CHAPTER 1

INTRODUCTION

CONTENTS

1.1 Prelude
1.2 Statement of the Problem
1.3 The Research Design Steps
1.4 Review of Literature
1.5 Post Review Observation
1.6 Research Questions
1.7 Scope of the Study
1.8 Objectives of the Study
1.9 Hypotheses
1.10 Research Design
1.11 Sampling Methodology
1.12 Data Collection and Analysis
1.13 Statistical Tools for Data Analysis
1.14 Operational Definitions
1.15 Limitations of the Study
1.16 Chapter Scheme
CHAPTER 1
INTRODUCTION

1.1. Prelude

Human capital is a key determinant of economic growth. Investment in human capital is imported through education. Economic studies have shown that the impact of growth varies according to an economy's level of human capital, and human capital is a direct output of higher education. Economic benefits from education flow not only to the individual but also to society. In addition to economic effects, education has been shown to bring widespread social benefits such as a lower crime rate, better governance, better health and interpersonal trust. Economic growth brings with it structural transformation that creates growing demand for manpower with increasingly higher levels of education, shifting the emphasis from the primary to the secondary level and, increasingly, the higher education level, for higher skills. The global environment has witnessed dramatic and dynamic changes in, Information and Communication Technology (ICT), cross border economic activities, continuous global flow of people, information, knowledge, technologies, products and financial capital. This has increased the demand for skilled and knowledge worker across industry and businesses leading to the increase in enrolments in the Higher Education Institution (HEI). Higher education has now become central to the changes sweeping through developed nations and emerging nations, in which crossborder networking and exchange are reshaping social, economic and cultural life. Higher education is considered an investment for future growth not only by individuals but by societies at large. The private gains from higher education, has been very high for individuals. Today Higher education is considered the way forward for economic and
social uplifting firstly to the Individual, secondly to the nation and last but not the least to the world at large.

1.2 Statement of the Problem

The structures of education have changed and continue to change rapidly today. The demographic changes, technological advancement particularly ICT, the complex effects of globalisation on economies and societies, and the shift in the role of government in public services, from provider, to facilitator, to regulator, and a partner have all contributed towards the changes in all sectors of the economy including education. HEI for long enjoyed state funding and education was considered a public good and the sole responsibility of the state. As world economic activities have become more knowledge driven the demand for higher education increased and higher education moved from elite to the masses. The rapidly increasing demand for higher education and decreasing public funding from the governments have led HEI to be self-financed, to become better managed and more businesslike, and to exploit the opportunities both locally and internationally through quasi-commercialisation. The economic growth in the developing economies of Asia and Latin America are witnessing exponential growth for higher education services since the early 1990's. With government investment in higher education decreasing across nations, the private sector has been indirectly encouraged to invest in higher education sector to absorb the expanding demand, which has led to an unprecedented growth in private higher education providers. The governments of developed economies in order to exploit the opportunity of the increasing global demand for higher education services have encouraged international trade in higher education by formulating polices to attract international students to enroll in their countries HEI. This
global phenomenon in higher education industry is currently influenced by market forces leading to competition at all levels. The introduction of educational services under the provisions of WTO-GATS, has increased cross border trade in higher education services and in some countries it is today one of the largest export earner. Higher education today is a multibillion dollar global industry.

The Demand for higher education has also been stimulated by the human resource requirements of the globally growing knowledge economies, which place a premium on highly skilled knowledge workers. Many emerging nations like India, China, Malaysia, Korea, and Singapore have sought to achieve their development aims and international competitiveness by expanding their knowledge-based sectors like IT, ICT and Biotech. These industries require highly skilled knowledge workers with higher educational qualification. In addition, students themselves are seeking to become individually competitive and to enhance their opportunities for employment both in the domestic and global employment markets. They view higher education as an investment for individual gain.

The Providers of higher education have responded to the demand by establishing more HEI and introducing new and more flexible modes of study by way of distance and open education. The demand for higher educational services has also seen a rapid rise in the growth of private higher educational providers across the globe including India. The fast changing higher education environment has opened huge opportunities for nations, educational providers as well as to educational seekers. But there are also many challenges by way of increased competition between the suppliers of higher educational services at all levels. Under this dramatically changing back ground the existing business models and management strategies are in vogue. The present research undertakes to study
Globalisation in context of India, its implication on higher education sector and also the application of business strategies and business models for higher education in the growing competitive environment. The topic undertaken for study is titled "Globalisation of Higher Education - A study of emerging strategies and business models for Higher Education". The study is in context with global and Indian higher education scenario.

