicate that the Debt Management Ratio will increase steadily from 5.4% in 2015 to 15.67% in 2019, beginning at 5.4% in 2015. This trend suggests that Brac University's financial structure has become increasingly leveraged with debt over the past few years.

Operating Profit Margin

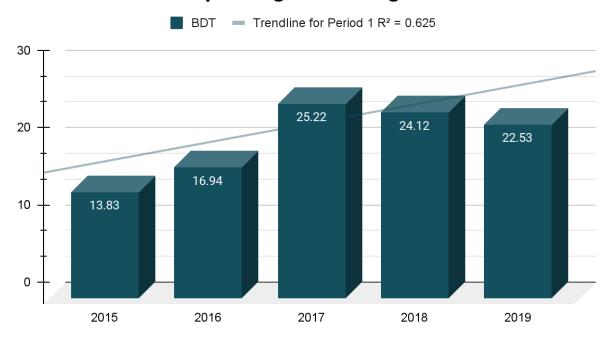


Figure 4: Yearly comparison of the operating profit margin of BRAC University (2015 - 2019)

The Operating Profit Margin is a key financial metric that measures the proportion of revenue remaining after direct costs of producing products or services have been deducted, but before interest and tax expenses. Beginning at 13.83% in 2015, the university's margin increased significantly over the subsequent years, culminating in 2017 with a margin of 25.22%. After covering its primary operating expenses in 2017, Brac University retained BDT 25.22 per BDT 100 in revenue as operating profit in 2017. However, after 2017 there was a modest decline, with margins of 24.12% in 2018 and 22.53% in 2019. The ascending trendline with an R2 value of 0.625% indicates a general upward momentum throughout the period, although the slight decline in the later years may necessitate additional investigation into potential causes. This trend may indicate that while the university was able to increase its operational efficiency during the middle years, factors in the years that followed led to a slight compression of the profit margin.

Net Profit Margin

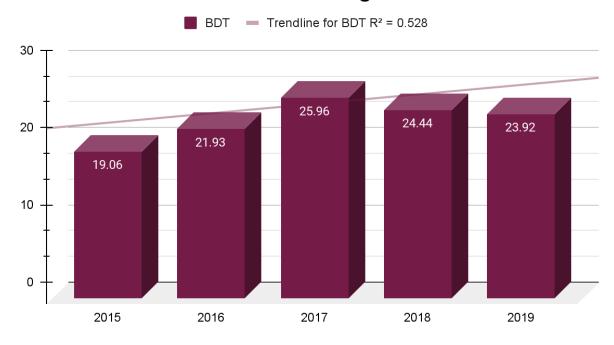


Figure 5: Yearly comparison of the net profit margin of BRAC University (2015 - 2019)

The Net Profit Margin is a crucial financial indicator that represents the proportion of revenue remaining after all expenses, such as operating costs, interest, taxes, and other deductions, have been deducted. Beginning at 19.06% in 2015, the university's margin grew to a peak of 25.96% in 2017. This indicates that for every BDT 100 in revenue generated in 2017, Brac University retained BDT 25.96 in net income. Following this zenith, there is a slight decline to 24.44% in 2018 and an increase to 23.90% in 2019. Indicated by an R2 value of 0.528, the trendline indicates a moderately consistent increase over these years. Despite the overall upward trend, the minor decline after 2017 suggests that while the university may have been adept at managing its operational costs, external or other factors may have influenced the university's net profit in subsequent years. To determine the exact variables influencing the margin fluctuations, it would be essential to analyze this pattern further.

Return on Equity (ROE)

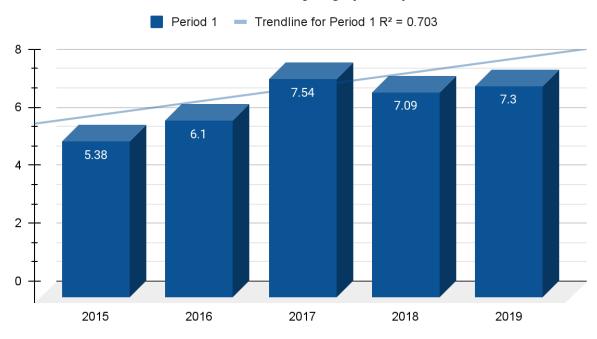


Figure 6: Yearly comparison of the return on equity (ROE) of BRAC University (2015 - 2019)

ROE is an important financial metric that measures a company or institution's ability to generate profits from its equity. It demonstrates how effectively equity capital is utilized to generate earnings. Beginning at 5.38 percent in 2015, Brac University's ROE rose steadily to its highest point of 7.54 percent in 2017. This means that the university generated a profit of BDT 7.54 per BDT 100 of equity in that year. While there is a minor decline to 7.09% in 2018, there is a slight increase to 7.3% in 2019. The trendline, with an R2 value of 0.703, indicates that the university's ROE grew relatively strongly and consistently over the examined time period. This positive trend indicates that Brac University has become increasingly effective at generating profits from its equity, which is an encouraging sign for stakeholders and potential investors. However, a deeper investigation into the causes of ROE fluctuations would provide a more complete picture of the institution's financial health and operational efficiency.

Return on Assets (ROA)

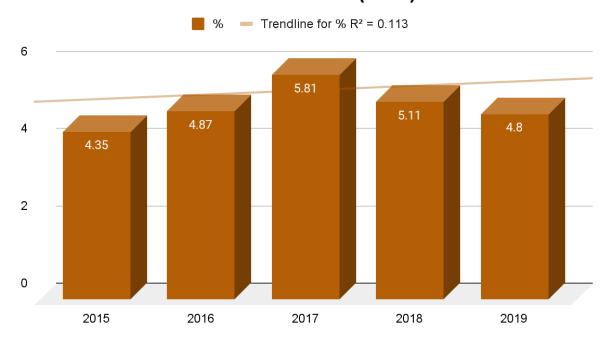


Figure 7: Yearly comparison of the return on assets (ROA) of BRAC University (2015 - 2019)

ROA is a key financial metric that evaluates an organization's ability to generate profit from its assets, signifying the effectiveness with which management utilizes the available assets to generate income. In 2015, the ROA was 4.35 percent, which indicates that for every BDT 100 in assets, the institution generated a profit of BDT 4.35. This number increased gradually over the next two years, reaching a peak of 5.81% in 2017. However, after 2017, there is a notable decline to 5.11% in 2018 and a modest contraction to 4.8% in 2019.

The R2 value of the accompanying trendline is 0.113, which is relatively low. This indicates that the data points (annual ROA values) do not align closely with the trendline, indicating that the trend of ROA over these years is less predictable and correlated. While the institution's capacity to generate profits from its assets increased significantly between 2015 and 2017, subsequent years witnessed a decline. The low R2 value emphasizes the need for caution when extrapolating future ROA trends from these data alone.

2.6 Operations Management and Information System Practices

2.6.1 Operations Management

Brac University places a premium on the efficient execution of its primary functions, which fall into two main categories: Academic and Administrative Operations.

