Analysing the financial viability of a private higher education institution

J Kotze

orcid.org 0000-0002-3762-2992

Mini-dissertation accepted in partial fulfilment of the requirements for the degree *Master in Business Administration* at the North-West University

Supervisor: Prof AM Smit

Graduation: June 2021

Student number: 22909427

i. Abstract

This study analysed the financial viability of a private higher education institution (PHEI). It focused on a specific private higher education institution, emphasising operational cost, gross and net profits, and financial ratios. It assessed the current financial status of the private higher institution market. Further analyses were conducted of the current pricing structure of the private institution, Academic Institute of Excellence (AIE), and how the institution compared with other private higher institutions.

The case study research design was established on an in-depth review of a specific group or event – in this case, AIE. Combined with a literature review, the investigation created a strong image of the financial viability of a private higher education institution.

The study found that AIE is a financially viable private higher education institution; they made a positive net profit and four out of the six faculties also generated a profit. Annual enrolment numbers across all faculties increased significantly. Regarding the comparative pricing study with other private higher institutions in the same region as AIE, the study showed that AIE is well priced regarding their competitors with similar qualifications.

Keywords: Academic Institute of Excellence, financial ratios, financial viability, higher education, net profit, private higher education institutions, private higher education

ii. Abbreviations and definitions

AIE: Academic Institute of Excellence

Cost is an expenditure necessary to produce or sell merchandise or get an asset ready for regular use.

CHE: Council of Higher Education

DHET: Department of Higher Education and Training

Financial viability is the capacity to produce sufficient income to meet operational payments, debt payment and, where relevant, to allow for growth while continuing service levels.

Gross profit is the profit a company makes after subtracting the costs linked with making and selling its goods or the costs associated with providing its services.

HE: Higher education

HEIs: Higher education institutions

PHE: Private higher education

PHEIs: Private higher education institutions

Liquidity ratios measure an organisation's ability to pay off its short-term debts as they become due, using its current or quick assets.

NDP: National Development Plan

PSET: Post-School Education and Training

Revenue is the income generated from business operations. It is the gross income figure of a business from which costs are subtracted to establish the net income.

Solvency ratios evaluate a company's debt amounts with its assets, equity and earnings to evaluate the probability of a business staying afloat over a sustainable period by paying its long-term debt and the interest on its debt.

iii. List of tables

iv. Table of Figures

TABLE OF CONTENTS

1.Chapter 1: Nature and scope of the study

1.1 Introduction

Despite receiving about 20% of the state budget, South Africa's education system is illustrated with deteriorating infrastructure, overcrowded classrooms, and low educational results, all of which maintain inequality and do not deliver quality education (CHE, 2016). Annually, South African universities and colleges are overwhelmed with prospective students, but the universities are struggling to accommodate these students with lack of resources (Coetzee, 2019). There are currently more than one million students in the higher education sector, and over 100 000 students in private tertiary education.

In South Africa there is an increase in higher education due to the technology explosion era and the Fourth Industrial Revolution which we are currently experiencing (Jamshidi, 2012). This statement was made in 2012; since then, the demand has grown even more. The university and college sector, specifically in developed nations, needs to respond to higher education demands by providing enough capacity for prospective students because public institutions face a scarcity of resources.

The higher education environment evolves continuously and has created a sense of necessity for private higher education institutions (PHEIs) to adjust or perish (Coetzee, 2019). The latest law by the South African government compels PHEIs to register with the Department of Education (DOE). This, coupled with the creation of mega public higher education institutions by mergers, has made it essential for PHEIs to re-evaluate their financial management systems and cost management systems.

The restriction on PHEIs by stringent government regulations has resulted in many institutions shutting down. The regulations and increased responsibilities of PHEIs have led to increased costs to add to the sector's woes. This led to a decline in income and profits for PHEIs that follow the profit motive and are managed as a business enterprise, with shareholders requiring high returns (CHE, 2016).

For these PHEIs to survive and be competitive and profitable, they need more funds from every source (CHE, 2016). Private higher education institutions, unlike their public counterparts, do not get funding and resources from the government. The funds that cannot be attained from sponsors and shareholders must be obtained through student funds. PHEIs must compete with these massive public institutions in various segments from student enrolment and the provision of quality academic qualifications (Naidoo, 2006).

The profit motive is one of the significant reasons that PHEIs have this negative stigma. Various commentators view PHEIs not good enough and on the same standard as public institutions (Coetzee, 2019). The White Paper on Higher Education establishes that PHEI should not allow substandard quality and unsustainable fly-by-night institutions into the higher education market (South Africa 17, 1997:255).

Private higher education institution course fees are estimated to be three times that of public higher education institutions (Mupunga, 2019). Increasing the fees of PHEI qualifications will decrease potential enrolments and, consequently, decrease income levels.

1.2 Problem statement

PHEIs is alleged to provide low-quality education while focusing on profit maximisation (Mupunga, 2019). The developing HE environment in South Africa has enormous financial consequences for PHEIs. The decline in enrolments at public higher education institutions must be worrying, not only to the PHEIs but also to the South African government as it will have an overall damaging socio-economic impact. With the growing demand for HE in South Africa, PHEIs have countless financial implications. Currently in South Africa there are 98 registered PHEIs and 34 provisionally registered PHEIs (Statistics South Africa, 2017).

PHEIs, unlike their public counterparts, do not get funding and resources from the government. The funds that cannot be attained from sponsors and shareholders must be obtained from students (Coetzee, 2019). For PHEIs to compete with the public HEIs and other PHEIs, private institutions must reduce costs to increase profits.

The pricing of PHEIs qualifications must be similar to the pricing of public higher education institutions, while offering quality teaching and learning. PHEIs fees are progressively higher than that of public HEIs (Mupunga, 2019). Increasing the fees of PHEIs qualifications may lead to a decrease in student enrolments and, consequently, decrease income levels.

This study analyses the financial viability of a private HEI. It focuses on a specific private HEI, emphasising operational cost, gross and net profits, and financial ratios. There were also multiple comparatives regarding enrolment numbers and pricing between the specific PHEI and its competitors.

1.3 Research objectives

1.3.1 Primary objective

The research objective of this study is to analyse the financial viability of a PHEI.

1.3.2 Secondary objectives

Attaining the following six secondary objectives is essential to support the achievement of the primary objective:

- Analysing the current role of private HEIs.
- Analysing the financial ratios of the AIE.
- Analysing the annual enrolments of the growth of PHEIs against the enrolment growth of the AIE.
- Analysing the average profit per student per faculty.
- Calculating the gross and net profit per faculty; and
- Conducting a comparative pricing analysis with other PHEIs in the same region.

1.4 Research methodology

Two research methods were used to achieve the objectives, namely:

Phase 1: Literature review

Phase 2: A case study

1.4.1 Phase 1: Literature review

The literature review was undertaken to research previous articles on financial viability in private HEIs.

The literature review provides an overview of PHEIs. It focuses on PHEIs globally, the current PHE market in South Africa, and the importance of financial analysis of PHEIs. The literature review was conducted using mainly journal articles, textbooks and reports.

1.4.2 Phase 2: Case study

The second phase of the research was a case study investigating the financial viability of a PHEI. Permission from the specific organisation was obtained to conduct the study (Appendix B).

1.4.3 Research design

The case study research design was established on an in-depth review of a specific group or event – in this case, the Academic Institute of Excellence (AIE). The AIE is a private college in Midrand, Johannesburg and Cape Town. The college has various qualifications under its six faculties, namely the School of Information Technology, the School of Engineering Science, the School of Business, the School of Draughting and the School of Visual Design and School of Architecture and Built Environment.

The case study aimed to analyse the financial viability of a specific PHEI. To perform this task, the following specific reports were scrutinised: the (1) balance sheet, (2) consolidated profit and loss statement of AIE, (3) faculty-specific profit and loss statements, which include operational reports of the institution, such as rent and utilities and lecturer salaries, and (4) qualification pricing.

Secondarily, the focus has been to financially evaluate the feasibility of the following faculties in the PHEI:

- School of Information Technology
- School of Engineering Science
- School of Business
- School of Draughting

- School of Visual Design
- School of Architecture and Built Environment

A comparison was made between the annual enrolment growth numbers of other PHEIs and the enrolment numbers of AIE. Finally, a comparative pricing analysis was conducted between AIE and PHEIs operating in the same region against the qualifications that both institutions have to offer. These enrolment numbers and price comparative studies relied on the public information available on the web pages of the competing institutions. The data were available in the public domain and were easily accessible.

1.4.4 Data collection

The following steps were followed throughout the data collection process.
Step 1: Ethical approval was obtained from the Economic and Management Sciences Research Ethics Committee (EMS-REC) at the North-West University (Appendix A).
Step 2: Permission was obtained from AIE to conduct the study at this institution (Appendix B).
Step 3: Participants were identified to obtain necessary financial documents.
Step 4: Interviews with participants were scheduled to obtain documents.

1.4.5 Data analysis

The data were analysed by making use of the CRM software that the institution uses. Financial reports that had already been analysed and presented in financial reports and tables were downloaded. The data were analysed, and a cost analysis was done to calculate the AIE's net profit, the number of students per faculty and per intake, the different gross and net profit of the various faculties, and the average profit per student.

1.5 Limitations of the study

Higher education institutions are more complicated financial organisations than what business usually is. There are limited research sources on the financial viability of private higher education institutions. The study was restricted to only one private higher education institution.

1.6 Conclusion

The problems facing the current PHEI environment and whether it is financially viable for a PHEI to function were explored. The research objective was explained, namely analysing the financial viability of a PHEI. The secondary objectives to achieve the primary research question were also given as follows:

- Analysing the current role of private HEIs.
- Analysing the financial ratios of the AIE.
- Analysing the annual enrolments of growth of PHEIs against the enrolment growth of the AIE.
- Analysing the average profit per student per faculty.
- Calculating the gross and net profit per faculty; and
- Conducting a comparative pricing analysis with other PHEIs in the same region.

The research design was described as quantitative in nature.

Chapter 2: Literature review

2.1. Introduction

The literature review aims to study current research and information available relevant to private higher education. The review also focuses on the South African higher education environment, specifically private higher education institutions. The objective of the literature review was to provide an understanding of the higher education sector, particularly in the context of the private higher education sector globally and nationally. It also attempts to conceptualise terminologies such as universities, private higher education institutions and financial ratios.

Higher education sectors internationally, and its evolution over the last few years regarding privatisation of higher education, increased demand, student numbers and financial ratios are acknowledged as essential topics in this chapter. The literature review also investigated the massification of higher education. These topics are investigated, and applicable conclusions are drawn.

2.2 Private higher education globally

A variety studies have been recorded, indicating a substantial increase in private higher education offerings globally (Teixeira et al., 2012). According to Bezuidenhout (2013:59), the growth in private higher education institutions, particularly in emerging countries, is outwardly driven by demand absorption. Continuous increase and development of private higher education institutions have aided to supporting the part it performs in the education sector internationally. The growth in demand for education and favourable policies has worldwide driven student numbers upwards.

Setswe (2013:98) reported average growth rate of 7% per annum since 1980 in the higher education market. Education fees are projected to generate over US$30 billion annually, with private higher education institutions contributing significantly. According to Van Schalkwyk (2018:32), the private higher education segment is growing so fast in several countries that it might fulfil the higher education needs on

its own.

Globalisation also had a massive influence on higher education. The growth of a knowledge-based economy created a need for higher education institutions, public or private, and the growth of higher education is therefore inevitable. With these changes in the economy, there is a significant demand for highly skilled employees. The need for tertiary education is more relevant in developing countries, where certain countries cannot fund, tertiary education. This is where the private sector can perform a substantial role in filling this gap and respond to this demand for, higher education. Globally, governments do not have enough financial resources to accommodate the big drive of higher education. Governments are starting to accept that private investment will extend the higher education system (Coetzee, 2019).

Massification relays not only to an upsurge in enrolments but also to a variety of other related changes, such as the type of students, curriculum, the wide- range of qualifications offered by private higher education institutions, and the introduction of several entries and exit points within the higher education system. Massification in governmental institutions delivered an opportunity for private institutions to separate themselves. With the additional support, private higher education institutions are capable of financing through their business models (Miller et al., 2014:266), remain smaller in size and provide students more individual attention. The student is not seen as merely a number. Between 2000 and 2010 massification became common when higher education institutions in Africa underwent an increase in enrolment by over 50 per cent, from 2.3 million to 5.2 million within one decade (Africa-America Institute, 2015).

Furthermore, the United Nations Sustainable Development Goal 4 (SDG4, 2015) advocates the need for inclusive and equitable quality education, which will provide life-long opportunities for all. Nevertheless, the public HEI, with their limited capacity, cannot meet the growing demand. This was seen in 2012 at the University of Johannesburg where more than 80,000 prospective students were competing for 11,000 available first-year slots (Setswe, 2012). Denying students access to HE due to the lack of capacity directly contradicts the spirit of the SDG4 and the NDP

guidelines.

The emergence of private higher education globally has been praised by several and is seen as an opportunity to enhance competition in the education sector, consequently improving the quality of qualifications offered (Teixeira et al., 2017:16). The expansion of privatising higher education is inevitable, as mentioned above, particularly in a country such as South Africa (Thwala, 2017).

With the rapid shifts in the higher education sectors within developing countries, private higher education institutions (PHEIs) can provide for the increasing demand in higher education (HE) that the public higher education institutions cannot provide due to their limitations in government funding and natural resources. According to Levy (2008), privatisation is one of the most notable worldwide changes in HE. The privatisation that Levy mentions includes partial privatisation within public higher education institutions and public universities, as well as privatisation of separate private higher education institutions as a separate entity. Regarding the student fees of private higher education institutions versus fees of public higher institutions, student fees of PHEIs are more expensive than that of public institutions. For these PHEIs to survive, they need more funds from every available source to be competitive and profitable (Ngware 2016:203). PHEIs, unlike their public counterparts, do not get funding and resources from the government. The funds that cannot be attained from sponsors and shareholders must be obtained from students (Coetzee, 2019).

Setswe (2013:100) states that the enlarged contest in the HE marketplace with PHEIs entering the market in large numbers has instigated the question of reliability and effectiveness of these PHEIs. However, these concerns do not discourage prospective students from enrolling at PHEIs globally and in South Africa. The possible reason for this may be that PHEIs take in the overflow of students who did not get accepted at public HEIs and that PHEIs offer a more variant approach to higher education. PHEIs are much more adaptable and open to change when it comes to changes in the market and particular demands; they also provide much more autonomy and a variety of abilities to prospective students and employers

(Shah & Lewis, 2010).

According to Finn (2013), with their business-like nature that gives them a competitive edge in the higher education marketplace, private higher education institutions are much more client-orientated, and supportive than public higher education institutions. According to Teixeira et al. (2017:14), there are mainly two types of developmental designs of private higher education namely excess demand and differentiated demand.

Excess demand refers to the inability of public institutions to cater for the increase in the volume of prospective students. PHEIs are consequently becoming a feasible second option for the overflow, which leads to growth. Differentiated demand refers to the high demand and expansion of PHEIs. Public HEIs can cater to their prospective students' needs in a more specialised way than public institutions, for example smaller classes and individual attention.