1.3 The Research Design Steps

The researcher on identifying the research topic, and having defined the statement of the problem, has designed the following steps for the research project which has facilitated the study to be carried out in systematic and methodical manner.

**RESEARCH DESIGN STEPS**
1.4 Review of Literature

The review sought to identify evidence of effective and innovative research and practices across the higher education sector, to examine the key issues and perspectives emerging from the literature, and to explore the changes and the potential and challenges in the higher education sector across the world. Since higher education sector is developing and has grown rapidly only in the past decade not much published research is available. The report has used and relied on ‘Grey literature’. For the purposes of the review ‘grey literature’ refers to publications of papers, reports, technical notes or other documents produced and published by governmental agencies, academic institutions and other groups available in both print and electronic formats, but not controlled by commercial publishing interests and where publishing is not the principal driver. The review focused on, theoretical and conceptual literature, research-based literature, and practice-based literature. The period of literature review is from 1990 to 2009.

Review of literature has been done under various themes

A. Higher Education and its implications on the economy and society

B. Globalisation of Higher Education

C. Implications of Globalisation of Higher Education

D. Private sector in Higher Education

E. Strategies and Business models for Higher Education.

A. Higher Education and its Implications on the Economy and Society

This part of the review focus on the role of Higher education on the economic and social development of the individual as well as the economy, Vaizey (1962) as cited in Jandhyala (2004) observed, there is a long and honourable tradition from Adam Smith
to Alfred Marshall which assigns to publicly supported education a major role not only in promoting social peace and harmony, and self-improvement, but in the process of wealth-creation, Mishan (1969) as cited in Jandhyala (2004) stated higher education is an investment and will pay for itself and will increase the earnings of the beneficiary students and the government will recover its costs through consequent higher tax receipts. Patel(2003) and Jandhyala (2004) opinion that higher education institutions have social functions; they possess important social, cultural as well as economic roles; they provide public service, they are different from commercial and business organisations, they produce human capital, and even specialised human capital; and that their output is not necessarily tangible. McMahon (2004) found that education through its contributions to economic growth has a significant influence on long-term transitions of democratization, greater respect for human rights and more economic and political stability. Jandhyala (2005) further observed, Public economic benefits are those that have broad economic, fiscal and labour market effects. These benefits result in the overall improvement of the national economy, as a result of citizen’s participation in higher education. Dongaonkar (2006) observes, with spectacular growth in higher education, India is becoming a genuine knowledge society, a knowledge economy and aiming to be global super power. This has all happened because of the growth of education in the public sector and recent initiative or participation of private sector. George and Augustine (2009) in the findings of their research reveal, positive and significant relationship between higher education and economic growth. The literature reviewed reveals that, higher education sector’s expansion and growth is essentially not just for economic benefits, but also for social and cultural empowerment of the society at large.
B. Globalisation of Higher Education

This part of the review focuses on the globalisation of higher education. Scott (1998) observed not all universities are (particularly) international, but all are subject to the same processes of globalisation partly as objects, victims even, of these processes, but partly as subjects, or key agents, of globalisation. Though higher education institutions often see themselves as objects of globalisation they are also its agents. As Knight (1999) summed up, “With the massification of higher education, increasing at an exponential rate, there is strong interest on the part of, large and small countries to make the export of education produces and services a major part of their foreign policy. In fact, we see major shifts in foreign policies where education was primarily seen as a development assistance activity or cultural programme to one where education is an export commodity”. Devesh and Pratap (2004) report that Globalisation of higher education has seen rapid expansion in higher education, with student enrollment growing at about 5% annually over the past two decades. This growth is about two-and-half times the population growth rate. According to the results of a special survey on 'Higher Education' Economist (2005), concluded that higher education is already a global business. Survey states, according to the International Finance Corporation (IFC), the growth is now soaring, two million universities students-approaching 2% of the world's total of around 100 million studying outside their home country in 2003, since the late 1990s the higher education market is growing by 7 per cent a year. The ‘Economist’ Survey on higher education further indicates that annual fee income alone is estimated at $30 billion Sanat Kaul (2006) also observes that, “Higher Education is a trillion Dollar industry worldwide. Education industry groups are, therefore, attracted by the prospects of liberalization and globalisation of this industry. They seek more international deregulation and generally
support WTO efforts. As demand for higher education grows the world wide, the
governments are also finding it difficult to provide adequate budgetary allocation.” In the
study by Varghese (2008) with globalisation, more people are investing most of their
time and money in education at present than in the past. Although all levels of education
have experienced expansion, the rate of growth has, perhaps been greatest at the higher
education level, between 1991 and 2005, the number of students enrolled in the institution
of higher education worldwide is more than the double from 68 to 137.9 million students.