The Office of the Registrar is in charge of Academic Operations and is responsible for the following:

- Evaluating course demand
- Coordinating efficient pre-advising sessions
- Assigning classrooms to respective courses and their sections
- Drafting semester-specific class and examination schedules
- Promptly announcing semester results

In contrast, the Operations Team is responsible for Administrative Operations, which includes tasks such as:

- Ensuring campus security
- Maintaining cleanliness and sanitation standards in university facilities
- Overseeing university transportation maintenance
- Assisting with off-campus event coordination
- Logging and maintaining university assets
- Providing assistance to other departments as needed

2.6.2 Shifts in Operations During the COVID-19 Pandemic

The COVID-19 pandemic required a change in operational strategy at Brac University. During the initial pandemic outbreaks, government-ordered lockdowns hindered regular campus academic activities. As a result, the university made the transition to online education utilizing platforms such as buX, Google Meet, Google Classrooms, and Zoom. The Office of the Registrar, in collaboration with Academic departments, ensured a seamless transition to online learning while students pursued their studies from home. In the meantime, the Operations Team continued to be accountable for campus and asset maintenance and security.

2.6.3 IT Systems at Brac University

The IT Department at Brac University maintains the institution's digital infrastructure by remaining at the forefront of technological developments. Currently, the university integrates a

variety of software and platforms to improve the educational experience and administer extensive records:

- USIS: This centralized software manages student and course records, facilitating academic advising, class schedule viewing, and course enrollment. It also serves as an administrative decision-making data source.
- TSR: Primarily a server for faculty, TSR permits the upload of educational materials but restricts access to on-campus users only.
- LMS (Learning Management System): An evolved variant of TSR, LMS enables students to retrieve study materials from off-campus.
- buX (Brac University X) is an innovative online education platform at Brac University. Notably, it is the first online learning platform conceived and implemented by a private Bangladeshi university. The intuitive design of the platform enables instructors to distribute recorded lectures and evaluations. While studying from home, students benefit from a flexible learning environment.
- G-Suite: In addition to managing communications and providing cloud storage, Brac University's G-Suite account provides seamless access to buX and important university updates for all enrolled students.

In addition, Brac University utilizes a suite of specialized software to ensure robust data security and mitigate cyber vulnerabilities.

2.7 Industry and Competitive Analysis

Along with a rise in living standards, Bangladesh's expanding economy has increased the demand for superior education. This trend is reflected by the proliferation of both public and private postsecondary institutions, making the landscape of higher education quite challenging.

We will employ Porter's Five Forces Model to analyse the competitiveness of Bangladesh's higher education sector. In addition, the position of Brac University within this environment will be analysed using a SWOT analysis.

Threat of New Entrants: Establishing a university in Bangladesh necessitates extensive administrative procedures. The rigorous regulatory framework, administered by the Ministry of Education and the UGC, makes the establishment of new universities a challenging endeavour. Therefore, from the perspective of Brac University, the potential for new competition is minimal.

Threat of Substitute: Threat of Substitution: Although Bangladesh has 103 private and over 45 public universities, only a few are regarded for their educational excellence. Given Brac

University's target audience and its prestigious reputation, there is a substantial danger of substitution.

Bargaining Power of Buyers: Consumer Negotiation Power: The majority of Brac University's service recipients are students and their parents. Due to the abundance of universities, all of which compete with appealing fee structures and scholarship programmes, these consumers wield considerable negotiating power.

Bargaining Power of Suppliers: Supplier Negotiation Leverage: For its services, Brac University relies on its faculty and administrative staff. With nearly two decades under its grasp, the institution enjoys a distinguished reputation that attracts academic luminaries from around the world. Still, the numerous educational institutions in the competition entice these individuals with enticing career opportunities. This places Brac University's supplier bargaining power at a level of equilibrium.

Rivalry among existing competitors: Competition Intensity: Brac University, one of Bangladesh's educational crown treasures, competes with the country's most prestigious universities. This confrontation is severe, defining the sector as extremely combative.

SWOT Analysis

To comprehend Brac University's position in the educational landscape and its possible future trajectory, we've conducted a SWOT analysis highlighting its strengths, weaknesses, opportunities, and threats.

Strengths

- BRAC University is affiliated with the BRAC brand, a symbol of reliability and excellence in Bangladesh.
- One of Brac University's formidable assets is the substantial financial acumen required to establish a university.
- Brac University is poised to become a beacon for prospective students with the construction of a cutting-edge campus and the provision of an enticing residential semester program.

Weaknesses

• Brac University's current campus is inadequate for its operational requirements, producing infrastructure issues.

Opportunities

• Since public universities have a limit on the number of students they can enrol, prominent private institutions such as BRAC University are able to fill the void for quality higher education.

• Sessions discourage students from enrolling in public universities.

Threats

- If public universities upgraded their amenities, shortened their academic sessions, and curbed student politics, they could become formidable competitors to private institutions such as BRAC University.
- Private University Reputation The subpar performance of some private universities has cast a dark cloud over the private university sector's reputation.

2.8 Summary and Conclusions

Essentially, Brac University has etched out a prominent niche in Bangladesh's higher education sector over the past two decades. They are currently expanding their scope by embracing internationalisation. Academic and administrative departments will collaborate to realise the objectives outlined by the Senior Management by 2024.

Brac University's rapid transition to online education during the pandemic exemplifies its adaptability to the ever-changing requirements of the modern world. Brac University is heading in the correct direction by emphasising student-centeredness, which is essential to a university's success. Their efforts target not only to improve Bangladesh's higher education landscape, but also to cultivate future global citizens.

2.9 Recommendations

As an intern in the Office of the Registrar at Brac University, I had the unique opportunity to work closely with some of the university's top administration and contribute to event coordination. The spectrum of responsibilities assigned to me enriched my comprehension of the institution and equipped me with skills that will be invaluable for my future endeavours.

It is evident from the conducted competitive analysis that data analytics still has latent potential. Given this context, I firmly advise Brac University to prioritise investments in the preservation and strategic utilisation of educational data. In addition to optimising operations, this will strengthen the university's competitive advantage in the higher education industry.

Last but not least, I am confident that Brac University, with its vast assets and adaptability, has the potential to rate among Asia's leading universities. In addition, it has the potential to herald in a significant revolution in the higher education landscape of Bangladesh.

Chapter 3: Project Part

3.1 Introduction

3.1.1 Background

Due to a variety of causes, including technological development, globalization, and changing student demographics, the higher education environment in Bangladesh is undergoing dramatic changes. BRAC University has been a leader in providing top-notch education in this changing landscape. However, maintaining competitiveness requires a thorough understanding of its position relative to other top academic institutions. Examining a wide range of factors is essential to navigating this complicated environment, including but not limited to student enrollment, faculty credentials, course offerings, and financial support for academic research.

3.1.2 Objectives

This internship report's major goal is to analyze BRAC University's competitive posture in comparison to other top private institutions in Bangladesh. The research plans to concentrate on several important topics to conduct a thorough analysis:

Examination of Key Metrics: In-depth analyses of student demographics, faculty credentials, the student-faculty ratio, and research expenditures from 2018 through 2021 are included in this.

Time-Series Analysis: Examining how these measures have changed over time intending to discover patterns rather than merely static comparisons is the goal here.

Academic Programs: to determine what distinctive or cutting-edge academic programs other institutions are providing that BRAC University does not already provide.

Actionable Recommendations: Finally, the research will provide specific, doable advice based on the results that will assist BRAC University in either preserving or enhancing its competitive advantage.

3.1.3 Scope and Limitations

In Bangladesh's private higher education market, the study focuses solely on BRAC University and its main competitors. The following universities have been listed as the main competitors for this report: North South University, Independent University, Bangladesh, American International University-Bangladesh, United International University, University of Liberal Arts Bangladesh, East West University, and Daffodil International University.