Conclusions can be made that the development design or patterns of PHEIs in developing countries can be seen as excess demand, while in developed countries, it is differentiated demand. Australia is a highly developed country and the PHEIs are primarily driven by differential demand. Established in 1974 and specialising in distance education, Deakin University is one of Australia's first PHEIs (Deakin, 2016). Their dedication to and focus on providing students with easily accessible and flexible long-distance education where the students had a choice in how, where and when learning would commence made them a leader in PHEIs (Back, Davis & Olsen, 2012).

Regarding the expansion of PHEIs in Asia, the development designs primarily respond to the excess demand pattern since most Asian countries are developing countries. Asia has a 36,4% of PHEI enrolment, which is by far the most of all the continents (Levy & Zumeta, 2011). African countries joined the PHEI sector a bit later, especially Sub-Saharan African countries, but the growth these countries show is noticeable. The growth of PHEIs came only in the late 1980s and 1990s in

countries like Kenya, Nigeria and Uganda (Altbach et al., 2009).

According to Setswe (2013), Sub-Saharan Africa has an estimated 300 universities. About one-third are privately owned, and most were established in the last two decades. Private higher education institutions entering the HE landscape have made an undeniable impact on the growing demand for higher education, accounting for up 20 per cent of enrolments in some countries (Setswe, 2013).

2.3. South African private higher education

Private higher education institutions play a substantial part in the higher education sector, particularly in South Africa. Higher education demand is more significant than what public institutions can provide and where more access to higher education is required (DHET, 2013:22). This produces the opportunity for PHEIs to fill the gap. The post school education and training (PSET) include all higher education institutions, which include public and private institutions, technical and vocational colleges (TVET) and public adult learning centres (Department of Higher Education and Training [DHET], 2013:1). All higher education institutions function inside the university sector. Public higher education institutions are acknowledged as “universities” while private institutions are permitted to be labelled as only “higher education institutions” and not as universities. Private higher education was generally unregulated until 1997, when the Higher Education Act was published. This Act, through section 53, regulates private higher education to ensure that academic offerings by PHEIs abide by levels of quality (Ellis, 2012:17).

The concept of supply and demand can explain the rapid growth of PHEIs in South Africa. This directly responds to the high demand from students in a public market that cannot supply the demand. The tendency can be described relatively to the growing enrolment numbers of students. It can also be a gauge of development to meet skill gaps even when most university qualifications are not market-driven (Ngware, 2016:203). The government has not met this increasing higher educational need, especially at post-secondary level, because of financial and infrastructural constraints (Stats SA, 2017).

It is important to note that although PHEIs outnumber public institutions, the private sector has far fewer students, and quality and regulation are paramount (Macgregor, 2008). There are currently 102 registered PHEIs and 26 provisionally registered PHEIs (DHET, 2018) in South Africa, in contrast to the 25 public HEIs. Enrolment at public and private higher education institutions reached 1.1 million in 2017, with public institutions enrolling 975 837 students and PHEIs 167 408 students (Stats SA, 2017). The goal set out in the National Development Plan (NDP) is 1.6 million student enrolments by 2030.

Figure 2.1 shows the annual growth of PHEIs regarding enrolments against public HEIs.

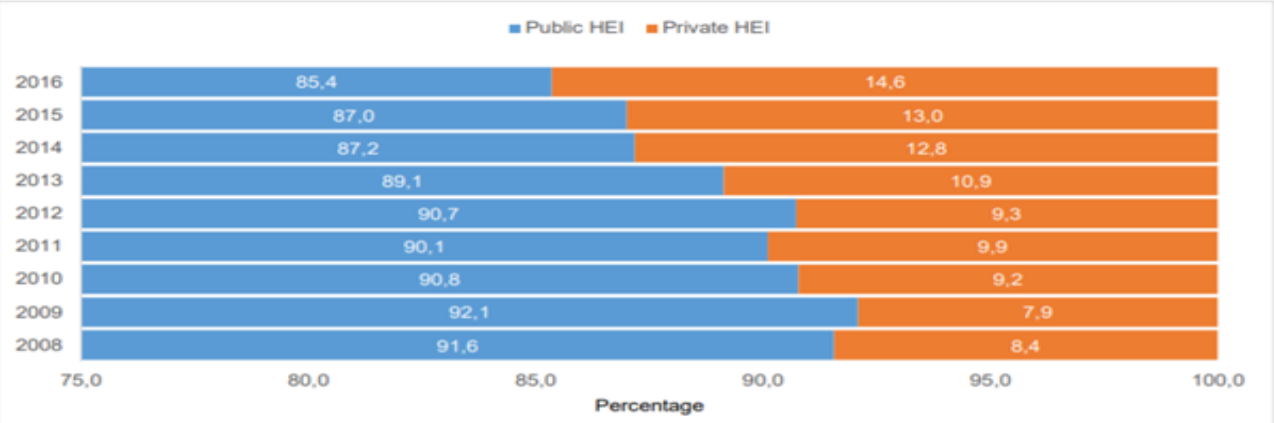

Figure 2.1 Enrolment at public and private higher education institutions, 2008–2016 (DHET, 2017)

Figure 2.1 demonstrates unequal growth in enrolment by type of institution. While public HEIs (27 public universities) reported the highest percentage of total enrolment (85,4% in 2016), enrolment rates at private education institutions (private universities) in 2016 had increased by 6,2% since 2010.

Table 2.1 below shows the number of institutions in the HEI space regarding the public HEIs, PHEIs, TVET, CET and private colleges.

Table 2.1 Overview of post-school education and training institutions and student enrolment 2016 (DHET, 2017)

	HEIs			Colleges				Total PSET
	Public	Private	Total	TVET	CET	Private	Total	
Number of institutions	26	123	**149**	50	9	279	**338**	**487**
Number of students enrolled	975 837	167 408	**1 143 245**	705 397	273 431	168 911	**1 147 739**	**2 290 984**

As indicated in Figure 2.2 below, in 2016, half of the total of PSET student enrolment was in public and private higher education institutions. Almost a third of students were enrolled in TVET colleges, while a smaller proportion enrolled in CET and private colleges (12% and 7% respectively).

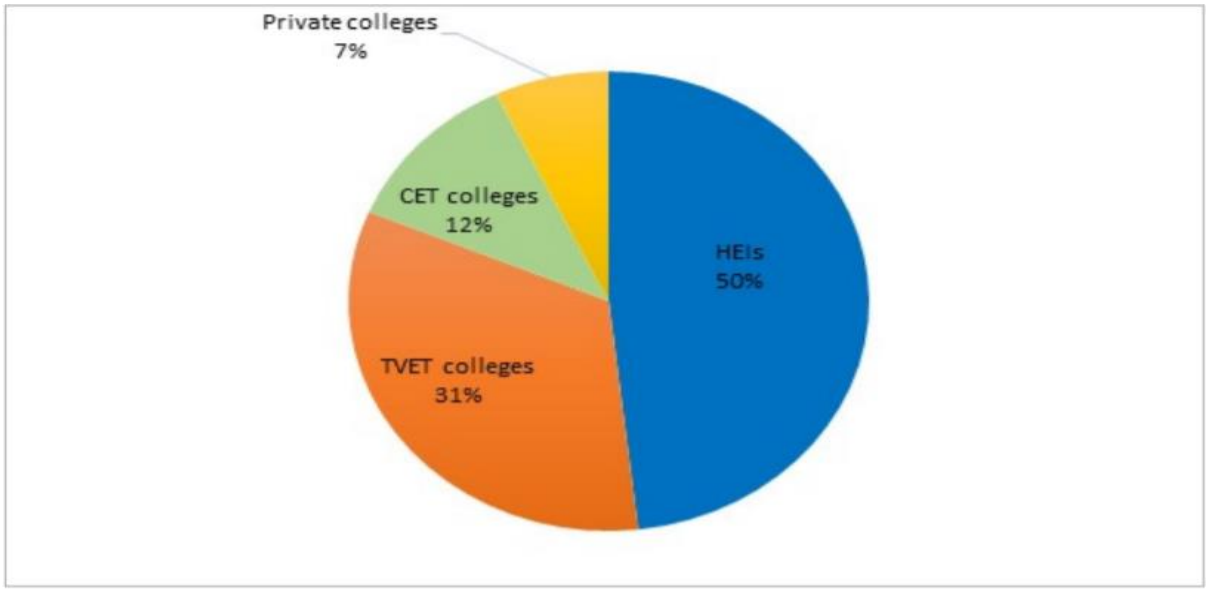

Figure 2.2 Percentage distribution of student enrolments in post-school education and training institutions (DHET, 2017)

According to an investment report by Caerus Capital (2017) on PHEI investment opportunities, the possible competitive advantage of PHEI in South Africa may include high student satisfaction, superior levels of student support, smaller classes with more student lecturer interaction, flexible and innovative learning options.

To qualify for registration as a PHEI and thus to be able to offer HE qualifications and programmes in South Africa legally, a PHEI needs to adhere to the following regulations (DHET, 2016):

• Be listed as a company under the Companies Act; and

• Comparable to its public counterparts, perform the roles of registering students for

HE qualifications (on NQF levels 5–10), providing and delivering curricula, assessing students and awarding qualifications.

These legislative changes created registration, accreditation and quality systems for private institutions that were granted registration for legal operation. Accreditation must be obtained from the South African Qualification Authority, followed by accreditation from the Council on Higher Education and registration with the Department of Higher Education and Training (DHET, 2016).

Private higher education institutions are here to stay. Even with tuition being up to three times that of public HEIs, PHEIs have approved the HE landscape and justified their existence, growth and expense. According to Ramlachan (2019), the possible reasons for their success are fourfold:

- Private higher education institutions are demand-driven; they are the response to specific demands directly from the labour market. Companies might have special requirements for the education of their employees, especially if it is work-related. With PHEIs being customer-orientated, they can listen to these companies' needs and meet their specific demands. Private higher education institutions have more freedom to be an innovative driving force, both in educational methods and in creating quality courses.
- Private higher education institutions take on all types of students, creating a flexible and attainable HE platform for non-traditional students, students who work full-time, older students and students who are geographically isolated. Private higher education institutions can cater to all these students' needs, unlike public HEIs who cater mainly to the traditional full-time student who has have just finished school.
- Private higher education institutions support life-long learning; they are more prepared and able to create courses in response to the necessity of life-long learning. Private higher education institutions can create modules and programmes to answer our technology-driven workforce's ever-changing landscape relatively quickly compared to public HEIs.
- Private higher education institutions display higher success rates. There are

some cases where PHEIs seem to more efficient and effective than their public counterparts. There are numerous cases where students who receive their qualifications from PHEIs exceed students from public HEIs.

This could be due to the customer-orientated business-like approach from PHEIs, which promotes these remarkable results. Yet, it should be noted that the way PHEIs fund their operations could lead to more effective teaching better-prepared staff. The latest data indicate that the market segment of independent schools in developing markets is about 14%; in South Africa, it is 4%. This gap between South Africa and other developing markets is even more significant in secondary education (Mupunga, 2019).

2.4. Financial ratios

Kharusi and Murthy (2019) illustrate that financial reporting is deemed an essential method of providing stockholders and stakeholders with all necessary information about the financial activities of HEIs. Though financial ratio analysis has been utilised in the corporate sector since the beginning of the 20th century, the application of ratio analysis in HE is not a well-recognised practice (Roden, 1991).

The financial ratios are expected to provide a general summary of the financial health of an HEI. Cause-and-effect ratio analysis has been recommended as another method to assist administrators in verifying changes in their financial statements and identifying what may have triggered them.

2.4.1 Liquidity ratios

Liquidity ratios indicate whether a firm can meet its short-term financial obligations. The ability of a PHEI to meet short-term financial commitments depends on current cash resources and cash likely to become accessible over the next year.

Three ratios, namely current ratio, cash ratio and the ratio of net working capital to total assets, are used to judge the liquidity position of a PHEI.

- The current ratio is the ratio of current assets to current liabilities, and the ratio is expected to be more than 1 for a PHEI with sufficient liquidity.
- The cash ratio is calculated as the ratio of cash and near-cash assets to current liabilities. This ratio signifies the amount of cash presently available to meet expenses arising as and when current liabilities mature over the next year.
- Networking capital is identified as current assets minus current liabilities. When current assets are more than current liabilities, that is when networking capital is positive, a PHEI will meet its payment commitments. This is because the institution’s current assets get converted into cash, which in turn becomes accessible to meet payments arising from growing current liabilities.

2.4.2 Solvency ratios

The ability of a PHEI to meet its long-term obligations is reflected in the debt-to-equity ratio and debt-to-assets ratio. A solvent PHEI is one that possesses more than it owes; in other words, it has a positive net worth and a controllable debt load. Here are some of the most popular solvency ratios.

- Debt-to-equity ratio: the ratio is calculated as total debt / total equity. This ratio indicates the degree of financial leverage used by the PHEI and comprises both short-term and long-term debt. An increasing debt-to-equity ratio implies higher interest costs, and, beyond a specific point, it may affect an institution's credit rating, making it further expensive to raise more debt.

- Debt-to-assets ratio: the formula is total debt / total assets. This ratio calculates the percentage of a PHEI asset that has been financed with debt (short-term and long-term debt). A higher ratio suggests a greater extent of leverage and, subsequently, financial risk.

2.4.3 Profitability ratios

Profitability ratios are a group of financial metrics used to assess the ability of a PHEI to produce earnings in relation to the institution’s revenue, operating costs, balance sheet assets or shareholders' equity over time, using data from a particular point in time. Profitability ratios indicate how effectively and efficiently a PHEI generates profit.

- Net profit margin is calculated as follows: net profit / total revenue is one of the frequently used profitability ratios to measure the degree to which a business action generates money. The profit margin ratio represents what percentage of sales has turned into profits.

The significance of financial statement analysis should not be undervalued. The suitable format of financial ratios allows practically any stakeholder to acquire a basic understanding of the most crucial financial policies of PHEIs and their financial condition (Kharusi & Murthy, 2019).

2.5. Financial model

The business model for PHEI is simple but effective. Once the institution has been built in a good location and the cost structure is good, it comes down to recruiting and getting students in classes. The operational leverage is excellent and, after a school break, even further enrolments plunge through to the profit line (Mupunga, 2019). This specific model is also highly cash generative. Institution fees are paid at the beginning of the month, quarter or year, and bad debts tend to be exceptionally low. Furthermore, students tend to be at a PHEI for many years. This results in an annuity revenue stream with articulation options where students progress in their current qualification or articulate to a new qualification, which all makes for a good business model.

2.5.1. Revenue

Consistent income streams are required to cover the institution's operations costs, either from external funding or earned income. If not, it will damage the institution's future (Gutherie et al., 2008). Revenue of PHEI is categorised into two main areas, namely private donations, and self-generated income.

Private donations come in cash contributions (Carroll & Stater, 2008:950) from individuals and businesses. Self-generated income is the qualification fees charged for services provided with economic activity and income from investments (Moore, 2005:3).

A PHEI’s dependence on one stream of revenue will substantially affect the organisational structure and financial success (Chambre & Fatt, 2002; Hodge &

Piccolo, 2005). Revenue diversification is a viable strategy for revenue steadiness, which in turn encourages organisational durability. When PHEIs diversify their revenue streams, more sustainability is possible if an institution is going to rely on only a single area of revenue, which could eventually lead to the failure of the PHEI.