Devesh and Megan (2008) also states “Tertiary education is a rapidly growing service
sector”. In 2002, the global market in higher education represented over 3 percent of the
total services market. In the report on Higher education UNESCO (2005) states that,
there are more than 80 million students worldwide, and 3.5 million people are employed to
teach or otherwise service them. The global market in educational services is currently
estimated at more than $2 trillion, including public and private spending on all forms of
education. Svava, et al (2009) have predicted that the demand for higher education
worldwide will have expanded from 97 million students in 2000 to over 262 million
students by 2025. It was estimated that the private education market in 2006 approached
US$400 billion worldwide and that this would continue to grow as the sector matures,
particularly in emerging economies. The review of the various studies reflects that
globalisation of higher education is not just phenomena but one which is growing rapidly
worldwide.

C. Implications of Globalisation of Higher Education

While globalisation of higher education has its positives there are other implications.
Altbach (2001) argues that the greatest negative impact of globalisation is WTO
control over higher education would be experienced by developing countries, once universities in developing countries are subject to an international academic marketplace regulated by the WTO, they would be swamped by overseas institutions and programs intended on earning profit but not in contributing to national development. It is not clear that the accrediting and quality control mechanism that now exists in many countries will be permitted. Knight (2002) explains the state of global higher education scenario complex and contentious. These two words sum up the current analysis and debate about the impact of GATS on higher education. Opinions on the risks and benefits are divided, if not polarized. They differ within and between countries. Neave (2002) in his study states, globalisation has its dark side, a recent estimate suggests that no more than 20 per cent of students currently in higher education will be at the core of the rising knowledge economy. The remainder will be a subordinate social layer. Kapur and Mehta (2004) observe that there has been a rapid expansion in higher education, with student enrollment growing at about 5% annually over the past two decades. This growth is about two-and-half times the population growth rate. Which in turn raises the questions of quality, recognition, excess, equity and cost. According to Bhushan (2006) The growth of foreign providers of higher education is sustained by the strong demand for transnational education. However, in a largely unregulated environment with de facto free entry there are significant risks for students. Kapur and Crowley (2008) observed. With the commercialization of higher education and the growth of cross-border mobility of students and providers, GATS is becoming increasingly relevant as the framework within which these occur. The general idea behind GATS is that knowledge is a commodity like any other and should be freely traded around the world. However, with education widely perceived as a public good, there have been rampant fears that this would "commercialise"
higher education and threaten its public good benefit. In the study of James (2009)\(^\text{\textsuperscript{24}}\) Higher education the world over has now become part of the Globalisation process and can no longer be strictly viewed from a national context. The realities of internationalisation of higher education and its attendant impacts on the sector is an urgent priority for higher education, especially in developing economies. The review reveals that Globalisation and the Provisions of WTO on Higher education pose many challenges with its benefits.

D. Private Sector in Higher Education

The increasing role of the private sector in the Higher education sector is worldwide and is the fastest growing sector. Prof. Yash Pal (2008)\(^\text{\textsuperscript{25}}\) states in his report, The absence of any significant expansion in different sectors of higher education by the state has created a space for the growth of private providers. The report further states, in order to reach the goals of doubling the higher education capacity from the present level, it will be necessary to encourage participation of the private sector. At the same time it must be emphasized that governments cannot afford to abandon the responsibility for further augmentation of the existing capacity entirely to the private sector. Brandenbur and Zhu (2007)\(^\text{\textsuperscript{26}}\) states that, China considers private providers of higher education as an acceptable means to increase options for their students. The overall number of institutions seems to be considerable, with nearly 1,200. In other words, nearly a third of the HEIs are private. According to Rosenblit, Sebkova and Teichler (2007)\(^\text{\textsuperscript{27}}\), the positive aspects of private Higher education initiatives include, the widening of learning opportunities at various higher education levels by providing more choice for citizens in any given national jurisdictions, challenging traditional education systems by introducing more competition
and innovative programmes and delivery methods, helping make higher education more competitive, assisting in diversifying the budgeting of higher education, benefiting through links with prestigious institutions, mainly in developing countries. Rohan (2008) in his study observes, as a result of the government's gradual withdrawal from higher education, the private sector has begun to play an increasingly important role. Rapidly entering spaces previously occupied by the state, it has transformed the contours of education particularly professional and technical education in less than a decade. Indeed in the span of one year, from 2003-04 to 2004-05, the total number of institutions in the system shot up by 12 percent (1503 institutions), he further observes that, the incentive for private providers has been to deal in disciplines that exhibit verifiable market demand, thus justifying the asking of higher fees from students who anticipate higher incomes upon graduation. Students, on the other hand, are attracted increasingly towards professional courses that have greater potential in the labor market, and are willing to pay higher prices for them. There seems to be a convenient matching of demand with private supply in the face of declining public investment. Svava, et al. (2009) in the report state, demand for places in higher education far outstrips supply of available seats globally. In many emerging economies the demand can be 20 to 50 per cent higher than places available in public institutions. It is predicted that the demand for higher education worldwide will have expanded from 97 million students in 2000 to over 262 million students by 2025. It was estimated that the private education market in 2006 approached US$400 billion worldwide and that this would continue to grow as the sector matures, particularly in emerging economies. This figure may well be much higher as it is virtually impossible to quantify the investment in infrastructure (land, building and construction costs) and capital
costs which private providers invest. The review in this segment reviles the fact that the private providers of higher education has not just increased but is increasing.