The limitations of this study must be acknowledged, though. The analysis makes extensive use of publicly accessible information from the UGC Annual Reports for the years 2018 through 2021. Therefore, any metrics or variables that are left out of these reports are not considered in our analysis. Furthermore, given how quickly educational technology and practices are changing, certain information or suggestions may become outdated rather quickly.

3.2 Methodology

The research strategy, data collection procedures, and statistical methodologies used in this study are described in the methodology section. The key goal is to uphold the research's credibility and integrity so that it can continue to be a reliable source of information for BRAC University's competitive positioning strategy.

To provide a comprehensive understanding of the competitiveness among higher education institutions in Bangladesh, this paper uses a mixed-methods research design that combines qualitative and quantitative techniques. The quantitative component focuses on a statistical examination of important performance measures, while the qualitative component analyzes the content of university promotional materials, academic curricula, and public pronouncements.

3.2.1 Data Gathering Techniques

Primary Data: The University Grants Commission (UGC) of Bangladesh's Annual Reports for the years 2018 to 2021 served as the primary source of secondary data for this study. Academic journals, periodicals, and publications are examples of secondary data.

Repositories online The individual institutions' websites and digital platforms are used to gather up-to-date information on their course offerings, faculty credentials, and student demographics.

obtainable databases To enlarge the findings, relevant online resources and published research articles are also searched.

3.2.2 Data Variables

Student demographics (such as total enrollment and departmental enrollment), faculty data (such as the number of Ph.D. holders and the difference between part-time and full-time employment), student-faculty ratios, research expenditures, and course offerings are all significant factors. For various analyses in the paper, these are regarded as both dependent and independent variables.

3.2.3 Statistical Analysis Methods

Statistically descriptive: In the beginning, descriptive statistics are used to give a broad overview of the data and provide information on the typical values, ranges, and distributions of the important metrics among colleges.

Comparative Analysis: To find weaknesses or strengths, specific indicators for BRAC University are contrasted with those of its rivals.

Time-Series Analysis: On yearly data from 2018 to 2021, a time-series analysis is carried out to comprehend the trends over time. This aids in spotting trends, seasonal variations, and possible new developments.

SWOT Analysis: SWOT analysis is used to evaluate the internal strengths, weaknesses, opportunities, and threats of BRAC University about its rivals.

Multivariate Analysis: When necessary, more sophisticated multivariate statistical approaches may be used to concurrently comprehend the relationships between several variables.

3.2.4 Ethical Considerations

The report has minor ethical data-gathering concerns because it uses data that is readily available to the public. However, the analysis strives to follow rigorous and honest academic norms.

3.3 Findings and Analysis

3.3.1 Student Profile Analysis

This Student Profile Analysis's goal is to offer a thorough, data-driven analysis of trends in student enrollment at the country's top universities from 2018 to 2021. The analysis aims to provide useful insights for university administrators, politicians, prospective students, and educational researchers by closely examining patterns in overall enrolment, intake by gender, and program-specific popularity. The study is intended to serve as a fundamental resource for ongoing academic research and to help educated decision-making regarding university admissions techniques, educational policy, and student university choices. The analysis attempts to provide a thorough and anticipatory view of the changing higher education environment in Bangladesh by utilizing a wide variety of data sources, including annual enrollment records, gender-specific datasets, and program-specific datasets.

Data Sources:

- **Enrollment Records:** The major data source for the analysis will be the annual enrollment records from each university.
- Gender-specific Enrollment Data: To present a more nuanced view of student demographic trends, separate datasets concentrating on male and female enrollment figures will be employed.
- **Program-specific Enrollment Data:** Information broken down by major or program will be studied to reveal preferences and trends in academic study among the student populations of the various universities.

3.3.2 Trend Analysis of Enrollment: Admitted Student Numbers

University Name	2018	2019	2020	2021
North South University	5,714	5,397	4,106	5,872
Brac University	3,664	3,144	3,549	4,716
Independent University, Bangladesh	2,360	2,314	2,698	2,406
American International University-Bangladesh	3,809	2,973	2,869	2,016
United International University	1,419	1,509	1,814	1,592

University of Liberal Arts Bangladesh	1,848	1,762	1,095	1,121
East West University	3,417	3,494	3,218	2,916
Daffodil International University	10,719	7,879	5,766	4,135

Figure 8: Table of enrollment: Admitted student number yearly (2018 to 2021)

Trend analysis of enrollment: Admitted student number per year

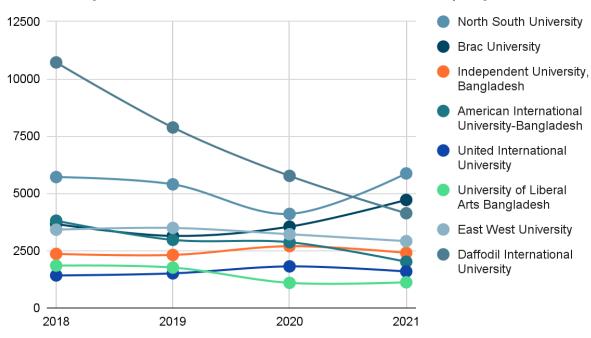


Figure 9: Trend analysis of enrollment: Admitted student number yearly (2018 to 2021)

Eight renowned Bangladeshi institutions' annual student enrollment is represented in a line chart for the four-year period from 2018 to 2021. The data captures variations that show both these institutions' resilience and vulnerability, particularly in the face of outside threats like the COVID-19 pandemic.

Key Findings

General observations:

- In 2020, enrollments at almost all universities decreased, most likely as a result of the COVID-19 pandemic.
- North South University and BRAC University experienced a considerable rebound in 2021

Most Resilient: Brac University's enrollment increased significantly in 2021, surpassing previous years.

Biggest Drop: Daffodil International University saw the largest drop in enrollment, decreasing from 10,719 in 2018 to only 4,135 in 2021.

Steady Performers: United International University and Independent University, Bangladesh both maintained enrollment figures that fluctuated only slightly.

Pandemic's Impact: American International University-Bangladesh experienced a substantial decline in enrollment in 2021, which was probably made worse by the virus.

Comparative Analysis

- North South University: Retains its top ranking despite occasional variations. The comeback in 2021 demonstrates strong adaptation.
- Brac University: Comes in second place behind North South University, especially after a solid performance in 2021.
- Daffodil International University: A more thorough inquiry is necessary given the downward trend over the past four years.

Implications and Future Outlook

The patterns indicate that while some universities, like North South University and Brac University, have successfully adjusted to obstacles, others, like Daffodil International University, have seen constant deterioration. Future planning for all institutions may require an understanding of the techniques used by resilient universities.