As self-generated income, institutional fees are seen as the primary contributor to the revenue of PHEIs. Cordery and Narraway (2008) state that sponsors favour services that offer “value for money”. The term “value for money” is appreciated by the quality of education of PHEIs. This is evident in PHEIs which charge a higher fee than public institutions to provide a better "service" (De Fraja, 2004:2) than what the public universities and colleges offer. The value that the PHEIs are offering needs to be transformed into recurring revenue streams (Gutherie et al., 2008).

PHEIs are under pressure to guarantee that the delivery of “value for money” is accomplished and that resources are being optimally used to deliver high-quality learning opportunities to students in South Africa. PHEIs must ensure that the institution's organisational and management structure understands the importance of revenue diversification, leading to long-term sustainability (Sorensen, Qian, Schoen & Hua, 2004).

2.5.2 Cost

Filmer (2007) indicates that if HEIs want to deliver quality education, decisions must be focused on spending money on extra “cost-effective interventions”. This is achieved by converting all resources in the form of money, time and human capital into results, and affects the maximum achievement (UNICEF, 2010).

The optimum cost model is dependent on the amount of the minimal cost of delivering quality educational services to all students. According to Baker (2011), the educational cost is a function of products, student numbers, areas, input prices and effectiveness. The cost function object is to identify aspects that will influence the institution's costs and provide a guideline on how the spending on the institution’s operations can be adapted accordingly to achieve financial sustainability (Baker, 2011).

There are various studies regarding what sections of costs can be decreased without risking quality education delivery. According to Froelich, Knoepfle and Pollak (2000), to create financial returns and for the institution to have a greater return, institutions need to have a smaller ratio of administrative expenses to the total expenses. An additional area where costs can be decreased is in the non-essential departments, resulting in less revenue instability over a period (Carroll & Stater, 2008).

Creators of PHEIs must be strategic and reasonable in distributing their resources to meet the institution's organisational objectives to achieve long-term sustainability (Gutherie et al., 2008). Consequently, managers and heads of school departments must have competent skills and knowledge to recognise the administration of costs to have an efficient methodology for managing costs (Hollman, 2007).

The emphasis on managing costs and cost estimating for the institution's operations and per faculty is vital. Lack of understanding and misinterpretation of the scope can lead to financial complications for PHEIs and threaten the institution's financial viability for different faculties (Garrett, 2008).

2.5.3 Financial viability

Financial feasibility is well-defined as a gauge to measure capital flow due to the organisation successfully generating a return on resources (Bercovitz & Mitchell, 2007). Private higher institutions with greater returns from their resources can obtain additional resources to maintain and grow (Bercovitz & Mitchell, 2007). Financial feasibility is crucial for a PHEI as it advises a working business model.

In the shape of revenue development and cost reduction of the institution, financial feasibility provides a proxy for its operational effectiveness. Hence, to guarantee that financial feasibility is accomplished, the costing accuracy is vital (Lucas & White, 2009). Private higher education institutions need to charge a fee that the customers (sponsors) are prepared to pay, but the fee charged needs to be significant enough to cover the institution's operations costs.

Any surplus made by the institution needs to be reinvested to increase the external fund. This creates a "financial cushion" that can cover any expenses against any uncertainties in the future. Private higher education institutions can reinvest in infrastructure and staff training or provide funding for scholarships. When reinvesting the surplus into the institution, a return on investment will happen quicker than ongoing capital investments (CHE, 2016).

2.6. Chapter summary

Chapter 2 set out to review the literature regarding PHEIs. It started by looking at what PHEIs entail. Secondly, the study reviewed the global perspective of PHEIs. Lastly, the study reviewed the HE landscape in South Africa, the growth and expansion of this sector and the existence of PHEIs. The literature review regarding financial ratios looked at mainly three financial ratios, namely liquidity, solvency, and profitability ratios, and concluded the significance that financial ratios provide a general summary of a HEI's financial health. Financial statement analysis should not be undervalued. Financial ratios allow practically any stakeholder to understand the most crucial financial policies of PHEIs and their financial condition. The financial model of PHEIs was reviewed. Three main aspects that the PHEIs financial model focusses on are revenue, cost and financial viability, which conclude that PHEIs need to manage cost-effectively and any surplus generated must be reinvested into the institution.

The following chapter looks at the empirical research, wherein the results will be presented.

2.Chapter 3: Empirical study

3.1 Introduction

The previous chapter reviewed the literature relevant to this study. The objective of Chapter 3 is to analyse the financial data of the AIE. Secondly, the chapter aims to analyse the historical annual growth of enrolments at PHEI and provide a comparative analysis with the AIE. Finally, the financial analysis will be presented in financial statements and financial ratios.

3.2. Data collection process

The primary objectives of the study were tested through the obtaining of financial reports of the AIE. The following steps were followed throughout the data collection process.

Step 1: Ethical approval was obtained from the Economic and Management Sciences Research Ethics Committee (EMS-REC) at the North-West University (Appendix A).

Step 2: Permission was obtained from AIE to conduct the study at this institution (Appendix B).

Step 3: Participants were identified to obtain necessary financial documents.

Step 4: Interviews with participants were scheduled to obtain documents.

3.3 Data analysis

With the use of AIE's financial reports comes the capacity to collect data online and in real-time. The financial data were updated in real-time and data analysis was done using statistical formulas in Microsoft Excel and CRM software. Graphs and other statistical data were calculated and presented in report format. These results will be used in the next section to discuss the data that were gathered.

Figure 3.1 below indicates the data analysis processed followed.

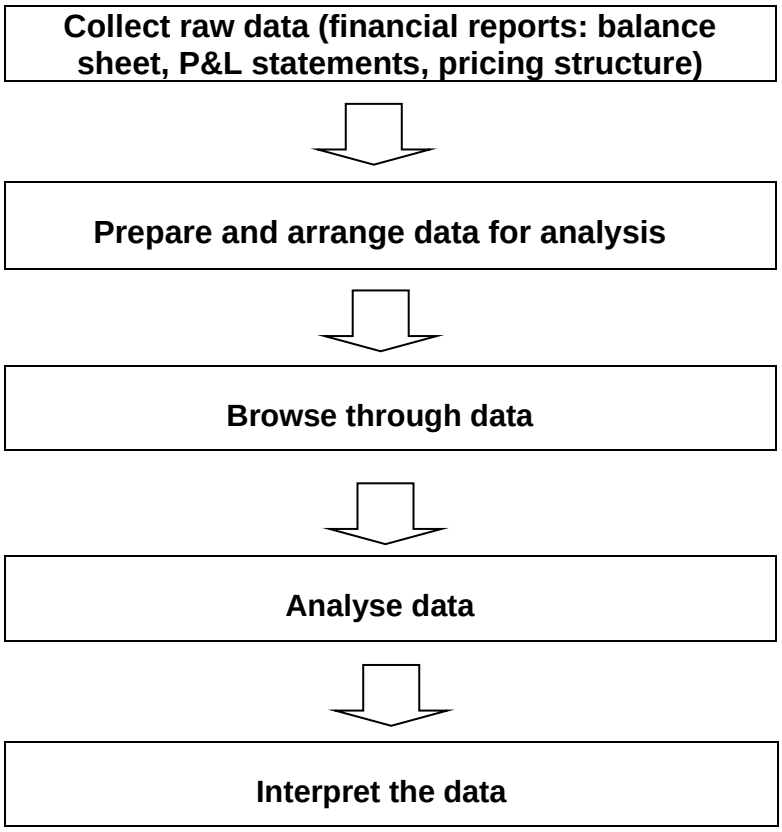

Figure 3.1 Data analysis process followed.

3.4. Results and discussions

The following financial reports of AIE were focused on: the balance sheet, cash flow statement, and the profit and loss statement. The balance sheet is indicated in Table 3.1.

3.4.1 Balance sheet

A balance sheet is a financial statement that reports the assets, liabilities, and shareholders' equity of a business. The balance sheet is one of the fundamental financial statements used to evaluate a company. The balance sheet is a summary indicating the condition of a company's finances regarding what it owns and owes as of the date of publication. Analysts use balance sheets, in combination with other financial statements, to calculate financial ratios.

Table 3.1 is the balance sheet of the AIE as of July 2020. The balance sheet will be used to calculate the following financial ratios: current ratio, debt asset ratio and profit margin ratio.

Table 3.1 Balance Sheet of the Academic Institute of Excellence

Academic Institute of Excellence (Pty) Ltd as of 31 July 2020

	31 JUL 2020
Assets	
Current Assets	
Bank	9,823,918.13
Trade and other receivables	25,058,763.71
Provision for doubtful debt	(3,296,586.50)
Deposit placed	200,215.63
IFRS15 Adjustment (CA) – BS	1,651,488.20
Provisional tax	929,882.77
Income Tax Refundable	139,786.15
Total Current Assets	**34,507,468.09**
Non-current Assets	
Property, plant, and equipment	1,669,953.30
Intangible assets	1,689,625.99
Investments	
GDC Acquisition	14,500,000.00
Investment in Concept Interactive	7,540,000.00
Total Investments	**22,040,000.00**
Deferred tax	735,000.00
Total Non-current Assets	**26,134,579.29**
Total Assets	**60,642,047.38**
Liabilities	
Current Liabilities	
Trade and other payables	5,954,743.70
Money received in advance	3,649,566.00
IFRS15 Adjustment (CL) – BS	41,510,634.60
Total Current Liabilities	**51,114,944.30**
Non-current Liabilities	
Conversion Account	1.00
Loan: The CAD Corporation (Pty) Ltd	35,060.93
Loan - Learnfast (Pty) Ltd	(1,253,426.66)
Loan: Greenside Design Centre	9,708,739.31
Loan - D Fox	1,250,000.00
Total Non-current Liabilities	**9,740,374.58**
Total Liabilities	**60,855,318.88**
Net Assets	**(213,271.50)**
Equity	

Current Year Earnings	12,173,860.81
Retained Earnings / Loss	(32,387,232.31)
Share Capital	20,000,100.00
Total Equity	**(213,271.50)**

3.4.1.1 Liquidity ratios

The current ratio

Current ratio = Current assets

Current liabilities

Current ratio = R34,507,468.09

R51,114,944.30

Current ratio = 0.68:1

The current ratio measures AIE's ability to pay off its present liabilities with the institution's current assets, such as cash, accounts receivable and inventories. The higher the ratio, the better AIE's liquidity position. The AIE had a current ratio of 0.68:1, which means that for every R1.00 of current debt, AIE had R0.68 available to pay for the debt. A current ratio under 1 indicates that the AIE's debts due in a year or less are more than its assets.

3.4.1.2 Solvency ratios

Debt asset ratio

Debt asset ratio: Total debt

Total assets

Debt asset ratio: R60,855,318.88

R60,642,047.38

Debt asset ratio: 1,00

The debt asset ratio is crucial in determining the financial risk of AIE. A ratio greater than 1 indicates that a substantial portion of assets is financed with debt and that AIE has a higher default risk. A ratio of 1.00 means that the AIE owns an equal amount of liabilities as its assets. This indicates that AIE is highly leveraged.

3.4.1.3 Profitability ratios

Profit margin

$$\text{Net profit margin} = \frac{\text{Net profit}}{\text{Total revenue}} \times 100$$

$$\text{Net profit margin} = \frac{\text{R12,196,397.84}}{\text{R60,274,130.63}}$$

Net profit margin = 0.20 x 100

Net profit margin = 20%

Profit margin is one of the frequently used profitability ratios to measure the degree to which a business action generates money. The profit margin ratio represents the percentage of sales that has turned into profits. The percentage figure suggests how many cents of profit the AIE has generated for each rand of sale. AIE reported that it achieved a 20% profit margin; this translates that it had a net income of R0.20 for each rand of sales generated.

3.4.1.4 Profit and loss statement

The profit and loss statement is a financial statement that summarises the revenues, costs and expenses incurred during a specified period, usually a fiscal quarter or year (Investopedia, 2018). The P&L statement is identical to the income statement. These reports provide information about the capability or inability of a business to generate profit by increasing revenue and reducing costs. P&L management describes how a business manages its P&L statement through revenue and cost management.

3.4.1.5. Net profit

Net profit is the measurement of a business's profit after operating costs, taxes, interest, and depreciation have been subtracted from the business revenues. The term is frequently described as a company's “bottom line” and may also be described as “net earnings” or “net income”. AIE's net profit was calculated because it validates the success of a business.

Table 3.1 below is the consolidated profit and loss statement of the AIE. To calculate the net profit of AIE, the first step is to calculate the gross profit, where the calculation is as follows: the total trading income for the business minus the cost of sales.

Total trading income (R92 764 912.24) – Cost of sales (R32 400 781.61)

= **Gross profit (R60 274 130.63)**

Second step:

Gross profit (R60 274 130.63) + **Other income** (R3 373 932.17) – **Operating expenses** (R51 204 036.31)

= R12 444 026.49 + **Canteen profit** (R162 853.92) – **Canteen Operating Expenses** (R410 482.57)