E. Strategies and Business Models for Higher education

This segment of literature review covers the studies and literature on application of business strategies, strategic planning and business models in higher education industry. In early years, Higher education was considered a Public good so the awareness as well as application of Business practices virtually did not exist. In a research study by Murphy and McGarrity (1978)\(^{30}\) conducted with 300 education administrators of colleges showed that 61 percent viewed marketing as a combination of selling, advertising and public relations, 28 percent stated it was only one of these three activities, and only a few knew that marketing had something to do with needs assessment, marketing research, product development, pricing, and distribution. Kotler and Fox (1985)\(^{31}\) stated that "an institution is not likely to develop a strong marketing orientation until its [superintendent] believes in it, understands it, wants it, and wins the support of other high-level administrators for building this function". According to McDooris (2002)\(^{32}\) strategic planning is a relative newcomer to higher education management. Strategic planning’s roots are in the arena of large-scale military operations. Most of the literature on strategic planning concentrated on the military, national-international statesmanship, and the corporate world. According to Conley (1992)\(^{33}\) strategic planning emerged in public education as a management tool in the mid-1980s. The term appeared in educational publications for the first time around 1984, and by 1987 an estimated five hundred school districts around the country were using some type of strategic planning. Clarke (1997)\(^{34}\) observes that, within a new global environment, characterized by rapid change, intense
information flows and increasing competition through the reduction of barriers to trade and exchange, higher education institutions are slowly emerging as organisations driven by the commercial imperative of market-led forces. According to Brock (1997) universities currently face immeasurable complexities and turbulence in their external environments and their internal organisations are consequently under pressure to adapt in an effective way. Then the intentions to survival oblige them to use strategic planning and management to adapt to their variable environment and to be responsive and supportive of their customers’ needs. Dooris (2002) in his study states, by the later half of the 1990s and into the 21st century, higher education planning had moved beyond a focus on niche and competitiveness to encompass ideas such as reengineering, business transformation, and continuous quality improvement. Linda (2006) opines that, just like business, higher education in the twenty-first century is facing numerous factors that are influencing, for better or worse, organizational effectiveness. These include globalisation, changing demographics, mass customization, and often, flattened financial resources, the encroachment on their “territories” by the hungry corporate providers that have entered the educational marketplace in recent years. Colleges and universities will need to reach beyond their own horizons when contemplating the best ways to educate the tech-savvy Generation Y, or Millennial students.