3.3.3 Gender-Specific Enrollment Trends

Trend analysis of enrollment: Admitted student number (Male)

University Name	2018	2019	2020	2021
North South University	3,433	3,130	2,783	3,242
Brac University	2,000	1,761	2,006	2,734
Independent University, Bangladesh	1,427	1,443	1,588	1,335
American International University-Bangladesh	2,916	2,229	2,496	1,544
United International University	981	1,129	1,366	1,189
University of Liberal Arts Bangladesh	979	907	609	550
East West University	1,918	1,882	1,730	1,577
Daffodil International University	8,073	5,620	4,172	2,639

Figure 10: Table of enrollment: Admitted student number of Male yearly (2018 to 2021)

Trend analysis of enrollment: Admitted student number (Female)

University Name	2018	2019	2020	2021
North South University	2,281	2,267	1,323	2,630
Brac University	1,664	1,383	1,543	1,982
Independent University, Bangladesh	933	871	1,110	1,071
American International University-Bangladesh	893	744	373	472
United International University	438	380	448	403

University of Liberal Arts Bangladesh	869	855	487	561
East West University	1,499	1,611	1,488	1,339
Daffodil International University	2,646	2,259	1,604	1,496

Figure 11: Table of enrollment: Admitted student number of female yearly (2018 to 2021)

In Bangladesh's top institutions, there has been a discernible shift in the number of male and female students enrolled between 2018 and 2021.

Yearly admitted student number (Male)

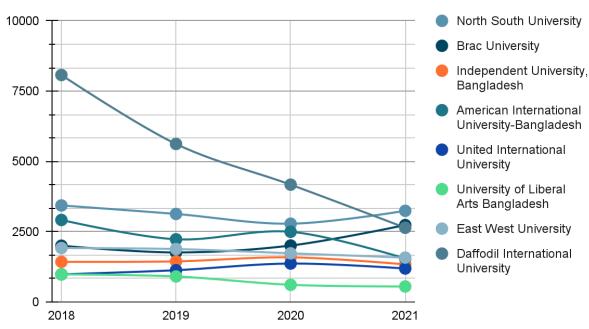


Figure 12: Trend analysis of male enrollments: Admitted student number yearly (2018 to 2021)

3.3.4 Male Student Enrollments (2018 - 2021)

- 1. From 2010 to 2020, male enrolment at North South University (NSU) fell, but it rose in 2021.
- 2. The number of male students at Daffodil International University has significantly decreased over time, practically half between 2018 and 2021.

• 3. The trends at Brac University and United International University are steady, with 2021 being the year where the small increases stand out the most.

Yearly admitted student number (Female)

3000 North South University Brac University Independent University, Bangladesh American International 2000 University-Bangladesh United International University University of Liberal Arts Bangladesh 1000 East West University Daffodil International University 0 2019 2020 2018 2021

Figure 12: Trend analysis of female enrollments: Admitted student number yearly (2018 to 2021)

3.3.5 Female Student Enrollment

- The number of female students at NSU fell precipitously in 2020, while the number increased in 2021.
- Female enrollment at American International University-Bangladesh (AIUB) has been steadily declining, reaching its lowest point in 2021.
- Daffodil International University experienced a similar downward trend from 2018 to 2021 as its male counterpart.

Comparison and Trends

- While NSU was able to increase its student enrollment in both categories in 2021, AIUB and Daffodil International are still having trouble doing the same.
- With very modest changes, universities like Brac and Independent University, Bangladesh, demonstrate stability in enrollment.

The gender-specific enrolment trends from 2018 to 2021 at Bangladesh's top institutions show a variety of trends. Others have seen considerable decreases, while some colleges have been able to either retain or increase their student enrollments. Such information might make institutions rethink their admission policies, prioritize gender inclusion, or even broaden the courses they offer to appeal to a wider range of prospective students.

3.3.6 Department-Specific Enrollment Trends (BBA and CSE/EEE)

For the department-specific enrollment trends, bar graphs would be useful for a year-over-year comparison within each university. A stacked bar graph could provide an overview of how many students enrolled in BBA versus CSE & EEE courses in the same year for each institution. Alternatively, an area chart could capture the changing trends over time, giving a sense of the volume and shift in interest toward specific departments.

Department-Specific Enrollment Trends (BBA) North South University 10.199 Brac University 4,326 4,929 Independent University, 2,945 Bangladesh 10,215 2.510 2.3.586 2.3.586 American International University-Bangladesh 5,517 2,840 United International University 11,459 1,752 1,996 4,282 University of Liberal 5,418 2,241 Arts Bangladesh East West University 10,133 4,468 1,33,20 Daffodil International 5,343 University 2,170 2,500 5,000 7,500 10,000 12,500

Figure 13: Trend analysis of Department-Specific Enrollment Trends BBA yearly (2018 to 2021)

Observations

- Leaders in Enrollment: Most students are enrolled at North South University, with a peak of 11,459 in 2020. In 2019, East West University surpassed the 5,000-student threshold, maintaining its strong level of enrollment.
- oscillations in Enrollment: BRAC University saw substantial oscillations, with enrollment dropping to 1,752 in 2020 before rising to 2,734 in 2021. This may be a sign of a number of things, like curricular adjustments, tuition increases, or other outside events, that have an impact on enrollment.
- Independent University, Bangladesh, exhibits steady growth, particularly after recovering from a decline in 2019 to greater numbers in 2020 and 2021.
- Declining Trend: Over the years, it appears that enrollments at universities like American International University-Bangladesh, United International University, and Daffodil International University have been declining.
- Mid-Level Stability: The University of Liberal Arts Bangladesh maintains largely consistent numbers, averaging little about 2,000 students.
- High Volatility: The enrollment figures at some universities, notably BRAC University and United International University, fluctuate significantly from year to year, which may call for additional inquiry.
- Comparative Size: In terms of enrollment, BRAC University is in the middle of the pack, neither the biggest nor the smallest. Because of this, it is positioned as a significant but not a dominant competitor, leaving the potential for development or the need for distinctiveness.
- Lowest Enrollment: Of all the universities on the list, Daffodil International University had the lowest enrollment in 2021 with 2,170 students. This may be a sign that the institution is encountering difficulties.

Department-Specific Enrollment Trends (CSE & EEE)

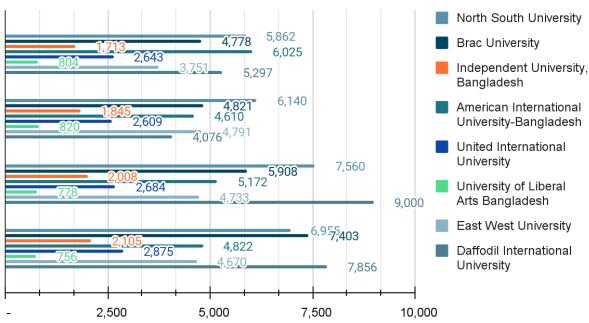


Figure 14: Trend analysis of Department-Specific Enrollment Trends CSE & EEE yearly (2018 to 2021)

Observations

- A notable increase has been seen at BRAC University, which went from 4,778 students in 2018 to 7,403 in 2021. Although it had a minor decline in 2021 compared to 2020, North South University nevertheless retains a significant presence.
- Unexpected Growth: Daffodil International University had a startling growth in 2020, going from a lower 4,076 in 2019 to 9,000. But in 2021, this started to slow down a little and fell to 7,856.
- Although it made a slight rebound in 2020, American International
 University-Bangladesh has been on a steadily decreasing slope since it had a bright start
 in 2018.
- continuous Growth: Over the years, United International University and Independent University, Bangladesh, have both seen continuous, albeit small, growth. This might signify that enrolment and other influencing factors are at a stable equilibrium.
- Steady but Flat: Since 2019, East West University's enrollment has remained in the mid-4,000 range, with little sign of growth or fall.
- The smallest participant is the University of Liberal Arts Bangladesh, which continuously enrolls the fewest students among these institutions—below 1,000 in every year.