= **Net Profit R12 196 397.84**

The Academic Institute made a net profit of **R12 196 397.84.**

Profit and Loss

Academic Institute of Excellence (Pty) Ltd
For the month ended 31 July 2020

	YTD	JUL 2020	JUN 2020	MAY 2020	APR 2020	MAR 2020	FEB 2020	JAN 2020	DEC 2019	NOV 2019	OCT 2019	SEP 2019	AUG 2019
Trading Income													
Transfer fees	610,876.14	78,209.40	94,060.15	50,007.49	10,437.79	53,962.17	29,226.86	43,491.90	22,740.80	56,342.63	48,392.78	14,819.20	109,184.97
Other Sales	4,400.00	-	-	-	-	-	-	-	-	-	4,400.00	-	-
Exam fees	2,012,075.00	-	-	2,200.00	91,800.00	-	(500.00)	8,500.00	810,700.00	1,250.00	610.00	91,815.00	1,005,700.00
Course fees	89,770,281.50	6,958,269.48	7,773,288.72	7,924,123.32	7,876,578.96	9,264,471.00	9,459,811.54	8,181,654.54	4,933,039.72	6,467,680.21	6,988,937.05	7,630,004.67	6,312,422.29
Admin fees	159,179.60	8,945.00	9,035.00	13,395.00	19,370.00	18,850.00	16,120.00	12,415.00	9,945.00	7,810.00	17,846.00	13,979.00	11,469.60
Sales - Laptops	118,100.00	56,000.00	44,100.00	-	-	18,000.00	-	-	-	-	-	-	-
Total Trading Income	**92,674,912.24**	**7,101,423.88**	**7,920,483.87**	**7,989,725.81**	**7,998,186.75**	**9,355,283.17**	**9,504,658.40**	**8,246,061.44**	**5,776,425.52**	**6,533,082.84**	**7,060,185.83**	**7,750,617.87**	**7,438,776.86**
Cost of Sales													
COS Books & Stationery	2,090,838.51	165,481.83	214,591.67	216,008.25	191,900.36	338,625.32	342,014.28	333,061.84	5,308.34	11,908.14	11,908.14	13,496.75	246,533.59
COS Lecturing	21,880,839.39	1,688,304.51	1,678,527.00	1,672,602.68	1,793,981.82	2,087,045.82	1,931,274.13	1,567,153.52	1,896,820.37	1,864,081.15	2,012,663.89	1,768,247.65	1,920,136.85
COS Training Materials	299,690.17	37,039.05	33,366.83	33,441.84	31,587.24	50,807.26	50,862.79	43,020.58	86.98	195.13	195.13	221.16	18,866.18
COS Certifications & Subscriptions	1,820,415.17	418,878.50	266,872.62	78,062.22	-	37,114.59	595,956.71	65,973.07	14,628.00	46,372.95	185,434.01	18,911.70	92,210.80
COS Other	87,802.32	-	-	-	-	3,800.00	137.51	16,892.67	5,148.32	15,887.36	39,786.46	-	6,150.00
COS Postage & Courier	276,109.23	25,064.28	25,585.62	25,648.51	23,752.55	36,910.82	36,910.82	29,392.88	-	-	-	-	72,843.75
COS Study kit - Laptops	5,713,398.67	195,587.04	440,671.15	211,746.31	-	124,450.88	1,438,562.51	2,529,037.27	539,480.51	-	-	46,396.00	187,467.00
COS Study Material General	22,301.00	-	-	-	-	-	22,301.00	-	-	-	-	-	-
COS Exams - Equipment rentals	171,056.75	75,158.25	-	-	-	-	-	-	-	95,898.50	-	-	-
COS Exams - Examination centres	38,330.40	16,200.00	-	-	-	-	630.40	-	19,750.00	1,750.00	-	-	-
Total Cost of Sales	**32,400,781.61**	**2,621,713.46**	**2,659,614.89**	**2,237,509.81**	**2,041,221.97**	**2,678,754.69**	**4,418,650.15**	**4,584,531.83**	**2,481,222.52**	**2,036,093.23**	**2,249,987.63**	**1,847,273.26**	**2,544,208.17**
Gross Profit	**60,274,130.63**	**4,479,710.42**	**5,260,868.98**	**5,752,216.00**	**5,956,964.78**	**6,676,528.48**	**5,086,008.25**	**3,661,529.61**	**3,295,203.00**	**4,496,989.61**	**4,810,198.20**	**5,903,344.61**	**4,894,568.69**
Other Income													
Interest Received	249,425.89	23,416.89	26,103.56	24,907.10	32,658.77	33,220.36	15,034.13	5,987.18	15,280.37	16,041.97	16,655.82	18,169.30	21,950.44
Bad Debts Recovered	2,865,247.28	18,700.00	88,906.05	50,202.00	17,845.10	69,812.74	228,301.64	108,066.13	169,256.85	256,155.45	364,424.41	354,885.13	1,138,691.78
Management fees received	206,759.00	-	-	-	-	-	-	-	206,759.00	-	-	-	-
Recoveries	52,500.00	52,500.00	-	-	-	-	-	-	-	-	-	-	-
Total Other Income	**3,373,932.17**	**94,616.89**	**115,009.61**	**75,109.10**	**50,503.87**	**103,033.10**	**243,335.77**	**114,053.31**	**391,296.22**	**272,197.42**	**381,080.23**	**373,054.43**	**1,160,642.22**
Operating Expenses													
Advertising & marketing	10,242,630.56	549,969.62	555,296.63	485,721.87	433,368.75	452,605.09	1,003,198.69	2,280,245.03	972,314.35	1,184,028.42	1,003,829.35	811,326.26	510,726.50
Cleaning	97,140.64	6,596.89	6,761.94	16,208.25	167.99	8,565.16	16,602.27	17,996.26	8,726.16	8,408.26	4,170.26	2,937.20	-
Bank Charges	305,755.66	14,342.58	11,578.34	6,582.27	21,940.95	40,870.58	59,528.88	23,371.46	25,088.79	18,737.42	26,839.40	17,683.43	39,191.56
Computer Expenses	62,622.28	-	-	4,920.85	6,900.00	578.00	7,835.18	8,068.38	-	24,235.09	4,389.05	3,248.75	2,446.98
Development Costs	1,599,079.44	126,859.13	199,725.75	140,596.51	137,019.00	147,637.03	120,581.65	109,690.50	102,187.32	166,500.04	112,216.94	143,905.08	92,160.49
Electricity & Water	2,183,846.60	129,587.76	137,813.05	188,710.11	214,332.20	160,511.86	177,909.50	206,237.27	202,752.05	181,125.30	210,483.38	202,586.52	171,797.60
Entertainment	106,799.75	-	-	-	-	-	-	-	12,824.80	89,319.40	1,529.00	405.00	2,721.55
Insurance	190,680.53	10,742.38	10,742.38	10,742.38	10,742.38	10,742.38	69,277.38	10,742.38	13,242.38	10,742.38	10,742.38	11,598.00	10,623.73
Management Fees	1,307,869.00	114,960.00	115,000.00	106,000.00	115,954.50	50,954.50	115,000.00	115,000.00	115,000.00	115,000.00	115,000.00	115,000.00	115,000.00
Office Consumables	129,385.01	5,770.17	-	1,941.14	-	5,240.99	18,850.16	21,488.65	9,975.11	15,819.88	29,701.75	9,628.67	10,968.49
Printing & Stationary	102,726.14	-	-	-	-	230.00	28,459.67	10,801.31	1,325.21	27,935.62	310.50	7,524.66	26,139.17

Profit and Loss

	YTD	JUL 2020	JUN 2020	MAY 2020	APR 2020	MAR 2020	FEB 2020	JAN 2020	DEC 2019	NOV 2019	OCT 2019	SEP 2019	AUG 2019
Professional Fees	1,255,992.74	83,861.03	69,531.50	171,767.50	160,052.50	160,052.50	161,980.30	153,839.63	89,068.93	62,511.35	107,047.50	12,000.00	24,280.00
Rent - Cape Town	826,757.52	3,726.00	3,726.00	88,066.86	88,066.86	88,066.86	88,066.86	77,839.68	77,839.68	77,839.68	77,839.68	77,839.68	77,839.68
Rent - Midrand	5,923,220.10	337,000.00	337,000.00	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01	524,922.01
Repairs & Maintenance	317,991.70	2,079.40	9,458.76	4,060.48	3,183.06	17,780.50	23,835.76	11,873.82	16,745.82	87,132.09	3,705.19	8,437.19	129,699.63
Salaries & wages	13,534,155.44	1,120,855.00	1,142,197.02	1,040,285.16	1,034,082.13	1,166,069.13	1,377,504.37	1,207,336.48	1,140,765.42	1,051,510.24	1,060,495.29	1,146,501.09	1,046,554.11
Salary Expenses	101,529.83	-	1,047.21	-	298.00	13,489.58	11,546.23	11,193.25	14,823.86	6,916.71	18,436.99	10,817.67	12,960.33
Security	516,205.15	60,030.00	60,030.00	60,030.00	60,030.00	50,561.40	41,279.61	29,236.24	31,044.82	30,521.22	29,708.53	33,279.21	30,454.12
Staff Training	237,849.45	118,800.00	-	-	-	-	49,916.85	-	-	-	-	20,492.50	48,640.10
Subscriptions	251,792.38	32,777.15	36,917.43	24,976.81	18,759.46	12,440.43	11,821.63	16,999.26	15,152.71	17,101.77	18,975.07	28,959.58	16,911.08
Telephone & Internet	457,913.42	40,007.36	43,508.99	37,379.60	43,066.09	33,551.72	40,146.09	40,196.18	36,980.81	39,286.43	34,857.89	34,586.83	34,345.43
Travel & Accommodation	54,684.81	-	-	-	-	-	13,176.89	23,713.17	-	6,519.50	9,222.22	700.05	1,352.98
Bad Debts	3,588,611.63	1,038,989.67	2,536,732.96	-	-	-	-	-	-	-	-	-	12,889.00
Doubtful debt - Provision	(289,792.84)	(289,792.84)	-	-	-	-	-	-	-	-	-	-	-
Bad debt - provision	3,643,556.94	(225,628.96)	3,869,185.90	-	-	-	-	-	-	-	-	-	-
CI OPEX FEES	2,259,755.61	67,375.00	126,500.00	175,715.00	234,438.36	207,000.00	220,000.00	219,776.53	243,515.10	164,000.00	168,500.00	432,935.62	-
Depreciation & Amortization	1,109,163.30	133,418.80	114,780.24	108,782.71	106,477.17	101,034.60	98,271.10	85,034.87	82,748.22	74,074.33	72,852.11	67,921.55	63,767.60
Interest paid	674,861.36	-	5,735.11	52,317.11	51,049.96	52,296.72	48,527.20	68,130.12	68,098.93	77,047.61	87,196.85	82,817.91	81,643.84
Staff Welfare	63,876.64	-	929.80	-	-	-	25,963.98	32,307.17	500.00	1,935.00	-	2,240.69	-
Software Subscriptions	108,972.83	3,773.37	7,413.29	11,440.00	3,716.82	6,454.43	14,241.35	20,308.92	6,742.63	17,380.97	11,437.45	2,438.00	3,625.60
Equipment-Rentals	74,415.88	4,973.97	5,191.64	5,213.21	5,213.21	10,691.16	5,773.44	5,315.12	5,315.12	5,315.12	5,097.45	8,158.22	8,158.22
SARS - Interest and penalties	34,610.67	34,610.67	-	-	-	-	-	-	-	-	-	-	-
Workmens compensation	72,451.14	-	-	72,451.14	-	-	-	-	-	-	-	-	-
Research fees	56,925.00	-	-	-	-	-	-	-	-	-	-	56,925.00	-
Total Operating Expenses	**51,204,036.31**	**3,525,684.15**	**9,406,803.94**	**3,338,830.97**	**3,273,781.40**	**3,322,346.63**	**4,374,217.05**	**5,331,663.69**	**3,817,700.23**	**4,085,865.84**	**3,749,506.24**	**3,877,816.37**	**3,099,819.80**
Canteen													
Sales													
Canteen Sales	551,025.44	2,514.06	107.00	-	-	52,896.13	93,848.23	51,165.07	11,295.92	57,160.26	101,171.66	83,624.50	97,242.61
Catering sales	184,010.00	22,585.00	-	-	-	59,195.00	18,715.00	7,285.00	11,430.00	13,015.00	33,920.00	17,865.00	-
Quantam Sales	7,326.30	-	-	-	-	-	3,956.01	-	-	564.09	2,806.20	-	-
Gym fees	3,600.02	-	-	-	-	1,440.01	960.01	480.00	-	-	-	720.00	-
Total Sales	**745,961.76**	**25,099.06**	**107.00**	**-**	**-**	**113,531.14**	**117,479.25**	**58,930.07**	**22,725.92**	**70,739.35**	**137,897.86**	**102,209.50**	**97,242.61**
Cost of sales													
COS - Catering	(88,356.40)	(13,674.15)	(484.73)	-	-	(3,524.73)	(11,776.39)	(18,344.77)	(3,970.29)	(8,278.34)	(15,086.71)	(13,216.29)	-
COS - Canteen	(494,751.44)	(3,370.48)	(4,710.59)	-	-	(90,427.74)	(90,348.55)	(60,432.14)	(7,309.09)	(29,468.77)	(79,949.52)	(54,962.15)	(73,772.41)
Total Cost of sales	**(583,107.84)**	**(17,044.63)**	**(5,195.32)**	**-**	**-**	**(93,952.47)**	**(102,124.94)**	**(78,776.91)**	**(11,279.38)**	**(37,747.11)**	**(95,036.23)**	**(68,178.44)**	**(73,772.41)**
Operating expenses													
Canteen - Subscriptions	(12,605.15)	(1,223.90)	(1,269.10)	(1,320.68)	(1,359.47)	(1,929.26)	(1,125.32)	(1,088.62)	(1,073.38)	(1,106.95)	(1,108.47)	-	-
Canteen - Bank charges	(22,990.94)	(496.88)	-	(38.00)	(687.91)	(6,045.22)	(5,379.31)	(852.38)	(1,984.14)	(1,304.08)	(3,140.11)	(952.21)	(2,110.70)
Canteen - Staff salaries	(340,900.12)	(25,705.90)	(25,705.90)	(25,705.90)	(25,705.90)	(25,705.90)	(30,338.66)	(30,338.66)	(30,338.66)	(30,338.66)	(30,338.66)	(30,338.66)	(30,338.66)
Canteen - Repairs and Maintenance	(4,243.00)	(3,895.00)	-	-	-	-	-	-	-	-	-	-	(348.00)
Quantum Subscriptions	(11,246.70)	(1,139.29)	(1,139.29)	(818.94)	(818.94)	(1,139.29)	(1,139.29)	(1,139.29)	(1,139.29)	(1,139.29)	(1,633.79)	-	-
Quantum Maintenance	(1,155.00)	(1,085.00)	-	-	-	-	-	-	-	-	-	-	(70.00)
Quantum Petrol	(17,341.66)	(300.00)	-	-	-	(1,000.00)	(2,680.07)	(2,220.00)	(780.00)	(1,560.15)	(3,760.00)	(2,009.89)	(3,031.55)
Total Operating expenses	**(410,482.57)**	**(33,845.97)**	**(28,114.29)**	**(27,883.52)**	**(28,572.22)**	**(35,819.67)**	**(40,662.65)**	**(35,638.95)**	**(35,315.47)**	**(35,449.13)**	**(39,981.03)**	**(33,300.76)**	**(35,898.91)**
Canteen Profit/(Loss)	**(247,628.65)**	**(25,791.54)**	**(33,202.61)**	**(27,883.52)**	**(28,572.22)**	**(16,241.00)**	**(25,308.34)**	**(55,485.79)**	**(23,868.93)**	**(2,456.89)**	**2,880.60**	**730.30**	**(12,428.71)**
Net Profit/(Loss)	**12,196,397.84**	**1,022,851.62**	**(4,064,127.96)**	**2,460,610.61**	**2,705,115.03**	**3,440,973.95**	**929,818.63**	**(1,611,566.56)**	**(155,069.94)**	**680,864.30**	**1,444,652.79**	**2,399,312.97**	**2,942,962.40**

Table 3.2 Consolidated profit and loss

3.5 Profit and loss statements

Table 3.2 above showed the consolidated profit and loss statement of the AIE. The main reason for the analysis of the faculty-specific profit and loss statement is to indicate how each faculty performs financially. Tables 3.2–3.7 indicate the profit and loss statements per faculty for the AIE. The following faculties were analysed:

- School of Business, Entrepreneurship & Finance
- School of Information Technology & Data Science
- School of Draughting & Technical Design
- School of Visual Design, Marketing & Branding Profit
- School of Engineering & Science
- School of Architecture & Built Environment

3.5.1 School of Business, Entrepreneurship & Finance profit and loss statement

Table 3.2. School of Business, Entrepreneurship & Finance profit and loss statement

Profit and Loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

School of Business, Entrepreneurship & Finance

Account	2020
Trading Income	
Cancellation – Course fees	(85 802,32)
Course fees	8 067 228,13
Exam fees	91 800,00
School of Business, Entrepreneurship & Finance – Course fees	(8 165,00)
Transfer fees	43 320,10
Total Trading Income	**8 108 380,91**
Cost of Sales	
COS Books & stationery	226 997,28
COS Certifications & subscriptions	235 766,13
COS Lecturing – Business, Entrepreneurship & Finance	224 327,00
Cost of sales – Lecturing	1 519 788,65
Total Cost of Sales	**2 206 879,06**
Gross Profit	**5 901 501,85**

Table 3.2 above contains the trading income and cost of sales for the Faculty of Business, Entrepreneurship & Finance. The trading income consists of the cancellation of course fees, course fees, exam fees and student transfer fees, as these total to R8 108 380.91 trading income. Cost of sales includes books and stationery, certifications, subscriptions and lecturing expenses as the cost of sales total to R2 206 879.06. The business faculty's gross profit was calculated as follows: total trading income minus total sales cost: R8 108 380.91 – R2 206 879.06 = R5 901 501.85.

