Chapter-1: Introduction

1.1 Background

Appropriate positive work culture, strategic leadership, change management processes, faculty attrition, relevant branding, governance and efficiency are playing significant role in day to day activities of management of AP engineering colleges. Students, faculty members, industry partners, governing bodies, policy makers are keenly looking into some of the above parameters to find possible solutions for mutual benefit. Need of the hour is a realistic focus on metrics and feedback measurement analysis. Lack of genuine leadership and change management processes in the technical education at the institution level in AP making our education policies and initiatives low on world class quality and facing challenges in global acceptance.

Strategic Leadership provides the vision, mission, value system and strategic direction for the growth and overall success of AP engineering colleges. Strategic leadership in AP engineering colleges basically means using strategy in the management of faculty members, staff, students and other stakeholders. The main strategy usually employed in a strategic style of leadership is to motivate faculty and staff to take initiatives to improve their efficiency levels and productivity.

---

Strategy involves proactive thinking and planning. Leadership inspires others to take appropriate and timely actions. Strategic leadership is a management model that trains and encourages the stakeholders and organizations for the future.

**Strategic leaders** in AP engineering colleges by and large look ahead and analyze the present events, circumstances and people issues, in terms of preparation for what may be ahead for the overall growth. Cognitive ability and awareness is a big part of a strategic leadership style\textsuperscript{12}, but it must be followed up with well thought out actions. Strategic leaders are adaptable and growth-oriented. They take responsibility for getting things done by training faculty members and staff to think and act more effectively to achieve the best result possible for the institutions of which they are responsible. Leadership team needs to provide solutions for high faculty attrition, branding, performance, governance and efficiency. Strategic leaders are generally responsible for large institutions and may influence large number of people. They establish organizational structure, allocate resources, and communicate strategic vision.

Distinguishing Transactional Management and Strategic Leadership in AP Engineering Colleges:

Table 1.0.1 Transactions and strategic leadership

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Transactional Mgmt.</th>
<th>Strategic Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach</td>
<td>Balance of operations</td>
<td>Innovative (creates opportunity, Imagines new areas to explore)</td>
</tr>
<tr>
<td>Interaction</td>
<td>Role-bounded</td>
<td>Personal and transformation in their orientation to group members</td>
</tr>
<tr>
<td>Focus</td>
<td>Focus on control, production and results</td>
<td>Focus on vision, mission, values, expectations and context.</td>
</tr>
<tr>
<td>Influence</td>
<td>Within the designated group</td>
<td>Within and outside the construct of structure and their immediate jurisdiction</td>
</tr>
<tr>
<td>Motivates through</td>
<td>Formal authority mechanisms</td>
<td>Volitional activity (emotion, offering suggestions)</td>
</tr>
<tr>
<td>Use</td>
<td>Control</td>
<td>Influence (power)</td>
</tr>
<tr>
<td>Values</td>
<td>Co-ordination, efficiency and effectiveness</td>
<td>Collaboration, unity, equality, justice and fairness in addition to efficiency and effectiveness</td>
</tr>
<tr>
<td>Communicate</td>
<td>Directly giving clear direction, solitary assignment</td>
<td>Indirectly and directly, give overlapping and ambiguous assignment</td>
</tr>
<tr>
<td>Oriented towards</td>
<td>Means</td>
<td>Ends</td>
</tr>
<tr>
<td>Is</td>
<td>Technologist</td>
<td>Coach, Mentor, Philosopher, Realist</td>
</tr>
<tr>
<td>Main tasks</td>
<td>Implement goals, referees, coaches</td>
<td>Defines and communicates goals, motivates</td>
</tr>
<tr>
<td>Thinking time-frame</td>
<td>Current (yesterday’s output and today’s problems)</td>
<td>Futuristic (tomorrow and the day after)</td>
</tr>
<tr>
<td>Thinking context</td>
<td>Local</td>
<td>Global</td>
</tr>
<tr>
<td>Emotional involvement</td>
<td>Involved with tasks and people associated with the tasks</td>
<td>Emotionally involved with ideals and vision</td>
</tr>
<tr>
<td>Personal life</td>
<td>Attempt to maintain boundaries seeing a proper time for each other</td>
<td>Work and private life are indistinguishable and merge with each other</td>
</tr>
<tr>
<td>Achieving commitment and accountability</td>
<td>Involve people. Use contracts, performance appraisal and key result areas</td>
<td>Inspire. Hold people accountable by inducing feelings of guilt</td>
</tr>
</tbody>
</table>
Strategic leaders work in an uncertain environment on highly complex issues or problems that affect and are affected by events, circumstances, people and organizations. Strategic leaders apply many of the leadership skills and actions they mastered or learned from their previous roles and responsibilities. Strategic leaders demonstrate exceptional mentoring abilities with fellow team members. Strategic leaders, like direct and organizational leaders, process information quickly, assess alternatives based on incomplete data, make decisions, and generate support. However, strategic leaders’ decisions affect more people, commit more resources, and have wider-ranging consequences in both space and time.