- Recovery and rise: Following a small decline in 2019, BRAC University exhibits the largest rise in the data set, increasing from 4,821 in 2019 to 7,403 in 2021. This high gain suggests that the university is very popular or that its programs have improved.
- Universities with significant levels of volatility in their data, such as Daffodil International University and American International University-Bangladesh, may be sensitive to outside factors, changes in policy, or market dynamics.
- Relative Strength: BRAC University performs remarkably well in the CSE and EEE sectors compared to the BBA enrollment, indicating a potential area of emphasis or focus for the institution.

3.3.7 Total number of students (2018 - 2021)

University Name	2018	2019	2020	2021
North South University	20,197	20,596	24,689	22,106
Brac University	9,498	10,566	12,216	13,548
Independent University, Bangladesh	7,348	7,549	8,142	8,704
American International University-Bangladesh	10,027	10,432	10,738	9,616
United International University	5,565	4,943	4,632	4,777
University of Liberal Arts Bangladesh	4,750	4,869	4,201	4,243
East West University	12,438	12,472	12,291	12,191
Daffodil International University	21,752	20,038	19,675	17,105

Figure 15: Table of total number of students (2018 to 2021)

The total number of students enrolled is a crucial indicator for assessing an institution's development, reputation, and general health in the quickly changing higher education scene. This line graph displays a four-year trend (2018–2021) of Bangladesh's eight most prestigious universities' student enrollment. This graphic provides a thorough overview of how these educational institutions are doing in terms of drawing in and keeping students, with universities ranging from North South University and BRAC University to Daffodil International University.

Understanding these patterns is crucial for all stakeholders, including university administrators, prospective students, and educational officials. Each trajectory presents a different story, whether it be one of strong development, steady upkeep, or an urgent need for attention and intervention. This graph will serve as the starting point for assessing what these trends signify for the future of higher education in Bangladesh as we delve into the details of the data.

The chart aims to provide a transparent, data-driven perspective on trends that may influence future strategic planning, financial decisions, and marketing initiatives for these organizations.

Number of total students (2018 - 2021)

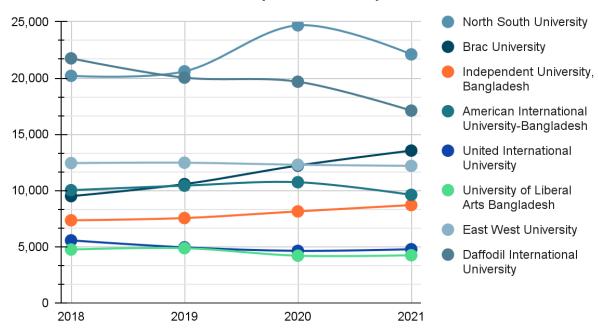


Figure 16: Trend analysis of number of total students yearly (2018 to 2021)

Kev Findings

- Peaks and Troughs: In 2020, North South University reached a notable apex, but in 2021, there was a modest decline. Despite this, it continues to have the highest overall enrollment.
- Growth Trend: The number of students at BRAC University increased steadily from 9,498 in 2018 to 13,548 in 2021, demonstrating the institution's expanding importance and popularity.
- Consistency: Over the course of four years, Independent University, Bangladesh has displayed a trend of gradual, consistent growth, indicating stable demand and perhaps efficient enrollment techniques.
- A slight decline was seen in American International University-Bangladesh after its high in 2020. However, compared to where it began in 2018, its numbers are still quite high.
- United International University exhibits a worrying trend, with enrollment declining yearly. In this dataset, it is the only university to exhibit a steady fall over all four years.
- Holding Steady: East West University stays largely the same for the term, neither gaining nor losing many students considerably, indicating a solid competitive position.
- Significant reduction: After a good start, Daffodil International University has had a significant reduction each year, going from 21,752 students in 2018 to 17,105 in 2021. The dataset's most notable reduction is this one.

- Minor Changes: The University of Liberal Arts Bangladesh exhibits some fluctuation, although it generally ranges between 4,000 and 5,000, indicating reasonably consistent demand but space for expansion.
- Polarization: There appears to be a growing divide between expanding colleges like North-South and BRAC and declining institutions like United International and Daffodil. This can be a sign of the polarization of student preferences or of different university capacities.
- Market Leaders: In a typically competitive environment, North South University and BRAC University seem to be the major market players, with growing tendencies. Their tactics could be used as standards by other academic institutions.

3.3.8 Faculty Profile Analysis

The quality of instruction and the student experience in a school are greatly influenced by the qualifications and makeup of the teachers. To shed light on the academic credentials, employment position, and demographic diversity of the teaching staff at BRAC University, the Faculty Profile Analysis sets out to look into the many factors that shape them. The total number of faculty members, the breakdown of full-time and part-time instructors, and the gender diversity of the academic staff will all be covered in this analysis. We will also evaluate the proportion of professors who hold doctoral degrees, which is a critical sign of the caliber of the academic program. This section will look at these indicators to provide comparisons with other private institutions in Bangladesh and industry standards, as well as insights into how well the faculty can meet the student's educational needs.

The total number of teaching staff engaged at all private universities in Bangladesh, including BRAC University and its rivals, will be calculated in this section. This fundamental indicator can help us understand how well each school can provide high-quality education. This information will also help BRAC University benchmark its performance and develop its competitive strategy.

University Name	2018	2019	2020	2021
North South University	971	885	632	616
Brac University	722	722	726	925
Independent University, Bangladesh	482	486	524	467
American International University-Bangladesh	378	394	404	455
United International University	279	254	216	234
University of Liberal Arts Bangladesh	309	342	314	328
East West University	401	418	415	441
Daffodil International University	859	887	692	692

Figure 17: Table of total number of faculty (2018 to 2021)

Number of Faculty (2018 - 2021)

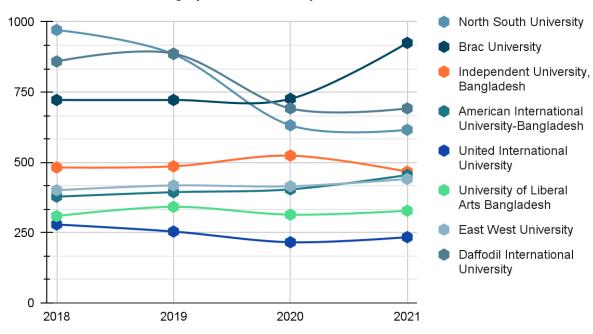


Figure 18: Trend analysis of number of total faculty yearly (2018 to 2021)

Key Findings

- Staff Variations: For the majority of universities, the data shows significant variations in the number of faculty members over time. For instance, North South University experienced a sharp reduction, going from 971 faculty members in 2018 to 616 in 2021.
- Contrary to the typical trend, BRAC University had a steady increase in the number of academic members, reaching a peak of 925 in 2021 from 722 in 2018. This would suggest an emphasis on the caliber of instruction and the distribution of resources.
- Stability at certain Institutions: For four years, Independent University, Bangladesh, and East-West University both maintained a largely constant faculty population, pointing to the need for a more consistent staffing plan.
- Sharp North South University experienced the biggest decline in faculty members, losing more than 35% of its personnel between 2018 and 2021. The academic output and standard of the university might be affected by this.
- United International University's Recession: UIU likewise had a fall, going from 279 in 2018 to 234 in 2021, which might be a sign of budget cuts or a change in business priorities.
- Female Faculty: Although there is no information about the gender of the faculty, this could add another perspective for more complex findings, especially in light of the increased focus on diversity in academia.
- Outlier Performance by Daffodil International University: Despite being comparatively less well-known, the university maintained a consistently high number of faculty members, even topping North South University in 2020 and 2021.