3.5.2 School of Information Technology & Data Science profit and loss statement

Table 3.3 School of Information Technology & Data Science profit and loss statement

Profit and Loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

School of Information Technology & Data Science

Account	2020
Trading Income	
Cancellation – Course fees	(97 953,33)
Course fees	10 472 892,43
Exam fees	3 610,00
Sales – Laptops	58 000,00
School of Information Science & Technology - Admin fees	3 195,00
School of Information Science & Technology - Course fees	184 696,34
Transfer fees	124 006,16
Total Trading Income	**10 748 446,60**
Cost of Sales	
COS Books & stationery	46 229,12
COS Certifications & subscriptions	727 739,45
COS Lecturing - Information Science & Technology	88 862,00
COS Training materials	13 889,70
Cost of sales – Lecturing	1 932 043,11
Total Cost of Sales	**2 808 763,38**
Gross Profit	**7 939 683,22**

Table 3.3 above contains the trading income and cost of sales for the School of Information Technology & Data Science. The trading income consists of cancellation fees, course fees, exam fees, laptop sales, administration fees, course fees and transfer fees. These total to R10 748 446.60 trading income. Cost of sales includes books and stationery, certifications and subscriptions, training materials and lecturing costs total to R2 808 763.38. The School of Information Technology & Data Science gross profit was calculated as total trading income minus total sales cost: R10 748 446,60 – R2 808 763.38 = R7 939 683.22.

3.5.3 School of Draughting & Technical Design profit and loss statement

Table 3.4 School of Draughting & Technical Design profit and loss statement

Profit and loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

Faculty of School of Draughting & Technical Design

Account	2020
Trading Income	
Cancellation – Course fees	(94 852,00)
Course fees	15 018 507,49
Exam fees	215 500,00
School of Draughting & Technical Design – Course fees	2 996 073,26
Transfer fees	91 653,28
Total Trading Income	**18 226 882,03**
Cost of Sales	
COS Books & stationery	65 744,70
COS Certifications & subscriptions	3 000,00
COS Exams – Equipment rentals	171 056,75
COS Exams – Examination centres	1 750,00
COS Lecturing – Draughting & Technical Design	268 622,00
COS Training materials	81 921,65
Cost of sales – Lecturing	3 643 974,62
Total Cost of Sales	**4 236 069,72**
Gross Profit	**13 990 812,31**
Operating Expenses	
Bad debts	4,70
Salary expenses	5 230,80
Total Operating Expenses	**5 235,50**

The profit and loss (Table 3.4) of the School of Draughting and Technical Design contains trading income, cost of sales and operating expenses. The trading income includes cancellation course fees, course fees, exam fees and transfer fees. These total to R18 226 882.03 of total trading income. Cost of sales includes books of stationery, certifications, subscriptions, equipment rentals, examination centres, lecturing costs and training material and total to R4 236 069.72 costs of sales. The gross profit of the School of Draughting and Technical Design was calculated as trading income minus cost of sales minus operating expenses: R18 226 882.03 – R13 990 812.31 – R5 235.50 = R13 985 576.81.

3.5.4. School of Visual Design, Marketing & Branding profit and loss statement

Table 3.5 School of Visual Design, Marketing & Branding profit and loss statement

Profit and loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

Faculty School of Visual Design, Marketing & Branding

Account	2020
Trading Income	
Cancellation – Course fees	(151 491,11)
Course fees	11 538 633,97
Sales – Laptops	14 000,00
School of Visual Design, Marketing & Branding – Course fees	93 450,90
Transfer fees	84 888,09
Total Trading Income	**11 579 481,85**
Cost of Sales	
COS Books & stationery	73 389,69
COS Certifications & Subscriptions	124 386,49
COS Lecturing – Visual Design, Marketing & Branding	158 430,00
COS Training materials	134 147,13
Cost of sales – Lecturing	2 238 578,28
Total Cost of Sales	**2 728 931,59**
Gross Profit	**8 850 550,26**

The School of Visual Design, Marketing and Branding profit and loss table (Table 3.5) contains trading income and cost of sales. The trading income includes cancellation course fees, course fees, sale of laptops and transfer fees. These total to R11 579 481.85 of total trading income. Cost of sales includes books, stationery, certifications, subscriptions, lecturing costs, training material and total to R2 728 931.59 costs of sales. The gross profit of the School of Visual Design, Marketing and Branding was

calculated as trading income minus cost of sales: R11 579 481.85 – R2 728 931.59 = R8 850 550.26.

3.5.5. School of Engineering & Science profit and loss statement

Table 3.6 School of Engineering & Science profit and loss statement

Profit and loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

School of Engineering & Science

Account	2020
Trading Income	
Cancellation – Course fees	(62 645,62)
Course fees	13 351 754,43
Exam fees	605 150,00
School of Engineering & Science – Course fees	3 547 605,60
School of Engineering & Science – Exam fees	655 900,00
Transfer fees	71 635,46
Total Trading Income	**18 169 399,87**
Cost of Sales	
COS Books & stationery	857 145,01
COS Certifications & subscriptions	52 980,00
COS Exams – Examination centres	16 200,00
COS Lecturing – Engineering & Science	112 408,00
COS Training materials	9 488,49
Cost of sales – Lecturing	7 463 844,89
Total Cost of Sales	**8 512 066,39**
Gross Profit	**9 657 333,48**
Operating Expenses	
Bad debts	5,00
Equipment rentals	1 306,02
Salary expenses	4 549,00
Total Operating Expenses	**5 860,02**

The School of Engineering & Science profit and loss table (Table 3.6) contains trading income, cost of sales and operating expenses. The trading income includes cancellation course fees, exam fees, course fees and transfer fees. These total to R18 169 399.87 of total trading income. Cost of sales includes books and stationery,

certifications, subscriptions, examination centres, lecturing costs and training material and total to R8 512 066.39 costs of sales.

The gross profit of the Faculty of the School of Engineering & Science was calculated trading income – cost of sales – operating expenses: R18 169 399.87 – R8 512 066.39 – R5 860.02 = R9 651 473.46.

3.5.6. School of Architecture & The Built Environment profit and loss statement

Table 3.7 School of Architecture & The Built Environment profit and loss statement

Profit and loss

Academic Institute of Excellence (Pty) Ltd
For the year ended 31 July 2020

Faculty in the School of Architecture & The Built Environment

Account	2020
Trading Income	
Cancellation – Course fees	(139 400,16)
Course fees	27 089 532,16
Sales – Laptops	44 100,00
School of Architecture & The Built Environment – Admin fees	(4 000,00)
School of Architecture & The Built Environment – Course fees	944 143,75
School of Draughting & Technical Design – Course fees	6 536,00
Transfer fees	71 654,58
Total Trading Income	**28 012 566,33**
Cost of Sales	
COS Books & stationery	1 021 455,29
COS Certifications & subscriptions	17 050,00
COS Lecturing – Architecture & The Built Environment	227 490,00
COS Training materials	15 879,00
Cost of sales – Lecturing	3 959 580,64
Total Cost of Sales	**5 241 454,93**
Gross Profit	**22 771 111,40**
Operating Expenses	
Repairs & maintenance	5 040,00
Salaries & wages	20 500,00
Salary expenses	1 600,00
Staff Training	12 500,00
Total Operating Expenses	**39 640,00**

The School of Architecture & The Built Environment's profit and loss table (Table 3.7) contains trading income, cost of sales and operating expenses. The trading income

includes cancellation course fees, sale of laptops, course fees and transfer fees. These total to R28 012 566.33 of total trading income. Cost of sales includes books and stationery, certifications, subscriptions, lecturing costs, training material and total to R5 241 454.93 costs of sales.

Operating expenses include repairs and maintenance, salaries and wages, and staff training, which equal to R39 640.00 total operating expenses.

The gross profit of the Faculty of the School of Architecture & The Built Environment were calculated as trading income – cost of sales – operating expenses: R28 012 566.33 – R5 241 454.93 – R39 640.00 = R22 731 471.40.

The above P&L statements of each faculty indicated that each faculty was performing financially stable.

3.6 Student numbers

Table 3.8 indicates the number of students per faculty per intake at the Academic Institute of Excellence from 2019–2020.

Table 3.8 Student numbers per faculty per intake

Faculty	Intake 1_2019	Intake 2_2019	Intake 3_2019	Intake 1_2020	Denominator	% Split	Total students
Architecture & The Built Environment	293	80		366	410	21%	739
Business, Entrepreneurship & Finance	128	84		147	222	11%	359
Draughting & Technical Design	238	68	42	253	356	18%	601
Engineering & Science	522	468	392	761	501	26%	2 143
Information technology & Data Science	146	67		159	220	11%	372
Visual Design, Marketing & Branding	169	64		182	240	12%	415
	1 496	831	434	1868	1 946	100%	4 629

Not all the faculties have three intakes per year, and it is only applicable to the Engineering and Draughting faculties. The Architecture and The Built Environment had 739 students and made up 21% of the total student numbers. The Business Entrepreneurship and Finance faculty had 359 students and had 11% of the total student numbers.

The Draughting and Technical Design faculty had 601 students and 18% of the student number. The Engineering faculty, which is the largest, had 2143 students and 26% of the total student numbers.

The Information Technology faculty had 372 students and 11% of total student numbers. The Visual Design faculty had 415 students and 12% of the total student numbers. The Academic Institute of Excellence had a total of 4629 students during four intakes from 2019–2020.

The table also indicated that the AIE enrolment numbers increased from 2019–2020. The School of Architecture enrolments grew from 293 students to 366; School of Business student enrolments increased from 128 to 147 students; School of Draughting and Technical Design numbers increased from 238 to 253; School of Engineering Science increased from 522 to 761; School of Information Technology & Data Science enrolments grew from 146 to 159 in 2020 and, lastly, the School of Visual Design and Marketing grew their student numbers from intake-1 in 2019 from 169 to 182 in intake-1 of 2020. Overall, the AIE enrolment numbers grew from 1496 students in intake-1 in 2019 to 1868 in intake-1 in 2020, increasing by 372 students.

3.6.1 Financial analysis per faculty

Table 3.9 Financial analysis per faculty

Faculty	Architecture	Draughting	VD	IT	Business	Engineering
Total trading Income	28 090 921	18 294 904	11 625 308	10 787 251	8 150 763	18 265 166
Total cost of sales	6 898 880	5 674 933	3 698 292	3 697 175	3 103 386	10 537 808
Gross profit	21 192 041	12 619 971	7 927 016	7 090 076	5 047 377	7 727 359
	75%	69%	68%	66%	62%	42%
Total other income	63 535	55 157	37 159	34 056	34 366	77 654
Total operating expenses	8 895 680	7 763 174	5 745 154	5 548 955	6 023 336	11 160 346
	32%	42%	49%	51%	74%	61%
Net profit	12 359 896	4 911 954	2 219 021	1 575 177	- 941 593	- 3 355 334
	44%	27%	19%	15%	-12%	-18%
Average student no.	410	356	240	220	222	501
Average profit	30 183	13 817	9 265	7 176	-4 251	- 6 704

Table 3.9 indicates the gross and net profit per faculty and the total operating expenses per faculty, calculated in percentages. The table includes the average student numbers per faculty and the average profit per student per faculty.

The School of Architecture & The Built Environment had a gross profit of R21 192 041.00 and calculates to 75% gross profit percentage (gross profit/total trading income). The total operating expense is R8 895 680.00, which translates to 32% total operating expense percentage (total operating expenses/total trading income). Net profit is R12 359 896.00, which is a 44% net profit percentage. The average student number for the School of Architecture & The Built Environment was 410, and the average profit made by a student was R30 183.00; this was calculated by dividing the net profit/student number.

The School of Draughting & Technical Design had a gross profit of R12 619 971.00 and a 69% gross profit percentage. Operating expense was R7 763 174.00 and an operating expense percentage of 42% (total operating expense/total trading income). Net profit for the draughting faculty was R4 911 954.00, and a 27% net profit percentage. The number of students in the faculty was 356, and the average profit per student was R13 817.00; this was calculated by dividing the net profit/student number.

The School of Visual Design, Marketing & Branding gross profit was R7 927 016.00 and a 68% gross profit percentage (gross profit/total trading income). Operating expenses for the faculty were R5 745 154.00 and operating expense percentage 49%. The net profit for the faculty was R2 219 021.00 and a 19% net profit percentage. Student numbers for the School of Visual Design, Marketing & Branding were 240, and the average profit per student was R9 265.00.

School of Information Technology & Data Science gross profit was R7 090 076.00 and a 66% gross profit percentage. The faculty's operating expenses were R5 548 955.00, and the operating expense percentage was 51%. Net profit was R1 575 177.00 and a 15% net profit percentage. There were 220 students in the faculty, and the average profit per student was R71 76.00.

The School of Business, Entrepreneurship & Finance gross profit was R5 047 377.00 with a 62% gross profit percentage. Total operating expenses were R6 023 336.00 with a 74% operating expense percentage. Total net profit was –R941 593.00 and a negative 12% net profit percentage. The School of Business had 222 students, and the average profit per student was –R4251.00.

School of Engineering & Science gross profit was R7 727 359.00 with a 42% gross profit percentage. Operating expenses for the faculty were R11 160 346.00, with a 61% operating expense percentage. Net profit was –R3 355 334.00 with a negative net profit percentage of –18%. Total students were 501, and the average profit per student was –R6704.00.

3.6.2. Financial analysis per faculty summary

To summarise the results from Table 3.9, the objective was to indicate the gross and net profit of the AIE per faculty and the total operating expenses per faculty, calculated in percentages. The table included the average student numbers per faculty and the average profit per student per faculty. The results were stated in decreasing order from the faculty that performed the best financially to the faculty that performed the worst. The criteria were as follows: highest net profit generated and highest average student profit.

1. The School of Architecture & The Built Environment performed the best financially of all the faculties. Net profit was R12 359 896.00, which is a 44% net profit percentage. Net profit was R12 359 896.00, which is a 44% net profit percentage. The 44% net profit margin percentage indicates that for every R1.00 spent in the faculty R0.44 was made. The average profit made by a student was R30 183.00.
2. The School of Draughting & Technical Design was second regarding financial performance. Net profit for the draughting faculty was R4 911 954.00, and a 27% net profit percentage, and the average profit per student was R13 817.00.