From the reviews it can be observed that Business management concepts like Marketing and Strategic Planning has gained importance in the recent past with globalisation, massification and increased private sector higher education. The concept of Business Models in Higher education is still in its very early stages, Chesbrough and Rosenbloom (2002) states in May 2000 search of the Web which found, 1,07,000 references to the term ‘business model’ in general use while a search of the academic literature found only
three references to the term. Schiffman (2005) in an exploratory investigation confirms the desire and need for business models, strategies, methods and benchmarks. He identifies business issues such as revenue distribution and generation, compensation, planning, student services, course and degree regulation, marketing, sources of capital, cost management and product development in the higher education sector. Karen et al. (2006) concluded in their study, despite the rapid growth in the adoption of online learning, there is a dearth of detailed information on effective business models, business strategies and effective practices on which to build sustainable online education programs. The study further observes that there is a lack of information to help guide business decisions, such as best practices or benchmarks, from the different perspectives of different types of higher education organisations. In another research study on business models by Lambert (2006) concludes that to date, research into business models has been conceptual and any empirical research has been deductive. On close examination it has been established that the existing ‘taxonomies’ of business models are in fact typologies and are of limited and very specific use. There exists no general taxonomy of business models largely because there is no widely agreed upon concept of a business model. Rasmussen (2007) observes in his study, one of the difficulties of employing the business model concept is that it is still in its infancy in academic usage. It owes its origins largely to pragmatic development and use in the business sector”, therefore application to higher education may be difficult. He further states in the same study, developing a generalisable business model is a challenge. To date most other academic formulations of the business model focus on taxonomic issues in defining the relevant components of the model but offering little by way of empirical support for their propositions or suggested causation between the components. In a study published By
IBM(2008)\(^{43}\) state, Business model is an old concept widely used and many a times mostly undefined, but the interest on it has risen exponentially in the last decade. This growing interest can be explained largely by the impact of globalisation, deregulation and advances in Information and Communication Technologies (ICTs). In fact, scholars and practitioners argue that the ability to take advantage of these structural changes by innovating in business models can explain firm's current and future competitiveness. Finally according to Machado and Taylor (2010)\(^{44}\) Market forces are exerting significant impacts on higher education institutions (HEIs) that are fundamentally changing the ways they conduct and manage their affairs. These major shifts are forcing HEIs to approach their operations more proactively and from a business perspective in order to be strategically positioned to seize opportunities and confront threats in an increasingly competitive environment. Strategic planning is a tool for assisting an HEI to manage itself with foresight and an external focus.

1.5 Post Review Observation

The extensive literature review covering various studies of higher education sector in India and across the world has enabled in understanding the higher education sector from various dimensions. The study revealed that the higher education is truly complex global phenomenon affecting not just a few countries but all the countries in the world. It has influenced and influencing the global policy makers, governments, industry, business, and trade on one hand, and the economic and social welfare of individuals, families and the society as a whole on the other.
The reviews of the studies done by International agencies, different Government's across the world, and experts in the field of Higher education, reveal the following very common developments in the Higher education sector across the global

- Fast Increasing demand of higher education
- Rapid changes in the demographics in the world
- Decreasing public funding to higher education sector
- Increasing number of private higher education institution
- Increase in student mobility across the Globe
- Raise in profit oriented educational providers
- Increase in competition at both Micro and Macro levels
- Higher Education is internationally traded service with the government export policies framed to encourage Trade in Higher education

In the background of globalisation and the WTO regime and higher education as trade services under GATS, experts in the field of higher education are constantly studying the fast changing global higher education environment both, at the national level as well as at the global level. International and national conferences, seminars, government sponsored workshops and research studies are held to develop and draw up polices, strategies and plans to meet the complex competitive challenges of rapidly changing higher education industry. The present study is justified on the premise that no comprehensive studies exist with regard to management strategies and business models in the Higher education sector since it is still an emerging sector. Hence, this study aims at understanding, Globalisation of Higher education and emerging strategies and business models for higher education.
1.6 Research Questions

The following questions have guided the research

1. What is the growth of enrollment of students in HE in India?
2. What is the trend of government funding in HE in India?
3. What is the contribution and growth of private sector in Indian HE?
4. What are the provisions of GATS on Educational services?
5. What is the growth of international student mobility?
6. What is the growth rate of International trade in HE?
7. What are the perceptions of Stakeholders on HEI in India?
8. What are the emerging business management practices and strategies in HE Industry?
9. What are the emerging Business Models in HE Industry?
10. What is the rationale for the development, or lack of development of new strategies and practices for analysing competition in HE Industry?

1.7 Scope of the study

The scope of the present research covers two segments, one Indian and the other Global.

1. Under the Indian segment, the study has covered the higher education sector in India in general. The study specific with regard to stakeholders perception would be limited to Under Graduate (UG) and Post Graduate (PG) students in selected institutions in Bangalore since it has a large number of HEI managed by the government, private aided and private unaided institution offering graduate and post graduate courses, in engineering, commerce, science, and management.
2. Under the Global segment, the study covers, WTO-GATS provisions on higher education and the changing trends in the higher education sector, the influence of globalisation and international trade in the higher educational services.

1.8 Objectives of the Study

1. To study the historical background, the structure, the government policies and regulations of Higher Education in India.

2. To study the perception of Stake holders, Students, Parents, Faculty and Industry on Higher Education.

3. To study the Globalisation and Internationalisation of Higher Education and the provisions of WTO-GATS on Higher education services.