Strategic leaders often do not see their ideas come to fruition during their "watch" and their initiatives may take years to plan, prepare, and execute. In-process reviews (IPRs) might not even begin until after the leader has left the job. This has important implications\textsuperscript{13} for long-range planning\textsuperscript{14}. On the other hand, some strategic actions or decisions may become important announcements for the institutions. Perhaps of paramount importance, because they exert influence primarily through subordinates. Strategic leaders must develop strong skills in picking and developing good second tier leaders.

\textsuperscript{13} Rajeshwara Rao, 2009, HRM practices and quality of work life, GITAM journal of management, volume-7, number-4, PP 184-193

After understanding the meaning or insights of strategic leadership in general, now let’s refer specifically what strategic leadership relates to AP engineering colleges. The main focus of this research study is strategic leadership in AP engineering colleges, and their management activities in terms of, academic change management processes, improving positive work culture in colleges, enhancing performance of faculty, staff, and students\(^\text{15}\). Strategic leaders also provide solutions while dealing with faculty attrition, branding, governance and efficiency, effective collaboration with research institutes, industry partners, in turn providing positive healthy environment in the campus.

It is also relevant to understand the strategic leadership actions, one need to study the influencing factors related to providing competitive work culture, meritocracy\(^\text{16}\), raising aspirations of faculty and students, recruiting qualified staff, encouraging higher education of staff. Strategic leaders need to be good at providing research opportunities or facilities to staff and students, building credibility with all stakeholders, maintaining high levels of discipline in campus, implementing pay scales as per the prevailing norms and policies, rewards and recognition, leadership by example, customer value and delight, integrity, fairness and transparency.

**Change management:** Change management in AP engineering colleges is the process, tools and techniques to manage the people side of change to achieve the required business or academic outcome.

---


Change management incorporates the organizational tools that can be utilized to help individuals make successful personal transitions resulting in the adoption and realization of change (technology, people and environment). Change management is a structured approach to transitioning individuals, teams and organizations from a current state to a desired future state. It is an organizational process aimed at empowering faculty and staff to appreciate in order to accept and embrace changes in their current academic environment. Change management refers to a project management process where changes to a project are formally introduced and approved.

**Examples of organizational change**\(^\text{17}\) are change in vision and mission, strategic changes, operational changes (including changes in organizational structure), technological changes, changing the attitudes and behaviors of personnel. As a multidisciplinary practice that has evolved as a result of scholarly research, organizational change management should begin with a systematic diagnosis of the current situation in order to determine both the need for change and the capability to change. The objectives, content, and process of change should all be specified as part of a change management plan.

---

\(^\text{17}\) K Aswathappa, Work culture, Organizational Behavior by HPH, 2007, PP 79-83
Change management processes may include creative evangelism to enable communication\textsuperscript{18} between change audiences, but also deep social understanding about leadership’s styles and group dynamics. As a visible track on transformation projects, organizational change management aligns groups’ expectations, communicates, integrates teams and manages people training. It makes use of performance metrics, such as financial results, operational efficiency, leadership commitment, communication effectiveness, and the perceived need for change to design appropriate strategies, in order to avoid change failures or solve troubled change projects\textsuperscript{19}. Successful change management is more likely to occur if the following are implemented in AP engineering colleges:

1. Benefits management and realization to define measurable stakeholder aims, create a business case for their achievement (which should be continuously updated), and monitor assumptions, risks, dependencies, cost benefit analysis, return on investment, and cultural issues affecting the progress of AP engineering colleges.