3. The School of Visual Design, Marketing & Branding was third with the following financial analysis; net profit for the faculty was R2 219 021.00 with a 19% net profit percentage; the average profit per student was R9 265.00.
4. School of Information Technology & Data Science was fourth with a net profit of R1 575 177.00 and a 15% net profit percentage. There were 220 students in the faculty, and the average profit per student was R7 176.00.
5. The School of Business, Entrepreneurship & Finance is one of the faculties that did not make a profit. The faculty had a net profit of –R941 593.00 and a negative 12% net profit percentage; the average profit per student was –R4251.00. The negative 12% net profit translates to a negative net income of –R0.12 for each rand of sales generated for the faculty.
6. School of Engineering & Science performed the worst financially. Net profit was –R3 355 334.00 with a negative net profit percentage of –18%, and the average profit per student was –R6704.00. The –18% net profit translates to a negative net income of –R0.18 for each rand of sales generated for the School of Engineering faculty.

3.7. Comparative pricing analysis

The Academic Institute of Excellence has two campuses, which are in Midrand and Cape Town. The PHEI that competes with the AIE is Richfield Institute of Technology and Varsity College. The following tables will indicate the pricing of Varsity College and The Richfield Graduate Institute of Technology. The comparative analysis was made against the same qualifications that both institutions have to offer over the different study methods. The main reason why Richfield Graduate Institute of Technology and Varsity College are seen as competitors is that these PHEIs are operating in the same region and offer similar qualifications as the AIE and various study methods. Table 3.10 below indicates the pricing of the qualifications at the AIE.

Table 3.10 Pricing structure of AIE

Approved Programme Payment Terms and Costs for Intake 2, 2020

		Course fee 2020						
No#	Programme Name (as it appears on Fact Sheets and website)	Full Time	Part Time	Online	Deposit	Laptop Cost	Course duration	Laptop compulsory
School of Draughting & Technical Design								
1	Multi Disciplinary Draughting National Certificate (MDDOP)	R 60 400	R 59 800	R 40 700	R 4 000	R 16 000	9 Months	Yes
2	National Diploma: Structural Steelwork Detailing NQF5 (1st year)	R 59 200	R 58 700	R 39 800	R 4 000	R 16 000	12 Months	Yes
3	National Diploma: Structural Steelwork Detailing NQF5 (2nd year)	R 59 200	R 58 700	R 39 800	R 4 000	R 16 000	12 Months	Yes
4	Industrial and Product Design Certification	R 48 200	R 47 800	R 38 000	R 4 000	R 16 000	10 Months	Yes
5	Technical Bridging Course	R 7 200	NA	R 5 000	R -	n/a	5 Days	No
School of Information Science & Technology								
6	Certificate: IT Systems Developer NQF5 (Programmer/Developer)	R 59 600	R 59 000	R 42 400	R 4 000	R 16 000	12 Months	Yes
7	Systems Developer NQF5 (Programmer/Developer) + Int Diploma in IT	R 66 600	R 66 000	R 49 400	R 4 000	R 16 000	13 Months	Yes
8	Certificate: IT Systems Support NQF4 (IT Support/PC Technician)	R 59 600	R 59 000	R 42 400	R 4 000	R 16 000	12 Months	Yes
9	Certificate: IT Systems Support NQF5 (Server/Network Technician)	R 59 600	R 59 000	R 42 400	R 4 000	R 16 000	12 Months	Yes
10	Database Administrator (DBA) Certification	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
11	Database Developer (DBD) Certification	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
12	Data Science Solutions with Microsoft Azure	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
13	Business Intelligence (BI): Data Analysis & Reporting Certification	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
14	Business Intelligence (BI): Developing BI Solutions Certification	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
15	Advanced Networking Administration with CISCO Certification	R 48 200	R 47 800	R 43 800	R 4 000	R 16 000	10 Months	Yes
School of Business, Entrepreneurship & Finance								
16	Certificate: Bookkeeping NQF3 (Junior Bookkeeper)	R 28 800	R 27 200	R 22 400	R 4 000	R 9 000	8 Months	Yes
17	Certificate: Bookkeeping NQF4 (Senior Bookkeeper)	R 14 400	R 13 600	R 11 200	R 4 000	R 9 000	6 Months	Yes
18	National Diploma: Technical Financial Accounting NQF5	R 14 400	R 13 600	R 11 200	R 4 000	R 9 000	6 Months	Yes
19	National Diploma: Financial Accounting NQF6	R 28 800	R 27 200	R 22 400	R 4 000	R 9 000	12 Months	Yes
20	Certificate: Public Sector Accounting NQF4	R 28 800	R 27 200	R 22 400	R 4 000	R 9 000	12 Months	Yes
21	National Diploma: Public Sector Accounting NQF5	R 28 800	R 27 200	R 22 400	R 4 000	R 9 000	12 Months	Yes
22	National Diploma: Public Sector Accounting NQF6	R 28 800	R 27 200	R 22 400	R 4 000	R 9 000	12 Months	Yes
23	Certificate: Office Administration NQF5 (Office Administrator)	R 43 200	R 40 800	R 33 600	R 4 000	R 9 000	12 Months	No
24	Higher Certificate: Office Administration NQF5	R 21 600	R 20 400	R 16 800	R 4 000	R 9 000	8 Months	No
25	National Diploma: Office Administration NQF6 (Senior Administration)	R 21 600	R 20 400	R 16 800	R 4 000	R 9 000	8 Months	Yes
26	CIMA Certificate in Business Accounting (CIMA CERT BA)	R 26 200	R 23 800	R 22 000	R 4 000	R 9 000	6 Months	Yes
27	CIMA Diploma In Management Accounting (CIMA DIP MA)	R 33 000	R 29 800	R 26 400	R 4 000	R 9 000	12 Months	Yes
28	CIMA Advanced Diploma In Management Accounting (CIMA ADV DIP MA)	R 33 000	R 29 800	R 26 400	R 4 000	R 9 000	12 Months	Yes
29	National Certificate: Project Management NQF4	R 54 000	R 53 000	R 44 000	R 4 000	R 9 000	12 Months	No
30	National Diploma: Project Management NQF 5 (1'st year)	R 54 000	R 53 000	R 44 000	R 4 000	R 9 000	12 Months	No

31	National Diploma: Project Management NQF 5 (2'nd year)	R 54 000	R 53 000	R 44 000	R 4 000	R 9 000	12 Months	No
32	Higher Certificate: Entrepreneurship, Business Management with Future Tech	R 59 600	R 59 000	R 42 300	R 4 000	R 9 000	12 Months	No
33	Professional Executive and Personal Assistant Certification	R 48 200	R 47 800	R 38 000	R 4 000	R 9 000	10 Months	No
34	Event Management, Travel, Tourism and Digital Marketing Certification	R 48 200	R 47 800	R 38 000	R 4 000	R 9 000	10 Months	Yes
35	ACCA Applied Knowledge L1 Certificate	R 22 100	R 19 500	R 16 500	R 4 000	R 9 000	6 Months	Yes
36	ACCA Applied Skills L2 Certificate	R 46 200	R 40 200	R 34 200	R 4 000	R 9 000	12 Months	Yes
37	ACCA Strategic Professional L3 Certificate	R 15 900	R 14 000	R 11 800	R 4 000	R 9 000	4 Months	Yes
38	ACCA FIA Introductory Certificate in Financial and Management Accounting	R 14 800	R 13 000	R 11 000	R 4 000	R 9 000	4 Months	Yes
39	ACCA FIA Intermediate Certificate in Financial and Management Accounting	R 15 400	R 13 400	R 11 400	R 4 000	R 9 000	4 Months	Yes
40	ACCA FIA Diploma in Accounting and Business	R 23 800	R 21 000	R 17 700	R 4 000	R 9 000	6 Months	Yes
School of Visual Design, Marketing & Branding								
33	FET Certificate: Design Foundation NQF4	R 47 000	R 45 000	R 38 000	R 4 000	R 16 000	12 Months	Yes
34	National Certificate: Graphic Design (Design Techniques) NQF5	R 54 000	R 53 000	R 44 000	R 4 000	R 16 000	12 Months	Yes
35	National Certificate: Web and Interactive Media Design NQF5	R 56 500	R 56 500	R 42 000	R 4 000	R 16 000	12 Months	Yes
36	Digital/Online & Social Media Marketing and Design Certification	R 48 200	R 47 800	R 38 000	R 4 000	R 9 000	10 Months	Yes
37	Advanced 3D Visual Effects and Animation with Maya and V-Ray	R 53 000	R 52 500	R 41 300	R 4 000	R 18 000	10 Months	Yes
38	Advanced 3D Desgin Visualization and Animation with 3DS Max & V-Ray	R 53 000	R 52 500	R 41 300	R 4 000	R 18 000	10 Months	Yes
39	Advanced 2D Animation, Illustration and Storyboard Design with Toon Boom	R 53 000	R 52 500	R 41 300	R 4 000	R 18 000	10 Months	Yes
40	Games Design and Development with Unity 3D	R 53 000	R 52 500	R 41 300	R 4 000	R 18 000	10 Months	Yes
41	Interior Design and Decorating Certification	R 48 200	R 47 800	R 38 000	R 4 000	R 16 000	10 Months	Yes
School of Engineering & Science								
42	National Diploma: Electrical Engineering N1-N6					R 9 000	3 Months/Level	No
43	National Diploma: Electrical Engineering N1-N6: HEAVY CURRENT					R 9 000	3 Months/Level	No
44	National Diploma: Electrical Engineering N1-N6: LIGHT CURRENT	R 14 300	R 14 200	R 11 900		R 9 000	3 Months/Level	No
45	National Certificate, Electrical Engineering: Electrician N1-N3					R 9 000	3 Months/Level	No
46	National Diploma: Mechanical Engineering N1-N6					R 9 000	3 Months/Level	No
47	National Certificate: Motor Mechanics (N1-N3)	Subject cost				R 9 000	3 Months/Level	No
48	National Certificate: Fitter & Turner (N1-N3)					R 9 000	3 Months/Level	No
49	National Certificate: Boilermaker (N1-N3)					R 9 000	3 Months/Level	No
50	National Diploma: Civil/Building Engineering N1-N6	R 3 700	R 3 600	R 3 500		R 9 000	3 Months/Level	No
51	National Certificate: Plumbing N1-N3					R 9 000	3 Months/Level	No
52	National Certificate: Bricklayer & Plastering N1-N3					R 9 000	3 Months/Level	No
53	National Diploma: Chemical Engineering (N1-N6)	Optimal practical module		R 3 500		R 9 000	3 Months/Level	No
54	National Diploma: Management of Civil Engineering Construction Processes NQF5	R 59 200	R 58 700	R 39 800	R 4 000	R 16 000	12 Months	Yes
54	National Diploma: Management of Civil Engineering Construction Processes NQF5	R 59 200	R 58 700	R 39 800	R 4 000	R 16 000	12 Months	Yes
School of Architecture and the Built Environment								
55	National Certificate: Architectural Technology NQF5	R 82 000	R 54 500	R 46 200	R 4 000	R 16 000	12 Months	Yes
56	National Diploma: Architectural Technology NQF6	R 61 000	R 52 000	R 41 400	R 4 000	R 16 000	12 Months	Yes

Table 3.11 indicates the pricing of Varsity College School of Management faculty's qualifications for full-time studies.

Table 3.11 Varsity College full-time pricing structure of the School of Management (Varsity College, 2020)

Full-Time

IIE Qualifications	METHOD A Full Settlement	METHOD B1 10 Instalments	DEPOSIT	METHOD B2 3 Instalments	METHOD B3 6 Instalments	METHOD B4 9 Instalments	METHOD C Early Settlement
School of Management Programmes							
IIE Bachelor of Commerce Honours in Management	63 300	6 960	19 000	15 290	7 850	5 370	60 140
IIE Bachelor of Commerce	84 900	9 330	26 000	20 330	10 430	7 140	80 660
IIE Bachelor of Commerce in Economics	88 000	9 670	27 000	21 050	10 800	7 390	83 600
IIE Bachelor of Commerce in Entrepreneurship	84 900	9 330	26 000	20 330	10 430	7 140	80 660
IIE Diploma in Sport Development & Management	71 900	7 910	22 000	17 220	8 840	6 050	68 310
IIE Higher Certificate in Business Principles & Practice	67 300	7 400	21 000	15 980	8 200	5 610	63 940
IIE Higher Certificate in Event Management	67 300	7 400	21 000	15 980	8 200	5 610	63 940

Source: https://www.varsitycollege.co.za/.

The qualifications that both AIE and Varsity College have to offer in the School of Management for full-time studies are the Higher Certificate in Business Principles & Practice qualification, which is priced at R67 300.00, and the Higher Certificate in Events Management qualification, priced at R67 300.00. The AIE has the following full-time qualifications: Higher Certificate in Business Management priced at R59 300.00, and the Events Management, Travel, Tourism and Digital Marketing Certification, which was priced at R48 200.00.

Table 3.12 below indicates the pricing of Varsity College School of Management faculty's qualifications for part-time studies.

Table 3.12 Varsity College part-time pricing structure of the School of Management (Varsity College, 2020)

IIE Part-Time Programmes – Contact Studies

	METHOD A Full Settlement	METHOD B1 10 Instalments	DEPOSIT	METHOD B2 3 Instalments	METHOD B3 6 Instalments	METHOD B4 9 Instalments	METHOD C Early Settlement
School of Management Programmes							
Qualifications							
IIE Bachelor of Commerce Honours in Management	34 180	3 760	10 270	8 240	4 240	2 880	32 460
IIE Higher Certificate in Bookkeeping	33 750	3 710	10 200	8 130	4 170	2 850	32 070
IIE Higher Certificate in Office Administration	33 750	3 710	10 200	8 130	4 170	2 850	32 070
IIE Postgraduate Diploma in Management	23 310	2 560	7 000	5 630	2 890	1 970	22 150

Both AIE and Varsity College are offering the Higher Certificate in Office Administration qualification in the School of Management for part-time studies, which is priced at R33 750.00. The AIE part-time qualification is a Higher Certificate in Office Administration, which is priced at R20 400.00.

Table 3.13 below indicates the pricing of Varsity College School of Management faculty for online studies.

Table 3.13 Varsity College online pricing structure of the School of Management (Varsity College, 2020)

IIE Distance Programmes – Online Studies

	METHOD A Full Settlement	METHOD B1 10 Instalments	DEPOSIT	METHOD B2 3 Instalments	METHOD B3 6 Instalments	METHOD B4 9 Instalments	METHOD C Early Settlement
School of Management Programmes							
Qualifications							
IIE Bachelor of Commerce	26 040	2 880	7 800	6 300	3 240	2 220	24 720
IIE Bachelor of Commerce in Entrepreneurship	31 220	3 450	9 350	7 550	3 880	2 660	29 640
IIE Higher Certificate in Business Principles & Practice	27 720	3 060	8 300	6 700	3 440	2 360	26 320
IIE Higher Certificate in Human Resource Practice	26 040	2 880	7 800	6 300	3 240	2 220	24 720
IIE Higher Certificate in Logistics & Supply Chain Management	26 040	2 880	7 800	6 300	3 240	2 220	24 720

Online qualifications that AIE and Varsity College are offering that are similar to the online study method in the School of Management is The Higher Certificate in Business Principles & Practice qualification, which is priced at R27 720.00. The AIE offers an online qualification in the form of a Higher Certificate in Business Management, which is priced at R42 300.00.

Table 3.14 below reflects the pricing for the School of Information Technology at Varsity College for full-time studies.