- Positive Trend at AIUB: American International University-Bangladesh's faculty numbers have steadily increased, which may indicate the expansion of their academic offerings or a deliberate emphasis on faculty development.
- ULAB's Modest Growth: The University of Liberal Arts Bangladesh has a modest but steady growth, which may be a sign of a moderate but steady growth approach.
- This information provides a wealth of information for examining the competitive environment for teacher resources among private universities in Bangladesh. It can be a crucial part of the strategic planning process for BRAC University or any other institution trying to figure out where they stand in the higher education market.

3.3.9 Faculty Members Working Full-Time

We will highlight the importance of full-time faculty members in this subsection and discuss how they shape the academic environment. Teachers who work full-time frequently devote more time to curriculum development and student mentorship, directly affecting educational quality.

University Name	2018	2019	2020	2021
North South University	618	523	506	504
Brac University	538	504	481	590
Independent University, Bangladesh	204	210	218	223
American International University-Bangladesh	338	348	347	425
United International University	209	201	198	209
University of Liberal Arts Bangladesh	197	229	221	219
East West University	269	300	299	298
Daffodil International University	746	744	657	654

Figure 19: Table of total number of faculty working full-time (2018 to 2021)

Faculty profile: Full time (2018 - 2021)

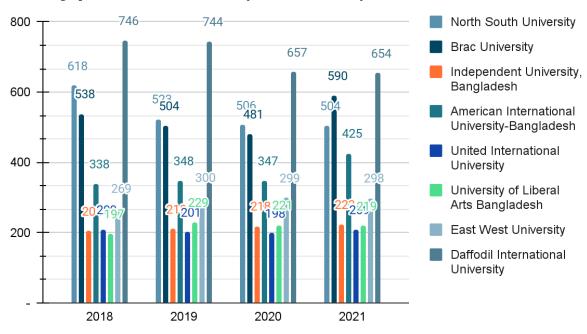


Figure 20: Trend analysis of number of total faculty working full-time yearly (2018 to 2021)

Kev Findings

- General Decline at NSU: From 618 in 2018 to 504 in 2021, North South University saw a gradual
 decrease in the number of full-time faculty members. This can lead to concerns about teacher
 retention or a change in strategic priorities.
- BRAC University Experiences Significant Upswing: In 2021, BRAC University experienced a significant upswing, going from 481 to 590 full-time faculty members. This might suggest a commitment to high-quality education and an investment in educational resources.
- Stable Numbers for IUB: Over the course of four years, Independent University, Bangladesh
 maintained a modest but steady increase in the number of full-time faculty, indicating a stable
 labor market.
- Positive Growth at AIUB: Between 2020 and 2021, there was a particularly noticeable increase at American International University-Bangladesh. This might point to a planned growth of their academic offerings.
- United International University's steady state showed little variation and stayed close to the 200 level. This might point to a consistent but constrained hiring approach.
- ULAB's Variability: In 2019, the University of Liberal Arts Bangladesh saw a significant increase, which was followed by a slightly gradual decline. This can indicate a brief hiring drive that fizzled out.
- Stable and not Growing EWU: East West University kept its full-time faculty at a steady level, with only modest increases from 269 in 2018 to 298 in 2021.

- Daffodil International University saw a sharp decline, falling from 746 students in 2018 to 654 in 2021. Although there are still a lot of academic members, the institution may be concerned about the falling tendency.
- Overall Sector Trends: Overall, the data point to different hiring and retaining practices for full-time professors, which may be a reflection of each university's priorities, financial situation, and strategic goals.

3.3.10 Faculty Members Working Part-Time

Part-time professors frequently bring a range of practical experience to the classroom. The number of part-time faculty members will be listed in this section along with their impact on the educational paradigm at BRAC University.

University Name	2018	2019	2020	2021
North South University	618	523	506	504
Brac University	538	504	481	590
Independent University, Bangladesh	204	210	218	223
American International University-Bangladesh	338	348	347	425
United International University	209	201	198	209
University of Liberal Arts Bangladesh	197	229	221	219
East West University	269	300	299	298
Daffodil International University	746	744	657	654

Figure 21: Table of total number of faculty working part-time (2018 to 2021)

Faculty profile: Part time (2018 - 2021)

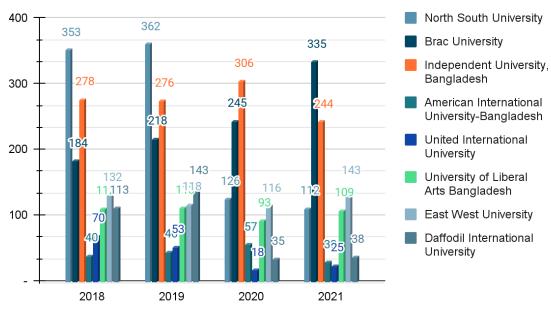


Figure 22: Trend analysis of number of total faculty working part-time yearly (2018 to 2021)

Key Findings

- Drastic Decline at NSU: From 353 in 2018 to 112 in 2021, North South University had a sharp
 decline in the number of part-time faculty members. This signals a significant shift in staffing
 tactics, possibly putting more of an emphasis on full-time faculty or lowering total personnel
 levels.
- Rising Trend at BRAC University: Part-time professor numbers at BRAC University increased steadily, notably rising from 245 in 2020 to 335 in 2021. This can be a sign of increased academic offerings or a deliberate decision to use part-time faculty to provide greater flexibility.
- Decline at IUB: After reaching a peak in 2020, part-time professors at Independent University, Bangladesh, suffered a decline in 2021. This could be due to cost-cutting initiatives or restructuring.
- American International University-Bangladesh experienced modest changes but also experienced a significant decline from 57 in 2020 to 30 in 2021. This could be a sign of a trend toward more full-time teachers or a decrease in the number of course options.
- The Minimal Part-time Staff at UIU: United International University has a very small percentage of part-time faculty, with that number falling from 70 in 2018 to just 25 in 2021, showing a shift away from the use of part-time teachers.
- Stability at ULAB: Despite a decline in enrollment in 2020, the University of Liberal Arts Bangladesh has maintained numbers that are largely stable, indicating a sustained utilization of part-time faculty.
- Recent Growth at EWU: East West University saw growth from 116 students in 2020 to 143 students in 2021, indicating a potential expansion or greater demand for specialized courses.
- Daffodil International University's Part-Time Faculty Experienced a Significant Drop from 143 in 2019 to 35 in 2020, Then, a Slight Increase in 2021. This can indicate a restructuring or a shift in academic approach.
- Industry-Level Variability In general, colleges employ a variety of part-time faculty, indicating a variety of philosophies regarding the proper ratio of full-time and part-time staff for academic and budgetary flexibility.
- The patterns in the appointment of part-time academics could reveal information about how adaptable, financially sound, and educationally focused each university is. This information is crucial for comprehending the bigger picture of part-time work in the private university industry in Bangladesh.

3.3.11 Male and Female Faculty Members

The academic experience for students can be improved by gender diversity in the teaching staff. The gender distribution of the faculty will be examined in this section, providing a general overview of the institution's diversity.