2. Effective college communications that informs various stakeholders of the reasons for the change, the benefits of successful implementation as well as the details of the change (when? where? who is involved? how much will it cost? etc.).


3. Devise an effective education, training and skills upgrading\(^{20}\) scheme for the college staff, faculty and students.

4. Counter resistance\(^{21}\) from the faculty members of college and align them to overall strategic direction set by the leadership team.

5. Provide personal counseling (if required) to under achievers or poor performers or people with low self esteem to alleviate any change related fears.

6. Monitoring of the implementation strategies or plans and fine tuning as required.

Change management in AP engineering colleges is a systematic approach to dealing with change, both from the perspective of an organization and on the individual level. A somewhat ambiguous term, change management has at least three different aspects, including: adapting to change, controlling change, and effecting change. A proactive approach to dealing with change is at the core of all three aspects. For a college, change management means defining and implementing procedures and technologies\(^{22}\) to deal with changes in the academic environment and to profit from changing opportunities.

Successful adaptation to change is as crucial within an engineering college as it is in the natural world. Just like plants and animals, colleges


\(^{21}\) G. Vijaya Raghavan, High Performance Leadership by HPH, 2006, PP 139-151

and the individuals in them inevitably encounter changing conditions that they are powerless to control. The more effectively you deal with change, the more likely you are to thrive. Adaptation might involve establishing a structured methodology\textsuperscript{23} for responding to changes in the business environment (such as a fluctuation in the economy, or a threat from a competitor) or establishing coping mechanisms for responding to changes in the workplace (such as new policies, or technologies).

After understanding the meaning or insights\textsuperscript{24} of change management in general, now let’s refer specifically what change management relates to AP engineering colleges. The present research study analyzes the academic change management processes in terms of, technology change management, infrastructure change management, people management in terms of behavioral aspects, learning-teaching methodologies, alliances with research institutes, industry partners, policy making bodies, competing with other national and international level colleges, sustainability, effectiveness, branding, governance, efficiency.

1.2 Technical Education in India

It is appropriate to mention at this stage, that the role played by AICTE (All India Council for Technical Education)\textsuperscript{25} and UGC\textsuperscript{26} (University

\begin{footnotesize}
\begin{itemize}
  \item Manohar, 2010, Professional responsibilities, Teaching Professionals, Sugyan Management Journal, Vol 2, Issue 1, PP 59-65
  \item Rane, 2004, Change management in educational institutions, World Transactions on Engineering and Technology Education, Vol.2, No.2, PP 245-250
  \item AICTE team report on accreditation, http://www.aicte-india.org/accreditation.htm, Accessed on 9\textsuperscript{th} March 2009
  \item UGC team report on academic guidelines, http://www.ugc.ac.in/financialsupport/xiplan/guideline.html, Accessed on 11\textsuperscript{th} March 2009
\end{itemize}
\end{footnotesize}
Grants Commission) as a point of reference for the study. The AICTE and the UGC are responsible for according permission for setting up technical institutions and imparting education at under graduate and post graduate level as per the set guidelines.

The AICTE is the statutory body and a National-level council for technical education, operates under the auspices of Department of Higher Education, Ministry of Human Resource Development\(^27\), established in November, 1945 as an advisory body and later in 1987 given statutory status by an Act of the Parliament. AICTE is responsible for proper planning and coordinating development of the technical education and management education system in India\(^28\). The AICTE accredits postgraduate and graduate programs under specific categories at Indian institutions as per its charter.

Since large number of private engineering colleges and polytechnics have come up in recent years, The National Policy on Education, 1986, stipulated that, the AICTE will be vested with statutory authority for planning formulation and the maintenance of norms and standards, Accreditation, funding or priority areas, monitoring and evaluation maintaining party of certificates and awards and ensuring the coordinated and integrated development of technical education.