Table 3.14 Varsity College online pricing structure of the School of Information Technology (Varsity College, 2020)

School of Information Technology Programmes							
IIE Bachelor of Computer & Info Science in Application Development	90 300	9 930	28 000	21 500	11 030	7 550	85 790
IIE Bachelor of Computer & Info Science in Network Engineering	90 300	9 930	28 000	21 500	11 030	7 550	85 790
IIE Diploma in IT Software Development	86 200	9 480	26 000	20 780	10 660	7 290	81 890
IIE Higher Certificate in IT Support Services	67 300	7 400	21 000	15 980	8 200	5 610	63 940

The School of Information Technology qualification in which AIE and Varsity College are competing for full-time studies is the Higher Certificate in IT Support Services, priced at R67 300.00. The AIE has the following full-time qualification: Higher Certificate in IT Systems Support (Server/Network Technician), which was priced at R59 600.00

Table 3.15 below reflects the pricing for the School of Information Technology at Varsity College for part-time studies.

Table 3.15 Part-time pricing structure of the School of Management Varsity College (Varsity College, 2020)

School of Information Technology Programmes							
Qualifications							
IIE Higher Certificate in IT Support Services	33 750	3 710	10 200	8 130	4 170	2 850	32 070

AIE and Varsity College's Higher Certificate in IT Support Services, which was priced at R33 750.00, competes in the School of Information Technology Programmes for part-time studies. The AIE has a part-time Higher Certificate in IT Systems Support (Server/Network Technician), priced at R59 600.00.

Table 3.16 below reflects the pricing for the Richfield Institute School of Engineering for full-time studies.

Table 3.16 Full-time studies pricing for the Richfield Institute School of Engineering (Richfield Institute, 2020)

ENGINEERING PROGRAMMES (9 Months - with textbooks only)							
EE/N1-N3	Electrical Engineering N1-N3	20 990	2 500	9 250	4 630	3 080	2 310
EE/N4-N6	Electrical Engineering N4-N6	20 990	2 500	9 250	4 630	3 080	2 310
CE/N4-N6	Civil Engineering N4-N6	20 990	2 500	9 250	4 630	3 080	2 310
ME/N4-N6	Mechanical Engineering N4-N6	20 990	2 500	9 250	4 630	3 080	2 310
CHE/N4-N6	Chemical Engineering N4-N6	20 990	2 500	9 250	4 630	3 080	2 310

The competing qualifications that AIE and Richfield Institute have to offer in the School of Engineering Programmes for full-time studies are the Electric Engineering N1-3, Electric Engineering N4-6, Civil Engineering N4-N6, Mechanical Engineering N4-N6, and Chemical Engineering N4-N6, priced at R20 990.00. The AIE has the following full-time qualifications: Electric Engineering N1-3, Electric Engineering N4-6, Civil Engineering N4-N6, Mechanical Engineering N4-N6, and Chemical Engineering N4-N6, priced at R14 300.

Table 3.17 below reflects the pricing for the Richfield Institute School of Business for full-time studies.

Table 3.17 Full-Time Studies pricing for the Richfield Institute School of Business (Richfield Institute, 2020)

FASSET SETA PROGRAMMES - ICB includes ICB Exams and Fees)								
FASSET/01	3	Certificate Bookkeeping	22 990	2 500	6 830	3 420	2 560	2 050
FASSET/02	4	FETC: Bookkeeping	24 990	2 500	7 500	3 750	2 810	2 250
FASSET/03	4	National Certificate in Small Business Financial Management	19 990	2 500	5 830	2 920	2 190	1 750
FASSET/04	4	National Certificate in Public Sector Accounting	19 990	2 500	5 830	2 920	2 190	1 750
FASSET/05	5	Higher Certificate in Office Administration	27 990	2 500	8 500	4 250	3 190	2 550
FASSET/06	5	Certificate in Office Administration	24 990	2 500	7 500	3 750	2 810	2 250
FASSET/07	5	ND:Technical Financial Accounting						
FASSET/07/01		Year 1	22 990	2 500	6 830	3 420	2 560	2 050
FASSET/07/02		Year 2	23 990	2 500	7 163	3 580	2 690	2 150
FASSET/08	5	Diploma in Public Sector Accounting						
FASSET/08/01		Year 1	22 990	2 500	6 830	3 420	2 560	2 050
FASSET/08/02		Year 2	23 990	2 500	7 163	3 580	2 690	2 150
FASSET/09	6	Diploma in Office Administration						
FASSET/09/01		Year 1	22 990	2 500	6 830	3 420	2 560	2 050
FASSET/09/02		Year 2	23 990	2 500	7 163	3 580	2 690	2 150
FASSET/10	6	ND: Financial Accounting - Public Sector						
FASSET/10/01		Year 1	25 990	2 500	7 830	3 920	2 940	2 350
FASSET/10/02		Year 2	24 990	2 500	7 497	3 750	2 810	2 250
FASSET/11	6	ND: Financial Accounting						
FASSET/11/01		Year 1	26 990	2 500	8 163	4 080	3 060	2 450
FASSET/11/02		Year 2	25 990	2 500	7 830	3 920	2 940	2 350

Similar to the AIE, Richfield Institute offers the following qualifications in the School of Business for full-time studies qualifications: Certificate in Bookkeeping, priced at R22 990.00; FETC: Bookkeeping, priced at R24 990.00; National Certificate in Public Sector Accounting, priced at R19 990.00; Higher Certificate in Office Administration, priced at R27 990.00 and Certificate in Office Administration, priced at R24 990.00. The AIE offers the following full-time qualifications: Certificate in Bookkeeping, priced at R28 800.00; FETC: Bookkeeping, priced at R14 400.00; National Certificate in

Public Sector Accounting, priced at R28 800.00; Higher Certificate in Office Administration, priced at R21 600.00 and Certificate in Office Administration priced at R43 200.00.

3.8 Chapter summary

The financial ratios focused on in this study were liquidity ratios, solvency ratios and profitability ratios. This study identified a significant set of financial ratios that, when arranged together, summarises the financial situation of a HEI. This set of financial ratios used for analysis is crucial because enhanced knowledge of HEI performance decreases the risk in decision-making.

Regarding liquidity ratios, AIE had a current ratio of 0.68:1, which means that for every R1.00 of current debt, AIE had R0.68 available to pay for the debt. A current ratio under 1 indicates that the AIE's debts due in a year or less are more than its assets.

When it comes to solvency ratios, a debt-to-asset ratio greater than 1 indicates that a substantial portion of assets is financed with debt. A ratio of 1.00 means that the AIE owns an equal amount of liabilities as its assets. This indicates that AIE is highly leveraged.

When one considers profitability ratios, profit margin is one of the frequently used profitability ratios to measure the degree to which a business action generates money. Profit margins are displayed as a percentage figure; this suggests how many cents of profit the AIE has generated for each rand of sale. AIE reported that it achieved a 20% profit margin; this translates to a net income of R0.20 for each rand of sales generated.

The consolidated profit and loss statement indicated that the AIE made a net profit of R12 196 397.84. The School of Architecture & The Built Environment net profit was the highest with R12 359 896.00 and an average student profit of R30 183.00. The School of Draughting & Technical Design was the second most profitable faculty with a net profit of R4 911 954.00 and an average profit per student of R13 817.00. The School of Visual Design, Marketing & Branding net profit for the faculty was R2 219 021.00, and the average profit per student was R9 265.00. The School of Information Technology & Data Science net profit was R1 575 177.00, and average profit per student was R7 176.00. Two faculties made a negative net profit, namely the Business, Entrepreneurship & Finance faculty, and the Engineering school. The

School of Business, Entrepreneurship & Finance total net profit was –R941 593.00 and the average profit per student was –R4251.00. The School of Engineering net profit was –R3 355 334.00, and the average profit per student was –R6704.00.

All the faculties increased their enrolment numbers from intake-1 of 2019 to intake-1 of 2020. The School of Architecture increased by 19.94%; School of Business & Entrepreneurship grew their student numbers by 12.93%; School of Draughting and Technical Design increased by 15%; School of Engineering and Science grew by 31.40%, and School of Information Technology & Data Science increased their student numbers by 8.17%. Lastly, The School of Visual Design, Marketing and Branding grew their faculty numbers by 7.14%. In summary, the AIE grew by 19.91%, which is higher than the current enrolment percentage of 6.2% of PHEIs in South Africa.

The comparative pricing analysis between AIE, Varsity College and Richfield Institute of Technology indicated that the AIE is well priced with their qualifications against these PHEI. Compared to Varsity College, AIE offers the same qualifications on average R5000.00 to R10 000 cheaper. Richfield Institute of Technology and AIE courses are priced remarkably similar, especially the Engineering faculty and ICB qualifications in the Business faculty. The AIE's registration fee of R4000.00 was also the most affordable out of the three institutions. This research could only compare the prices as this price comparative study relied on the public information available on the internet's web pages of the competing institutions. This information is also in the public domain and easily accessible. The financial ratio information could not be obtained as that kind of information for other institutions is not available on the public domain.

3. Chapter 4: Conclusions and recommendations

4.1 Introduction

The previous chapter served as an analysis of the empirical study. In this chapter, conclusions and recommendations will be made based on the literature review conducted in Chapter 2 and the financial and empirical analysis conducted in Chapter 3**.** This chapter will also discuss the objectives of the study and make recommendations for future research. Finally, a summary of the study will be presented.

4.2. Summary of the study

Chapter 1 outlined the research objectives and contextualised the study. A summary was given of the HE context in South Africa, focusing on the PHE sector, how the current HE sector functions, and the demand for HE and PHE. The profitability of PHEIs was also reviewed (section 1.1). The problem statement limited the necessity to analyse the financial viability of a PHEI (section 1.2). To provide evidence-based research on the financial viability of a PHEI, the primary objectives were determined in the aims of the study (section 1.3.1). The six secondary objectives were reviewed, which were essential to support the primary objective's achievement (section 1.3.2). There were two research methods used to achieve the objectives (section 1.4). The first phase was the literature review (section 1.4.1), and the second phase was the case study (section 1.4.2). The research design (section 1.4.3) was reviewed and underlined. Data collection (section 1.4.4) was reviewed, indicating that all the necessary permissions had been obtained. Data analysis was used to interpret the research findings (section 1.4.5). The limitations of the study were noted (section 1.5).

Chapter 2 focused on the diverse HEIs in South Africa, with emphasis on the global perspective of PHEIs (section 2.2.). PHEIs in South Africa were discussed, and related information to the governing framework was provided (section 2.3). Financial ratios were reviewed with the focus on liquidity, solvency, and profitability ratios (section 2.4), and the financial models of PHEI were discussed in section 2.5.

In Chapter 3, the empirical study, and the data collection process (section 3.2) were discussed. Data collection methods used in this case study include document evaluation and analysis. Results were discussed with a focus on the financial reports and the balance sheet (section 3.4.1). Financial ratios were calculated from these reports, such as the current ratio (section 3.4.1.1), debt-to-asset ratio (section 3.4.1.2) and profit margin ratio (section 3.4.1.3). The profit and loss statement and net profit were discussed and reviewed (section 3.4.1.4 and section 3.4.1.5). The consolidated profit and loss statement of the institution and specific faculties were analysed (section 3.5). The chapter offered an analysis of AIE student numbers per faculty, focusing on net profit margins, and the average profit per student was explained (section 3.6.1 and section 3.6.2). Comparative pricing analysis (section 3.7) was reviewed, focusing on PHEIs competing with AIE in the same region on the same qualification offering.

Chapter 4 provided a summary, conclusions of the study, limitations of the study and future research recommendations.

4.3 Conclusions

Based on the findings from the literature review on the PHEI landscape globally and in South Africa, with emphasis on PHEI financial ratios and business model, as well as on the findings of the empirical study, the following research conclusions are presented.

4.3.1 Conclusions from the literature study

A literature study was conducted on the HE industry globally and in South Africa, with the emphasis on PHEIs. Financial analyses, with the focus on financial ratios, financial models, enrolment numbers and a price comparison, were conducted.

4.3.1.1 Privatisation of higher education

Private higher education institutions are organisations that are privately owned or have a private founder. PHEIs, unlike their public counterparts, do not get funding and resources from the government. The funds that cannot be attained from sponsors and shareholders must be obtained through students (Coetzee, 2019). For PHEIs to compete with the state-subsidised public institutions and other PHEIs, private

institutions must minimise costs to maximise profits. Financial obstacles limit PHEIs from balancing their budgets, providing a balance between a quality education institution and maximising shareholders' wealth. There are no single devices or systems for assessing the financial sustainability of HEIs in South Africa. The AIE can be categorised as a PHEIs due to the definition provided in the literature review and since the institution relies on funding from sponsors and student fees. The balance sheets and profit and loss statement indicated that the AIE minimises its cost and maximises its profits.

4.3.1.2 A global perspective of private higher education

Globalisation has had a massive impact on HE. The growth of a knowledge-based economy created a need for HEIs, public or private, and therefore the expansion of HE is inevitable. With these changes in the economy, there is a significant demand for highly skilled employees. Public and private education can open various doors and help to overflow the country with sustainable development. Private higher education has now become the fastest growing segment of HE worldwide. The rapid growth of PHEIs can be explained by the simple concept of supply and demand; the founding of PHEIs directly responds to high demand from students in a public market that cannot supply the demand. Globally, governments do not have enough financial resources to accommodate the big drive of HE. Governments are starting to accept that private investment will extend the HE system (Coetzee, 2019).

4.3.1.3 South African and private higher education

There are currently 102 registered PHEIs in South Africa, and 26 provisionally registered PHEIs (DHET, 2018). PHEIs are here to stay and, even with tuition of up to three times that of public HEIs, they have approved the HE landscape and justified their existence, growth and expense. The newest data points showed that the market share of PHEIs in developing markets was about 14%, which is in stark contrast to South Africa's 4%. This disparity between South Africa and other developing markets is even more considerable in secondary education. There is a void to be filled. With the market share of 4% in South Africa, AIE is filling this void. With the increasing

demand for HE in the country, it seems that AIE is performing well with the opportunity to expand the institution and increase revenue.

4.3.1.4 Financial ratios

The financial ratios are expected to provide a general summary of the financial health of the HEI. The calculated financial ratios provided a general summary of AIE's financial health, focusing on liquidity, solvency, and profitability ratios. Financial ratios also aided in establishing the AIE as a financially viable PHEI. The profit margin ratio represents what percentage of sales has turned into profits. AIE reported that it achieved a 20% profit margin; this translates to a net income of R0.20 for each rand of sales generated. On a faculty basis, the profit margins were: The School of Architecture at 44%, School of Draughting at 27%, School of Visual Design at 19%; and School of Information Technology at 15%.

4.3.1.5 Financial model

The business model for PHEIs is simple but effective. Once the institution is built in a good location and a cost structure is good, it comes down to recruiting and getting students in classes. This specific model is also highly cash generative. Institution fees are paid at the beginning of the month, quarter or year, and bad debts tend to be exceptionally low. The AIE implements the same business model indicated through the literature review, focusing on affordable private education to increase sales. The institution has a variety of payment methods, which again provides flexibility to the parents/sponsor.