4. To study the impact of globalisation and GATS provisions on Higher education in India.

5. To study the increasing role of the private sector in Global Higher Education.

6. To Study the global growth in trade and services of Higher Education.

7. To study and develop suitable strategies and business for Higher Education

1.9 Hypotheses

The part of the research work on the perceptions of the stake holders on Higher education Institutions was based on the following Hypotheses.

1. Student perceptions

2. Parents perceptions

3. Faculty perceptions

4. Corporates perceptions
Research Hypothesis

**Hypothesis 1**  $H_0$. There is no dependency between Choice of Institutions, Government/Private, on various level of education among the various Stakeholders, such as Parents, Faculty and Students.

**Hypothesis 2**  $H_0$. There is No dependency between funders of Education and type of Stakeholders, Parents, Students and Faculty.

**Hypothesis 3**  $H_0$. There is No dependency between cause for opting higher education and stakeholders.

**Hypothesis 4**  $H_0$. There is no dependency between Stakeholders and Fee subsidy from the government.

**Hypothesis 5**  $H_0$. The perception of Parents and Students are the same on various factors influencing the decision to join an Higher Educational Institution.

**Hypothesis 6**  $H_0$. The perception of UG Students and PG Students are the same on various factors influencing the decision to join an Higher Educational Institution.

**Hypothesis 7**  $H_0$. The perception of Parents and Students are the same on Education Driving Force to join an Higher Educational Institution.

**Hypothesis 8**  $H_0$. The perception of UG Students and PG Students are the same on Education Driving Force to join an an Higher Educational Institution,

**Hypothesis 9**  $H_0$. The perception of corparate executives the quality and skills of the fresh graduate students of private Higher Educational Institutions is high.
1.10 Research Design

The research project required extensive information for achieving its objectives. The study has used two main methods of enquiry; the first method is a search from secondary sources of relevant literature and documentation, published in both print form and in the electronic form. The second method was survey method, by developing and instituting a questionnaire for collection of data from the stakeholders of higher education namely, students, parents, faculty and the corporate sector.

1.11 Sampling Methodology

The relevance of higher education stakeholder’s perception was very important for meeting the requirements of the present study’s research questions, its objectives as well testing of the hypotheses. The survey method was adopted for gathering information from the stakeholders. Since the population of the stakeholders is very large and complex and cannot be defined easily, Non-probability Judgment Sampling Technique and Snowball sampling has been applied for collection of data from the stakeholders as shown below.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sample Constituents</th>
<th>Size</th>
<th>Sampling Technique Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students</td>
<td>498</td>
<td>Non-Probability Judgment Sampling Technique</td>
</tr>
<tr>
<td>2</td>
<td>Parents</td>
<td>241</td>
<td>Judgment Sampling and Snowball Sampling Technique</td>
</tr>
<tr>
<td>3</td>
<td>Faculty</td>
<td>141</td>
<td>Non-Probability Judgment Sampling Technique</td>
</tr>
<tr>
<td>4</td>
<td>Corporate executives</td>
<td>102</td>
<td>Judgment Sampling and Snowball Sampling Technique</td>
</tr>
</tbody>
</table>
1.12 Data Collection and Analysis

The study is based on both secondary data and primary data

A. Secondary data

The extensive secondary data has been collected from national and international publications, annual reports, working papers, research studies, conference papers, sponsored studies by national and international agencies and the Government of India published reports. Information and data has also been collected from the electronic media.

B. Primary data

Following an initial survey of the literature and documentary sources, a questionnaire was prepared and instituted. Data was collected from each of the stakeholders namely students, parents, faculty's and the corporate executives to obtain their perception on higher education.

For designing well-structured questionnaire, due diligence was applied by the researcher into ensure that the developed questionnaire, will not just answer the research objectives, but will also elicit responses easily from the respondents. Five point scale with score of 'Five' being the highest and 'One' the lowest was used to secure relative order of significance from the respondents
1.13 Statistical Tools for Data Analysis

In order to analysis the primary data, secondary data and to test the set hypotheses, researcher has used various statistical tools. Choice of statistical tools is based on the objectives of the study, scale of measurement of the variables and the nature and size of the sample.

The following statistical tools have been applied.

1. **Descriptive Statistics:** It is the very basic statistics of the study, descriptive statistics includes frequency, average, and standard deviation, minimum and maximum of the variable and graphs. The basic purpose is to summarize or generalise variables to know how the variables are distributed and finding pattern among the variables.

2. **Chi Square:** Chi square test is used to test the hypothesis between two categorical variables for instance, level of education (10th, PUC, UG and PG) and stakeholders (Parents, Students and Faculty) is there any dependency between these two variables.