The University Grants Commission has been established by an Act of Parliament in 1956. The Commission acts as an expert body to advise

---

\(^{27}\) DHE team report on higher education, [http://www.education.nic.in/uhe/uhe.asp](http://www.education.nic.in/uhe/uhe.asp), Accessed on 11\(^{th}\) September 2010

\(^{28}\) Allam Apparao, 2009, Important Steps in Education System, The making of a world class University, the first 1000 steps, Graphic Printers, PP 6-7
the Central government on problems associated with the coordination of facilities and maintenance of standards in Universities\textsuperscript{29}. The Commission in consultation with the Universities concerned will also have the power to cause an inspection, or inquiry to be made of any University, established by law in India and to advise the University on any matter which has been the subject of an inquiry or inspection. The Commission shall also advise, whenever such advice is sought, on the establishment of new Universities. Thus, these two important agencies of Government are playing an important role in the growth and development\textsuperscript{30} of technical education in the country.

1.3 Status of Engineering Colleges in AP

As per AICTE report, growth rate of engineering colleges in AP from 1946 to 2010 has been significantly progressed. There were only three engineering colleges till 1965. By, Dec 2010, there are 656 colleges. Number of colleges\textsuperscript{31} and available seats in 2004-05 were 238 and 82225 respectively. Number of colleges and available seats in 2009-10 were 656 and 227410 respectively. In Ranga Reddy district there were 142 colleges and 52200 seats. In Adilabad district there were two colleges and 2630 seats.

\textsuperscript{29} UGC team report on college maintenance standards, \url{http://www.ugc.ac.in/policy/regulationspdf/establishment_maintenance.pdf}, Accessed on 6\textsuperscript{th} Jan2010.
\textsuperscript{30} Ashok Kacker, 2010, Development, Leadership at Infosys, Penguin India, PP 110-111
\textsuperscript{31} Nandan Nilekani, 2008, Profile of institutions, Technical education, Change Leadership Research, “Imagining India”, Penguin Books India, PP 179-198
Engineering Colleges Status as on Dec 2010 in AP:

Table 1.0.2: Growth rate of colleges from 1946 to 2010 in AP

<table>
<thead>
<tr>
<th>Period</th>
<th># Engg. Colleges</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1946-70</td>
<td>3</td>
<td>--</td>
</tr>
<tr>
<td>1970-75</td>
<td>5</td>
<td>66.66</td>
</tr>
<tr>
<td>1975-85</td>
<td>18</td>
<td>260</td>
</tr>
<tr>
<td>1985-95</td>
<td>20</td>
<td>11.11</td>
</tr>
<tr>
<td>1995-2000</td>
<td>90</td>
<td>350</td>
</tr>
<tr>
<td>2000-2005</td>
<td>238</td>
<td>164</td>
</tr>
<tr>
<td>2005-2009</td>
<td>535</td>
<td>124.7</td>
</tr>
<tr>
<td>As on Dec 2010</td>
<td>702</td>
<td>31.2</td>
</tr>
</tbody>
</table>

Table 1.0.3: Growth rate of seats availability from 2004 to 2010

<table>
<thead>
<tr>
<th>Year</th>
<th># Available Engg. Colleges</th>
<th># Available Engg. Colleges seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>238</td>
<td>82225</td>
</tr>
<tr>
<td>2005-06</td>
<td>262</td>
<td>92600</td>
</tr>
<tr>
<td>2006-07</td>
<td>282</td>
<td>98793</td>
</tr>
<tr>
<td>2007-08</td>
<td>337</td>
<td>118993</td>
</tr>
<tr>
<td>2008-09</td>
<td>535</td>
<td>176552</td>
</tr>
<tr>
<td>2009-10</td>
<td>656</td>
<td>227410</td>
</tr>
</tbody>
</table>