4.4 Research findings

The primary objective of this study was to analyse the financial viability of a specific PHEI, namely the Academic Institute of Excellence, with a focus on operational cost, net and gross profits, and financial ratios on an institutional as well as faculty level. An analysis was done on the annual enrolment growth numbers of private HEIs compared to the AIE's enrolment numbers. Lastly, a comparative pricing analysis was completed

between AIE and PHEIs operating in the same region against the same qualifications that both institutions have to offer.

The study found that the Academic Institute of Excellence is a financially viable PHEI due to the following indicators:

- All the faculties increased their enrolment numbers from the last intake, and AIE grew by 19.91%, which is higher than the current enrolment percentage of 6.2% of PHEIs in South Africa. This statistic indicates profitable continuous growth for AIE, which leads to increased sales and increased revenue.
- Regarding the comparative pricing study with other PHEIs in the same region as AIE, the study showed that AIE is well priced with similar qualifications and even cheaper on some qualifications. AIE's deposit/registration fee was the lowest among the three institutions. The institution must be priced accordingly in the market, especially to make it more accessible for everyone.
- AIE made a net profit of R12 196 397.84. The analysis focused on the AIE's net profit and the specific faculties; this is used as financially viable criteria because net profit validates a business's success.

4.5 Recommendations

Based on the outcome of this study, the following recommendations can be made. The AIE needs to improve its liquidity position. The Academic Institute of Excellence had a current ratio of 0.68:1, which means that for every R1.00 of current debt, AIE had R0.68 available to pay for the debt. A current ratio under 1 indicates that the AIE's debts due in a year or less are more than its assets. The AIE can improve the current ratio and liquidity by:

- Postponing any capital acquisitions involves any cash payments.
- Exploring to see if any term loans can be refinanced.
- Decreasing the personal draw of AIE; and
- Selling any capital assets that are not producing a return to the business.

The recommendation will be to reduce the AIE's assets financed through debt to reduce its debt asset ratio. AIE must reduce its debt asset ratio because a higher debt-

to-asset ratio is hugely damaging for a company. Therefore, AIE must work towards improving the debt-to-asset ratio, and this can be achieved by:

- Debt restructuring

  AIE pays comparatively high interest rates on its debts. With current interest rates being considerably lower, AIE can look at refinancing its existing debt. Debt restructuring could minimise all debt and lease costs, maximising AIE's efficiency on the bottom line and its cash resources and strengthening their capital reserves.

- Debt / equity swap

  AIE can implement a debt/equity swap. The institution can make a debt holder an equity shareholder in the company. Consequently, the debt will be cancelled and, in turn, will reduce the debt of AIE.

- Lease assets

  AIE can sell its assets and then lease them back. This will stimulate a cash flow that AIE can use to pay off some of the institution's debts.

- Increase sales

  The AIE can increase sales without any increase in overhead expenses. With the revenue generated from the increase in sales, AIE can reduce debt and improve the total asset ratio's debt.

Two faculties made a negative net profit, namely the Business, Entrepreneurship & Finance faculty and the Engineering school. A recommendation is to minimise the operational expenditure as this is possibly one of the main reasons these faculties were not performing as financially adequately as the other faculties.

Another recommendation will be to increase sales for these two faculties by increasing the pipeline activity where the sales team is more aggressive in chasing these new prospective students on the database. Marketing can also be more focused on increasing awareness and increase student numbers for the School of Business and Engineering.

Expanding the institution to more locations, as indicated in the literature review, and with continued annual growth at PHEI across South Africa and AIE, there is a chance to make the institution more accessible on a national level.

4.6 Achievement of the objectives of the study

Based on the literature review and empirical study presented in Chapter 2 and Chapter 3, respectively, the study's objectives were achieved. The financial viability of a specific PHEI has been studied, and it was determined that AIE is a financially viable PHEI. The main reasons for the financial viability were identified.

4.7 Recommendations for future research

This study focused on the financial viability of only one specific PHEI. Future research would benefit from exploring the private HE sector with the focus on the financial performance of PHEIs and the financial viability and financial models of PHEIs. Comparing the qualifications, they offer and how PHEIs influence different business sectors in South Africa could also be of value.

4.8 Chapter summary

This chapter provided a conclusion regarding the literature and empirical objectives of the research study. The research limitations were noted, and recommendations were made for the financial viability of a PHEI on which the case study was based as well as future research that can be conducted. All theoretical and empirical objectives that were formulated for this research study have been achieved.

BIBLIOGRAPHY

Africa-America Institute. 2015. State of Education in Africa Report 2015: A report card on the progress, opportunities and challenges confronting the African education sector. http://www.aaionline.org/ wp-content/uploads/2015/09/AAI-SOE-report-2015-final.pdf (Accessed 07 October, 2020).

Altbach, P., Reisberg, L., & Rumbley, L. (2009). Trends in global higher education: Tracking an academic revolution. Paris, France: UNESCO.

Baker, R. (2011). Exploring the sensitivity of education costs to the racial composition of schools and race-neutral alternative measures: A cost function application to Missouri. Journal of Education, 86, 58–83. doi:10.1080/0161956X.2011.539957

Bezuidenhout, G. 2013. Factors that influence the choice of private higher education institutions by students. Master's Dissertation. Tshwane University of Technology, Pretoria.

Caerus Capital. 2017. The business of education in Africa. http://edafricareport.caeruscapital.co

Carroll, D.A. & Stater, K. J. (2008). Revenue diversification in non-profit organizations: Does it lead to financial stability? Journal of Public Administration Research and Theory, 19, 947–966.

Chambre, S., & Fatt, N. (2002). Beyond the liability of newness: Non-profit organizations in an emerging policy domain. Non-profit and Voluntary Sector Quarterly, 31(4), 502–24.

CHE, 2016. *South African higher education reviewed:Two decades of democracy,* Pretoria: Council on Higher Education.

Coetzee, J., 2019. *Mail & Guardian.* [Online] Available at: https://mg.co.za/article/2019-05-22-private-sector-wants-to-play-a-bigger-role-in-higher-education/[Accessed 11 November 2020].

Cordery, C., & Narraway, G. (2008). Conceptual challenges displayed through the financial reporting of early childhood education centers. Accounting & the Public Interest, 8, 66-76.

Deakin University (Australia). (2016). Our history at a glance (2016). Retrieved November 8 from http://www.deakin.edu.au/about-deakin/reputation/history

De Fraja, G. (2004). Private and public schools: theoretical considerations. Education, Training, and Labour Market Outcomes in Europe, 172–94. Retrieved from: http://www.le.ac.uk/economics/gdf4/lri.pdf Date of Access:11 November 2020

Department of Higher Education and Training (DHET). 2013. White paper for post-school education and training. http://www.dhet.gov.za/SiteAssets/Latest%20News/White%20paper%20for%20post-school%20education%20and%20training.pdf Date of access: 25 September 2020.

Department of Higher Education and Training (2017b). Statistics on Technical and Vocational Education and Training, Community Education and Training and Private Colleges examinations in South Africa: 2015, Department of Higher Education and Training, Pretoria, South Africa.

Department of Higher Education and Training (DHET). 2018. Register of private higher education institutions. http://www.dhet.gov.za/SitePages/DocRegisters.aspx Date of access: 25 September 2020

Ellis, M.E., 2012. Managing a private higher education institution within the current higher regulatory context in South Africa. Pretoria: Unisa. (Mini-dissertation – MEd).

Filmer, D. (2007). If you build it, will they come? School availability and school enrolment in 21 poor countries. Journal of Development Studies, 43(5), 901- 928. doi:10.1080/00220380701384588

Field, C., and M. Shah. 2016. A global perspective on private higher education, xxi–xxvii. Cambridge, MA: Chandos.

Finn, W., 2013. "Private universities: An independent advantage." Independent, 16 August 2012. http://www.independent.co.uk/student/into-university/clearing/private-universities-an

Froelich, K.A., Knoepfle, T.W. & Pollak, T. H. (2000). Financial measures in non-profit organization research: Comparing IRS 990 return and audited financial statement data. Non-profit and Voluntary Sector Quarterly, 29(2),232–254.

Government of the Republic of South Africa (RSA). (2018). National Development Plan (NDP) (2030): Our future - make it work, National Planning Commission, The Department of the Presidency, Republic of South Africa.

Garrett, G. A. (2008). Cost estimating methods and sources of risk. Contract Management, 48(10), 14-24.

Hollman, J. K. (2007). What is cost engineering, and how are cost and schedule management an "engineering" function? Cost Engineering, 49(11), 8-8.

Ibrahim, J. & Dahlan, A.R.A., 2016. Designing business models options for “University of the Future.” (In Mohammed, E., Mohamed, C., Mohammed, A. & Badr E.M., eds. 4th IEEE International Colloquium on Information Science and Technology, CiSt 2016, Tangier, Morocco, October 24-26, p. 600-603).

Jamshidi, A., 2012. Developmental patterns of privatization in higher. Higher Education, pp. 789-803.

Levy, D. (2008). Private higher education's global surge: Emulating US patterns. In Proceedings of the international conference of privatization in higher education (pp. 32–52), January 7–8, The Samuel Neaman Press.

Levy, D., & Zumeta, W. (2011). Private higher education and public policy: A global view. Journal of Comparative Policy Analysis: Research and Practice, 13(4), 345–349.

Lucas, B. M., & White, E. D. (2009). A macro approach to estimate engineering and manufacturing development cost growth. Cost Engineering, 51(6), 30-34.

Macgregor, K. (2008). Private higher education stabilizes. University World News, Issue No. 27.

Miller, K., McAdam, M. & McAdam, R., 2014. The changing university business model: a stakeholder perspective. *R&D management*, 44(3):265-287.

Moore, D. (2005) Laws and other mechanisms for promoting NGO financial sustainability. International Center for Not-for-Profit Law. Retrieved from: http://www.icnl.org/knowledge/pubs/Financial_Sustainability.pdf. Date of Access 18 September 2020

Mupunga, V., 2019. *Mail and Guardian.* [Online]
Available at: https://mg.co.za/article/2019-08-02-00-investing-in-education-the-case-for-independent-schools-in-sa/ Date of Access 1 December 2020

Naidoo, M., 2006. An Analysis of The Financial Management Systems, Cost Management Systems, and Decision Making Systems Of Private Higher Education Institutions In South Africa From 1990-2005. p. 207.

Ngware, M. W., 2016. A critical assessment of "Higher education and economic development: The importance of building technological capabilities." International Perspectives on Education and Society 30: 201–219.

Ramlachan, p., 2019. The Potential Impact and Influence of Private Higher Education Institutions in the Internationalization of Higher Education in South Africa. International Journal of Education, [online] 11(2), pp.3-11. Available at: <https://doi.org/10.5296/ije.v11i2.14699> Date of Access 15 November 2020.

Research and Markets, 2019. *South Africa Education Sector Report 2019: Focus on Public and Private Education Sectors, Budgets, Enrolments, Initiatives,* Dublin: Research and Markets.

Setswe, G., 2013. Private higher education in Africa: The case of Monash South Africa. Africa Education Review 10(1): 97–110.

Shah, M., & Lewis, L. (2010). Private higher education in Australia: Growth, quality, and standards. Journal of Institutional Research South East Asia, 8(2), 80–95.

Sorensen, E.H., Qian, E., Schoen, R., & Hua, R. (2004). Multiple alpha sources and active management: Avenues to improve active performance. Journal of Portfolio Management, 30(2), 39–45.

South Africa. Council on Higher Education (CHE). 2016. South African higher education reviewed: two decades of democracy. http://www.che.ac.za/sites/default/files/publications/CHE_South%20African%20higher%20education%20reviewed%20-%20electronic_0.pdf Date of Access 20 May 2020

SOUTH AFRICA17. 1997. DEPARTMENT OF NATIONAL EDUCATION. Education White Paper 3: A Programme for Transformation of Higher Education. Pretoria.

Stats SA, 2017. Education Series Volume V, Pretoria: Statistics South Africa.

Teixeira, P., S. Kim, P. Landoni, and P. Gilani. 2017. Rethinking the public-private mix in higher education. Rotterdam: Sense Publishers

Teixeira, P., V. Rocha, R. Biscaia, and M. F. Cardoso. 2012. Myths, beliefs, and realities: Public-private competition and program diversification in higher education. *Journal of Economic Issues* 46(3): 684–703

Thwala, N.,2017. Mail & Guardian. [Online] Available at: https://mg.co.za/article/2017-02-17-00-private-tertiary-education-is-here-to-stay.Accessed 9 October 2020.

UNICEF. (2010). Advancing the Rights of Children, Women, and Poor Families through Better Public Finance Policies. UNICEF Social Policy and Economic Analysis Unit. New York. Retrieved from: http://www.unicef.org/socialpolicy/files/Advancing_the_Rights_of_Children_Women_and_Poor_Families.pdf. Date of Access 13 November 2020

United Nations, (UN), Report of the Secretary-General, (2017). "Progress towards theHIGHER%20EDUCATION%20INSTITUTIONS%2013December%2016.pdf. Date of Access, 8 November 2020.

Van Schalkwyk, R. D., 2011. The impact of leadership practices on service quality in private higher education in South Africa. Master of Commerce Dissertation. University of South Africa, Pretoria.

Van Schalkwyk, R.D. 2018. A total quality service framework for private higher education in South Africa. Pretoria: Unisa. (Thesis – MPhil).

Appendix A

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom

South Africa 2520

Tel: 018 299-1111/2222
Web: http://www.nwu.ac.za

Economic and Management Sciences
Research
Ethics Committee (EMS-REC)

29 May 2020

Prof. A Smit
Per email
Dear Prof. Smit

EMS-REC FEEDBACK: 29052020
Student: Kotze, J (22909427)(NWU-00676-20-A4)
Applicant: Prof. Anet Smit - MBA

Your ethics application on*, Analysing the financial viability of a Private Higher Education Institution,* which served on the EMS-REC meeting of 29 May 2020, refers.

Outcome:

Approved as a minimal risk study. A number NWU-00676-20-A4 is given for one year of ethics clearance.
Kind regards,

Mark Rathbone

Digitally signed by Mark Rathbone
DN: cn=Mark Rathbone, o=North-West University, ou=Business management, email=mark.rathbone@nwu.ac.za, c=ZA
Date: 2020.06.12 17:17:57 +02'00'

Prof Mark Rathbone
Chairperson: Economic and Management Sciences Research Ethics Committee (EMS-REC)

Appendix B

Letter of Introduction and Informed Consent

NWU Business School

Analysing the Financial Viability of a Private Higher Education Institution

Research conducted by
Mr. Jacques Kotze (**22909427)**

Cell: 072 439 1793
Date:2020/04/21

Dear Participant

You are invited to participate in an academic research study conducted by Jacques Kotze*,* Master of Business Administration final year student at the North-West University Business School, Potchefstroom Campus. The purpose of the study is to Analyse the financial viability of a Private Higher Education institution

Please note the following:

The type of research is a case study.

- Your participation in this study is important to us. You may, however, choose not to participate, and you may also stop participating at any time.

- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.

- Please contact my study leader, North-West University Business School, Professor A.Smit on 018 299 1407 or email Anet.Smit@nwu.ac.za if you have any questions or comments regarding the study.

Please indicate that:

- You have read and understand the information provided above. **YES**
- You give your consent to participate in the study voluntarily. (Please tick) **YES**

Date of consent:

21\04\2020

Leon Smalberger (CEO)