3. **Correlation:** Bivariate Correlation is employed in order to find the relation between two continuous variables in the given hypothesis. Correlation score ranges from -1 to 1. Score closer to 1 is high correlation and score closer to 0 is low correlation.

4. **Factor Analysis:** Factor analysis is correlation based technique. Factor Analysis is part of multivariate technique and it is an exploratory statistical technique, since it is exploratory it does not require any hypothesis, the purpose of employing factor analysis is to reduce the dimension and bringing down
sizable variables and also to attain dimension summarisation which is knowing
the underlying structure of the context or theories for the given variables.

5. **One Way ANOVA:** One way is a mean based technique, which belongs to
General Linear Model family. The basic purpose of employing ANOVA is to
know the statistical significant difference on variables based on group of the
Independent variable. For instance, Perception about higher education system
between Parents and Students.

6. **Pareto Rule:** The Rule of Pareto is based on the unequal distribution of things
in the universe. It is the law of the "significant few versus the trivial many."
The significant few things will generally make up 80% of the whole, while the
trivial many will make up about 20%. By graphically separating the aspects, we
will be able to identify the significant variables with not so significant ones in
the universe.

**1.14 Operational Definitions**

1. **Higher education:** A higher education, means university level education,
typically degree level takes a minimum of three years to complete and in some
cases typically four years to qualify for the award of degree.

2. **Higher Education Institutions (HEI):** Universities, Deemed to be
Universities, Colleges, and Institutions are referred as Higher Education
Intuitions (HEIs) or Higher Education Institution(HEI), these institutions offer
educational courses and programmes leading to the award of certificate,
diploma, or a degree,
3. **Tertiary education**: Also referred to as third stage, third level, and post-secondary education, is the educational level following the completion of a school. Colleges, universities, institutes of technology and polytechnics are the main institutions that provide tertiary education. Tertiary education generally culminates in the receipt of certificates, diplomas, or academic degrees. Tertiary is also referred to as higher education in many countries including India.

4. **Public Sector Institution**: An institution is classified as public if it is controlled and managed directly by a public education authority or agency; or controlled and managed either by a government agency directly or by a governing body (council, committee, etc.) most of whose members are either appointed by a public authority or elected by public franchise.

5. **Private Sector Institution**: An institution is classified as private if it is, controlled and managed by a non-governmental organisation like register trust or society run by religious institutions or private individuals, or if its governing board consists mostly of members not selected by a public agency.

6. **Public Expenditure (public sources)**: It includes expenditure by all public agencies at local, regional and central levels of government. No distinction is made between education authorities and other government agencies. It is non-repayable current and capital expenditure.

7. **Government Aided Institution**: An institution established, funded and managed by the government.
8. **Private Aided Institution**: An government dependent private institution is the one that receives its core funding from government agencies of the Centre and State.

9. **Private Unaided Institution**: An independent private institution is the one that does not receive any funding from any of government agencies and has to run and manage from its own funds and student fees.

10. **Enrolment**: Number of pupils or students officially enrolled in a given grade or level of education, regardless of age.

11. **Gross enrolment ratio (GER)**: Number of pupils or students enrolled in a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. For the tertiary level, the population used is the five-year age group following on from the secondary School-leaving age.

12. **Gross Domestic Product (GDP)**: The sum of gross value added by all resident producers in the economy, including distributive trades and transport, plus any product taxes and minus any subsidies not included in the value of the products.

13. **GDP per capita**: The gross domestic product divided by mid-year population.

14. **International (or internationally mobile) students**: Students who have crossed a national or territorial border for the purposes of education and are now enrolled outside their country of origin.

15. **Inbound mobility rate**: The number of students from abroad studying in a given country, as a percentage of the total tertiary enrolment in that country.
16. **Outbound mobility ratio**: The number of students from a given country studying abroad as a percentage of the total tertiary enrolment in that country.

17. **Net flow**: Number of students from abroad (inbound students) studying in a given country minus the number of students from given country studying abroad (outbound students).

18. **Globalisation**: A process that is increasing "the flow of people, culture, ideas, values, knowledge, technology, and economy across borders, resulting in a more interconnected and interdependent world." Globalisation affects each country differently. It can have both positive and negative consequences, according to a nation’s individual history, traditions, culture, priorities and resources. Education is one of the sectors impacted by Globalisation.

19. **Cross-border education**: The movement of people, knowledge, programs, providers and curriculum across national or regional jurisdictional borders. Cross-border education is a subset of "internationalisation of higher education" and can be an element in the development cooperation projects, academic exchange programs and commercial initiatives. The commercial initiatives are the focus of this guide.