Male Faculty Members

University Name	2018	2019	2020	2021
North South University	676	610	421	409
Brac University	452	462	481	588
Independent University, Bangladesh	315	339	355	321
American International University-Bangladesh	263	268	284	308
United International University	194	172	148	165
University of Liberal Arts Bangladesh	213	229	212	218
East West University	270	280	289	307
Daffodil International University	604	604	464	464

Figure 23: Table of total number of male faculty (2018 to 2021)

Highlights

- Sharp Decline at NSU: Staff reductions or changes in strategy may be to blame for the sharp decline of male faculty at North South University from 676 in 2018 to 409 in 2021.
- Contrarily, BRAC University witnessed a rise, reaching a peak of 588 male faculty members in 2021, indicating growth or deliberate staff augmentation.
- IUB: Independent University, Bangladesh saw a surge initially then a reduction to 321 in 2021, possibly indicating a restructure or change in strategy.
- AIUB's Consistent Rise: From 263 in 2018 to 308 in 2021, American International University-Bangladesh showed a consistent rise in the number of male faculty members.
- Sector-Wide Diversity: Universities show various patterns in the proportion of men among their faculty, which reflects different strategic philosophies or reactions to outside forces like the economy or pandemics.

Female Faculty Members

University Name	2018	2019	2020	2021
North South University	295	275	211	207
Brac University	270	260	295	337
Independent University, Bangladesh	167	147	169	146
American International University-Bangladesh	115	126	120	147
United International University	85	82	68	69
University of Liberal Arts Bangladesh	96	113	102	110
East West University	131	138	126	134
Daffodil International University	255	271	225	225

Figure 24: Table of total number of female faculty (2018 to 2021)

Highlights

- NSU's Falling Faculty: NSU also experienced a drop in female faculty, from 295 in 2018 to 207 in 2021, similar to the decline in male faculty.
- The steady growth of BRAC University: From 270 female faculty members in 2018 to 337 in 2021, BRAC University has consistently increased the number of female faculty members, indicating a balanced staffing plan.
- IUB fluctuated: Independent University, Bangladesh revealed a decline in the number of female teachers, noticeably lowering to 146 in 2021 following minor volatility in prior years.
- The Slight Change at UIU: At United International University, the proportion of female faculty members fluctuated somewhat but essentially stayed at the same level as in the late 1960s and early 1980s.
- Rise at EWU and AIUB: The proportion of female faculty at East West University and American International University-Bangladesh both showed a small but steady rise.
- Daffodil International University has maintained steady numbers of male and female faculty members, presumably indicating that staffing policies have not changed significantly.

Gender Dynamics

- Gender Imbalance: Male faculty members exceed female faculty members at all universities, demonstrating a gender imbalance in these institutions' academic communities.
- Growth trends for both male and female academic members are notable at BRAC University, which may be a sign of a fair and inclusive hiring policy.

The data provide a comprehensive view of the gender dynamics and staffing tactics in Bangladesh's private academic sector and indicate diverse trends and methods among universities.

3.3.12 Number of Faculty with PhD

Academic credentials are important determinants of academic competency. This section will provide the proportion of faculty members who have doctorates, giving an indication of the level of academic rigor upheld by BRAC University.

University Name	2018	2019	2020	2021
North South University	418	414	277	274
Brac University	196	207	166	209
Independent University, Bangladesh	173	190	212	194
American International University-Bangladesh	86	85	111	121
United International University	47	47	54	56
University of Liberal Arts Bangladesh	74	89	89	94
East West University	152	152	157	178
Daffodil International University	65	125	74	74

Figure 25: Table of total number of faculty with PhD (2018 to 2021)

Number of Faculty with PhD

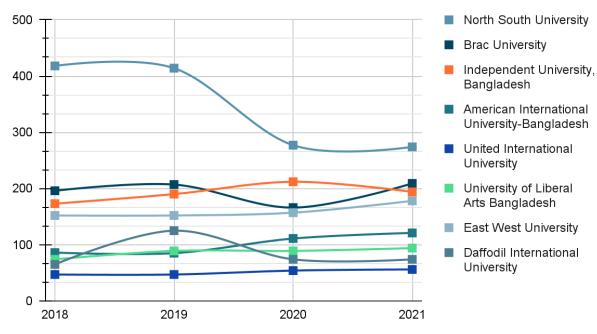


Figure 26: Trend analysis of number of faculty with PhD (2018 to 2021)

3.3.13 Faculty and Student Ratio Analysis

The 'Faculty and Student Ratio Analysis' section examines the distribution of faculty members and students at several private universities that we rank as competitors. This ratio is an important gauge of the caliber of education that a given institution can offer. A smaller faculty-to-student ratio frequently denotes greater individualized attention and resource allocation per student, both of which contribute to a better learning environment. On the other hand, a larger ratio can signify overcrowding or understaffing, which might compromise the learning environment. We will examine the faculty-to-student ratios for the years 2018 through 2021 in this analysis, evaluating trends and drawing conclusions that could help educational institutions make strategic decisions.

University Name	2018	2019	2020	2021
North South University	1:21	1:23	1:39	1:36
Brac University	1:13	1:15	1:15	1:15
Independent University, Bangladesh	1:15	1:16	1:16	1:19
American International University-Bangladesh	1:24	1:26	1:26	1:21
United International University	1:20	1:19	1:21	1:20
University of Liberal Arts Bangladesh	1:15	1:14	1:13	1:13
East West University	1:31	1:30	1:29	1:27
Daffodil International University	1:23	1:26	1:32	1:28

Figure 27: Table of Faculty and Student Ratio (2018 to 2021)

Key Findings: Analysis of the faculty to student ratio

- Brac University and the University of Liberal Arts Bangladesh have regularly kept their faculty-to-student ratios below the national average of 1:15 and 1:13, respectively, indicating a steady and focused academic atmosphere.
- Widening Gap at NSU: North South University's ratio has declined from 1:21 in 2018 to 1:36 in 2021, showing that either teacher numbers are declining or student enrollment is increasing more quickly than faculty size.
- Changes at AIUB: American International University-Bangladesh has improved, going from 1:21 in 2021 to 1:26 in 2019, possibly indicating a decline in student admissions or an investment in teachers.
- Stable but High at EWU: While East-West University maintains its existing faculty size well, there is space for improvement, the university has a high but largely stable ratio that hovers around 1:30.

- The ratio at the Independent University of Bangladesh (IUB) fluctuated from 1:15 in 2018 to 1:19 in 2021, which may have been caused by rising enrollments without a corresponding growth in teacher hires.
- The ratio at Daffodil International University increased from 1:23 in 2018 to 1:28 in 2021, demonstrating an unbalanced increase in the number of students relative to teachers.
- UIU's Consistency: Over the years, United International University has maintained a ratio of roughly 1:20, showing a balanced increase or stability in both student enrollment and faculty hiring.
- general patterns For individuals seeking a more individualized and concentrated educational experience, the faculty-to-student ratio at most colleges has generally demonstrated to be either steady or declining.

This analysis provides a compelling look at the interactions between the faculty and students at these institutions of higher learning, highlighting both areas for development and those who succeed at fostering a balanced learning environment.

3.4 Summary and Conclusions

With an emphasis on three crucial factors—student profile, faculty profile, and faculty-to-student ratio—we conducted a thorough research of numerous private colleges for our internship report. Each element provides information about the operational effectiveness, educational standards, and overall educational environment of the universities.