Table 1.0.4: Colleges and seats distribution as per districts in AP

<table>
<thead>
<tr>
<th>District</th>
<th># Available Engg. Colleges</th>
<th># Available Engg. Colleges Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranga reddy</td>
<td>142</td>
<td>52200</td>
</tr>
<tr>
<td>Guntur</td>
<td>47</td>
<td>17250</td>
</tr>
<tr>
<td>Nalgonda</td>
<td>40</td>
<td>13165</td>
</tr>
<tr>
<td>Krishna</td>
<td>37</td>
<td>13080</td>
</tr>
<tr>
<td>East Godavari</td>
<td>33</td>
<td>10800</td>
</tr>
<tr>
<td>Chittoor</td>
<td>33</td>
<td>10940</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>30</td>
<td>10100</td>
</tr>
<tr>
<td>Vishakhapatnam</td>
<td>28</td>
<td>10010</td>
</tr>
<tr>
<td>West Godavari</td>
<td>28</td>
<td>9810</td>
</tr>
<tr>
<td>Warangal</td>
<td>26</td>
<td>8535</td>
</tr>
<tr>
<td>Medak</td>
<td>24</td>
<td>8300</td>
</tr>
</tbody>
</table>

Out of every four students passing intermediate with Mathematics, Physics, Chemistry (MPC) group, three students are getting opportunity\textsuperscript{33} to join an engineering college in AP. Within five years, there is three times increase in terms of seats in AP. In view of this, the challenges these institutions are likely to face are availability of qualified teachers\textsuperscript{34}, infrastructure, governance structure, leadership, change management, industry intervention, efficiency, branding etc.

1.4 Objectives of the Study

The main objectives of the study are:

**Objective 1:** To analyze various factors that are impacting students placements in rural, urban, government and private engineering colleges of AP.

**Objective 2:** To measure the impact of performance management system on performance of faculty members in rural, urban, government and private engineering colleges of AP.

\textsuperscript{33} Brinda Kalyani, 2010, Managerial Skills, The personal and infrastructural problems of small scale entrepreneurs, Sugyan Management Journal, Vol 2, Issue 1, PP 83-96

\textsuperscript{34} The Department of Technical Education DTEAP team report, http://dteap.ac.in, Accessed on 1\textsuperscript{st} May 2010.
**Objective 3:** To examine the impact of pay scales in enhancing the performance of faculty members in rural, urban, government and private engineering colleges of AP.

**Objective 4:** To analyze the relationship between career growth and faculty attrition in rural, urban, government and private engineering colleges of AP.

**Objective 5:** To identify the factors influencing branding and the impact on performance of engineering colleges in both rural and urban areas of AP.

**Objective 6:** To critically examine the correlation between governance structure and performance of colleges in rural, urban, government and private engineering colleges of AP.

**Objective 7:** To study the relationship between college location and branding of engineering colleges in both rural and urban areas of AP.

All the above objectives are with reference to rural, urban, government and private engineering colleges of AP.

1.5 **Research Questions**

During 1995-2000, there was a high growth of engineering colleges in AP (about 350%). This huge expansion has created some challenges and hence has given the scope for the present study. After having extensive discussions with the research guides, academicians, experts in engineering colleges, and colleagues, industry experts, the research problem has been formulated keeping following research questions in perspective:
1) What are the critical success factors for successful implementation of change management processes and strategic leadership actions in AP engineering colleges?

2) What are the external and internal factors inhibiting the implementation of change management processes in AP engineering colleges?

3) What are the roles and responsibilities of different teams in an engineering college for creating positive work culture?

4) What are the factors influencing faculty attrition in AP engineering colleges? What are the roles and responsibilities of strategic leadership in this regard?

5) What is the role of branding in enhancing the overall performance of AP engineering colleges? What are the other influencing factors? (internal and external branding)

6) What are the enabling factors for enhancing the students’ placements in AP engineering colleges?

7) What is the present status of governance in AP engineering colleges? What is the impact of governance on efficiency in AP engineering colleges?

1.6 Hypotheses

A research hypotheses is the expectation or prediction that is to be tested by the researcher. After conducting a detailed review of literature\textsuperscript{35} on leadership in technical institutions, strategy and change management

\textsuperscript{35} Best practices in review of literature and surveys, \url{http://ludwig.missouri.edu/405/review.html}, Accessed on 7\textsuperscript{th} November 2009
best practices, the following are the set of hypotheses in line with the research problem and objectives. Factor analysis was done before hypotheses formulation.

**Hypotheses- H_01:** There is no significant association between location of the college (rural or urban) and their opinion on lack of career growth which has an overall impact on faculty attrition in AP engineering colleges.