20. **Trade of education services**: Cross-border education initiatives that are commercial in nature and are usually intended to be for profit (though this is not always the case); a term primarily used by the trade sector.

21. **Strategy**: Is the direction and scope of an organisation over the long-term which achieves advantage for the organisation through its configuration of resources within a challenging environment, to meet the needs of markets and to fulfill stakeholder expectations.
22. **Business Model:** Is a conceptual tool that contains a set of elements and their relationships and allows expressing a company's logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the organization and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue streams.

23. **E-learning/Online learning:** Comprises all forms of electronically supported learning and teaching. The information and communication systems, whether networked learning or not, serve as specific media to implement the learning process. The term will still most likely be utilized to reference out-of-classroom and in-classroom educational experiences via technology.

24. **Privatisation:** The process of shifting a function, either in whole or in part, from the public sector to the private sector. It included processes such as the transfer of state assets entirely or partly to the private sector, the abolishment of government subsidies, the contracting out to private suppliers of the provision of publicly funded services, and the provisions for opportunities to choose private services in areas such as pensions, health insurance and education.

25. **Stakeholders:** The specific groups of external players that have a direct or indirect interest in higher education, students, academic community, governments at all levels, business enterprises, different social and cultural actors as well as other universities and higher education institutions as main stakeholders.
1.15 Limitations of the study

1. The range of formal data sources that needed to be accessed in relation to the topic was difficult to source particularly official data from the Ministry and Government Departments and agencies and had to rely in electronic media therefore represents a partial picture.

2. Considerable diversity in the amount and validity of data available, there was often a contrast between a lack of formal data and an abundance of informal but not necessarily reliable data.

3. The primary data collection has covered the institution located in Bangalore managed by government, private aided and private unaided.

4. The study is restricted to evaluate the strategies and business models for higher education in general.

5. Data on private higher education providers is not completely available therefore presents a partial picture.

6. The study will not cover the social implication of higher education.

7. Time and funding have necessarily limited the research and this has, to a large extent, dictated the approach adopted.
1.16 Chapter Scheme

The entire thesis has been presented in seven chapters as follows:

Chapter 1 Introduction: The chapter covers the introduction to the study, review of literature, the research questions, the objectives, the scope, the limitations of the study. It further covers the hypotheses formulation, how data is collected, sampling technique, the statistical tools used in the analysis of the data, with operational definitions of concepts used in the study.

Chapter 2 Higher Education in India: A brief history of the evolution of higher education system over the period is covered, it describes the higher education system, the various higher education regulatory bodies, overview of higher education, the growth of the role of public and private higher education institution, the emergence of the foreign institutions and concludes with opportunities and challenges going forward.

Chapter 3 Globalisation and Higher Education: This chapter covers in detail the background of international higher education, the stages of development of international higher educational services, globalisation and internationalisation of higher education. A brief introduction to the World Trade Organisation (WTO), General Agreements in Trade in Services (GATS), its key elements and provisions in educational services is covered. A detailed study of the Modes of supply under GATS covering the Global and Indian scenario is described. The chapter also covers the trends in Global Higher Education Services, Implications of GATS on Indian higher education, Pros and Cons of liberalisation of education in developing countries under GATS. The chapter concludes with privatisation of Higher education and the role of corporate India in higher education.
Chapter 4 Strategies and Business Model for Higher Education: The chapter describes higher education as an industry covering industrial analysis of higher education institutions (HEI) and the changing dynamics of higher education industry. It explains the application of the basic principles of business to HEI, the need for management strategies and models in HEI. It further cover the higher education industrial environment, attractiveness, and competition analysis using Porter's FIVE FORCE MODEL. It explains the application of strategic planning to HEI. Lastly it describes Business Models, key elements of business models and their application to HEI.

Chapter 5 Trade in Higher Educational Services: The chapter analyses the trade in higher education. The secondary data is analysed and interpreted in two parts Part A Global Higher Education Scenario and Part B Indian Higher Education Scenario.

Chapter 6 Stakeholders Perception of Higher Education: The chapter covers the primary data analysis of stakeholders, Student, Parent. Faculty and Corporate Executives. Data compiled are analysed and interpreted using the various statistical tools.

Chapter 7 Summary of Findings, Suggestive Models and Conclusions: The presents the findings of the study along with the suggestive models for higher education institutions. It concludes with a brief outline for further research studies.
REFERENCES


23. Ibid 15.


29. Ibid 17


36. Ibid 26