3.4.1 Student Profile

Our analysis of the student profile revealed various patterns in student enrollment at the universities. For instance, whilst NSU experienced a modest decline in enrollment in 2021, Brac University and North South University both witnessed an overall growth in enrollment over time. Daffodil International University and American International University-Bangladesh, on the other hand, displayed some oscillations, indicating an erratic pattern of student growth. These developments may have a big impact on how these organizations allocate their resources and plan for the future.

3.4.2 Faculty Profile

Some worrying tendencies in professor staffing were revealed by the analysis of the professor Profile. For instance, North South University experienced a sharp fall in the number of faculty members, which harmed the professor-to-student ratio. Brac University defied this trend by significantly increasing the number of its academic members in 2021, particularly in the Ph.D.

and part-time divisions. These results imply that strategic hiring and employee retention are crucial areas that require attention.

3.4.3 Student-to-Faculty Ratio

A crucial gauge of educational excellence has emerged: the faculty-to-student ratio. While schools like Brac University and the University of Liberal Arts Bangladesh have been able to keep their ratios in a positive range, others, like North South University and Daffodil International University, have had worsening ratios. As they directly affect educational quality and student satisfaction, these trends are crucial to keep an eye on.

3.4.4 Conclusions

As a result, stakeholders in the education sector will benefit from this analysis. While certain colleges are doing very well in specific areas, there is still space for growth. A balanced approach to student enrollment and professor employment is required in light of the declining faculty-to-student ratios in several colleges. Meanwhile, colleges that have been able to keep their faculty-to-student ratios unchanged or increasing can learn a lot from them about preserving high standards in education. This study acts as a benchmark for follow-up research and a manual for institutional strategies targeted at fostering academic achievement.

Decision-makers can develop more focused strategies to improve their institutions by combining these insights, whether it is through calibrated enrollment projections, targeted faculty hiring, or strategic resource allocation.

3.5 Recommendations / Implications

Our examination of key performance metrics across a range of rival universities from the perspective of BRAC University offers vital insights into areas where tactical adjustments can give a competitive edge. Our recommendations are listed below:

- Strengthening Faculty Core: The majority of our faculty has remained consistent or even grown over the past year. We can differentiate ourselves from rivals like North South University, which has suffered a fall in faculty numbers, by leveraging this strength to draw top-tier faculty.
- Preserving an advantageous faculty-to-student ratio: Among its competitors, BRAC
 University has one of the best faculty-to-student ratios. For prospective students worried
 about receiving individualized attention and receiving a high-quality education, this
 might become a powerful selling factor.

- Leverage Gender Diversity as a Selling Point: We could sell this feature to a wider student base because our faculty is largely female, in contrast to competitors like East-West University where male staff predominates.
- Opportunistic Hiring of Part-Time Faculty: A drop in part-time professors at some universities, such as North South University, may have left qualified individuals hunting for opportunities. These people may strengthen our faculty without requiring lengthy commitments if they were strategically hired.
- Capitalize on Stable Enrollment Rates: There is a chance to use the constancy of our student enrolment as a selling feature, especially when compared to rivals that have seen enrollment changes.
- Build on Faculty Qualifications: With a high percentage of faculty members holding doctoral degrees, this fact should be emphasized in marketing campaigns to emphasize the caliber of education and draw comparisons to universities with lesser percentages of doctoral-qualified professors.
- Resource Redeployment: To entice prospective students away from competitors who offer less desirable amenities or educational benefits, think about reallocating funds from less important areas to support aggressive marketing efforts or new student facilities.

These suggestions are intended to elevate BRAC University to the top of the field of private universities, where it currently competes. If we were to succeed in these areas, it would not only set us apart from our rivals but also establish new standards for educational excellence and student satisfaction. By strategically allocating resources in these areas, we may significantly strengthen our competitive advantage and win over faculty and potential students.

References

- [1] H. Fei, Q. Li and D. Sun, "A Survey of Recent Research on Optimization Models and Algorithms for Operations Management from the Process View," *Hindawi*, 2017.
- [2] P. M. Kumari, S. A. Nabi and P. Priyanka, "Educational Data Mining and its role in Educational Field," *International Journal of Computer Science and Information Technologies (IJCSIT)*, 2014.
- [3] A. Algarni, "Data Mining in Education," *International Journal of Advanced Computer Science and Applications (IJACSA)*, pp. 456-461, 2016.
- [4] D. O'Connell, J. Raison, S. Hatfield-Dodds, A. Braid, A. Cowie, A. Littleboy, T. Wiedmann and M. Clark, "Designing for Action: Principles of Effective Sustainability Measurement," World Economic Forum, 2013.
- [5] V. Dahiya, "A Survey on Educational Data Mining," *IMPACT: International Journal of Research in Humanities, Arts and Literature (IMPACT: IJRHAL)*, pp. 23-29, 2018.
- [6] F. Alshareef, H. Alhakami, T. Alsubait and A. Baz, "Educational Data Mining Applications and Techniques," *International Journal of Advanced Computer Science and Applications (IJACSA)*, pp. 729-734, 2020.
- [7] "Leavitt's Diamond: Understanding the Factors Involved in Change," [Online]. Available:

 $https://www.accipio.com/eleadership/mod/wiki/view.php?id=1837\#:\sim:text=Harold\%20Leavitt\%20developed\%20Leavitt's\%20Diamond,\%2C\%20people\%2C\%20structure\%20and\%20technology..$

- [8] "BracU Employment Policy," [Online]. Available: https://www.bracu.ac.bd/about/bracu-employment-policy.
 [9] J. Ivy, "A new higher education marketing mix: the 7Ps for MBA marketing," *International Journal of Educational Management*, pp. 288-299, 2008.
- [10] Rumel, "SWOT analysis of BRAC University," February 2007. [Online]. Available: https://www.writework.com/essay/swot-analysis-brac-university.
- [11] "Brac University Annual Report 2019," Brac University, 2019.
- [12] UGC Annual Report 2018.
- [13] UGC Annual Report 2019.
- [14] UGC Annual Report 2020.
- [15] UGC Annual Report 2021
- [16] "Saad, Mohammad Alif Hossain: Importance of educational data mining for optimized operations in Brac University," [Online]. Available: http://hdl.handle.net/10361/15192

Appendix A.

Financial data extracted from Brac University's Annual Report for the calculation of Financial Ratios.

Particulars (BDT)	2015	2016	2017	2018	2019
Current Assets	1,885,604,875	2,060,166,635	1,498,733,655	2,798,453,140	2,755,059,854
Current Liabilities	750,375,578	826,949,272	1,088,616,096	1,640,018,136	1,948,871,077
Non-Current Assets	3,546,166,920	3,925,693,239	5,431,461,315	5,868,283,173	7,727,118,745
Total Assets	5,431,771,795	5,985,859,874	6,930,194,970	8,666,736,313	10,482,178,599
Total Debts	293,562,919	378,741,558	507,272,139	781,860,129	1,642,988,652
Total Equity	4,387,833,299	4,780,169,044	5,334,306,736	6,244,858,048	6,890,318,870
Total Revenue	1,238,872,817	1,330,797,860	1,550,534,473	1,811,703,357	2,102,182,967
EBIT	171,361,038	225,483,051	391,062,436	437,051,184	473,538,629
Net Profit	236,103,870	291,801,277	402,468,022	442,792,575	502,858,305

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