**Hypotheses- H_02:** There is no significant correlation between location of the college (rural or urban) and their opinions on performance management system which has significant impact on performance of faculty members in AP engineering colleges.

**Hypotheses- H_03:** There is no significant association between location of the college (rural or urban) and their opinions on partnering with industries which is one of the key factors to influence the performance of faculty members in AP engineering colleges.

**Hypotheses- H_04:** There is no significant difference in the management styles of the colleges located in rural or urban areas which is one of the key factors that influences the meritocracy practices in AP engineering colleges.

**Hypotheses- H_05:** There is no significant association between location of the college (rural or urban) and their opinions on pay scale which is the key factor responsible for faculty performance in AP engineering colleges.
Hypotheses- $H_06$: There is no significant correlation between location of the college (rural or urban) and their opinions on having competent staff which is the key factor to attract meritorious students in AP engineering colleges.

Hypotheses- $H_07$: There is no significant difference between type of college (private or government) and their opinions on partnering with industries, which is one of the key factors to influence the performance of faculty in AP engineering colleges.

Hypotheses- $H_08$: There is no significant difference between type of college (private or government) and their opinions on lack of career growth which has an overall impact on faculty attrition in AP engineering colleges.

Hypotheses- $H_09$: There is no significant difference between type of college (private or government) and their opinions on pay scale which is the key factor responsible for faculty performance in AP engineering colleges.

Hypotheses- $H_010$: There is no significant difference between type of college (private or government) and their opinions on having competent staff which is the key factor to attract meritorious students in AP engineering colleges.

Hypotheses- $H_011$: There is no significant association between type of college (private or government) and their opinions on brand image of AP engineering colleges.
Secondary data was collected from books, journals, magazines, newspapers, acts and articles and research publications. Primary data was obtained through questionnaire\textsuperscript{36}. Apart from hard copies, data was also collected through emails, online web survey portal, telephonic interviews and formal requests. Interviews were conducted through structured schedules by seeking prior appointments from the managements, faculty members. Relevant statistical tools, viz., SPSS 18.0 (Statistical Package for the Social Sciences), Microsoft Excel, etc., were used for the study.

1.7 Need of the Study

It is required to look at the impact of strategic leadership, change management activities, work culture, faculty attrition, branding, governance and efficiency on performance of AP engineering colleges\textsuperscript{37}. AP engineering college managements expected to be aware of various parameters that are influencing performance and sustainability.

While it is good to have more engineering colleges in AP state, it is very important to study and analyze the academic leadership challenges in terms of “architecting the education experience”. It is also very important to find the ways and means to enhance the existing students’ placements from 25\% to at least 50\% or higher rate for the benefit of students and other stakeholders.

\textsuperscript{36} Questionnaire sample reference, \url{http://www.samplequestionnaire.com}, Accessed on 9\textsuperscript{th} June2009.

\textsuperscript{37} Mr. Huned, Performance to determine fee structure for engineering colleges, \url{http://www.educationmaster.org/news/performance-determine-fee-structure-engineering-colleges.html}, Accessed on 4\textsuperscript{th} Dec2009.
The approaches suggested are based on close interaction as part of faculty enablement programs\textsuperscript{38}, student training programs and rolling of basic skills enhancement programs in terms of technical, life skills, process orientation, English language proficiency, etc.

1.8 Importance of the Study

This study is important as the researcher need to find out, besides others, the impact of strategic leadership, academic change management processes, work culture, faculty attrition, branding, governance and efficiency on performance of AP engineering colleges with respect to overall colleges’ performance and longevity.

For this study, it is observed that some of the AP engineering college managements, who have clear vision and mission, with closer industry contacts and enormous amount of risk taking ability and sound family or political background, have successfully taken over in setting up and running these colleges as first generation entrepreneurs, barring a few exceptions here and there. So there are challenges in analyzing or examining the relevance, effectiveness, sustainability of academic initiatives\textsuperscript{39} and change management processes.

The study could be useful to AP engineering college managements, academicians\textsuperscript{40}, students, research scholars, new entrepreneurs and

\begin{itemize}
\item \textsuperscript{38} Burguilio, 2010, Innovative Pedagogical Teaching Learning Methods, Development of e-learning module, Development in eSystems Engineering, DeSE’10, International Conference, PP 123-124
\item \textsuperscript{39} Special Academic Initiatives: Sustainability, \url{http://www.kenyon.edu/x49917.xml}, Accessed on 9\textsuperscript{th} August2010
\item \textsuperscript{40} Visweswaran C.1998, Job satisfaction as a function of top management support for ethical behavior, A study of Indian Managers, Journal of Business Ethics, PP 365-371.
\end{itemize}
colleges working on the subject of leadership and work culture with special reference to technical education.

This research study is important for several reasons, besides others. First, this study evaluates work culture, leadership in AP engineering colleges, faculty attrition, strategy and change management based on various parameters, viz., relevance, effectiveness, sustainability, analysis of gaps between industry and academia, improving skill development programs and also suggests the lessons to be learnt and, best practices from colleges and organizations should adopt.

1.9 Scope and Limitations of the Study

The study broadly focuses on factors related to work culture, leadership, strategy, change management, faculty attrition, efficiency, branding, governance, employability skills, industry ready skills, and important functions of human resources (HR) in AP engineering colleges. The researcher has chosen above, not because others are less important but due to time and resource limitations.

The present study covers about 417 engineering colleges\(^41\) spread across length and breadth of AP. Hence it is only an illustrative, but not necessarily an exhaustive study. The present study is based on the sample and it has limitations of generalization\(^42\).

- The study is largely based on the opinions and data points collected from the leadership teams, management, faculty and the opinions


sometimes, may or may not convey the whole truth.

- The study generally covers some of the selected engineering colleges located in the state of AP. The study by and large covers the private engineering colleges and very few selected are premier and the university colleges of engineering and technology.

- It was experienced that the respondents, sometimes were unwilling to share\textsuperscript{43} the sensitive information such as actual faculty attrition, reserves and surpluses, percentage of students getting campus placements, performance appraisals\textsuperscript{44}, research facilities, etc., this may not be accurate in some areas of this report.

\textsuperscript{43} Prem Chadha: Performance Management, Macmillan India, New Delhi, 2003
\textsuperscript{44} Krishnan, 2004, Performance Appraisals, Nurturing Fast Track Leaders, A Concept Paper, \url{http://stdwww.iimahd.ernet.in/~sandeepk/Fasttrack.pdf}. Accessed on 26th April 2009
1.10 Organization of Thesis

- **Introduction**: This chapter deals with background, objectives of the study, hypotheses, research process, need, importance, scope, and limitations of the study, etc.,

- **Literature Review**: This chapter provides literature review of research work done so far in the area including certain gaps that are existing. Some of such related aspects are listed below:
  - Leadership in technical institutions, strategy and change management in AP engineering colleges
  - Impact of change management processes on work culture
  - Strategic academic leadership and its impact on faculty attrition. Impact of branding on performance
  - Governance and its impact on efficiency

- **Research methodology**: This section deals with research design, research instruments, pilot study, main study, population, sampling method, profiling of institutions, data collection procedures, tests employed, etc.,

- **Data analysis**
  - **Data analysis and interpretation**
  - **Impact of change management processes on work culture**: This section deals with impact of change management on work culture in AP engineering colleges,
statistical analysis, data interpretation and findings of the study and summary.

- **Strategic academic leadership and its impact on faculty attrition:** This section deals with leadership and its impact on faculty attrition in AP engineering colleges, statistical analysis, data interpretation and findings of the study and summary.

- **Impact of branding on performance:** This section deals with impact of branding in AP engineering colleges, statistical analysis, data interpretation and findings of the study and summary.

- **Governance and its impact on efficiency:** This section deals with governance and its impact on efficiency in AP engineering colleges, statistical analysis, data interpretation and findings of the study and summary.

- **Conclusions:** This chapter deals with results of hypotheses tested, contributions of this research, recommendations, future studies, etc.,

- **Reference journals, books, websites**

- **Annexure**
  
  a. Questionnaire
  
  b. Abbreviations used
  
  c. Partial list of AP Engineering colleges
  
  d. List of publications by the researcher