2 Literature Review

2.1 Chapter Introduction
The purpose of this chapter is to find Literature support for the KPIs especially relating to Higher Education and also explore the academic context prevailing in The Sultanate of Oman. This would help in understanding the status quo and to examine the need for this kind of research work in this country.

2.2 KPI System- Governments’ View
“Key Performance Indicators (KPI) is related to goals or objectives and provides a means for tracking performance against that goal or objective” mentions the hand out given during a Work shop organized by Ministry of Higher Education, and Oman Accreditation Council in Sep’2006.

This is a broad pointer from The Ministry of Higher Education (MoHE), Oman, to all higher education institute representatives at the work shop. KPI is flagged as a vital element, in assessing the performance measurement of higher education institutes by the Ministry, Sultanate of Oman.

The roots for the implementation of KPIs in the Sultanate originate from the Islamic Conference of Ministers for Higher Education and Scientific Research (ICMHERS) meetings and the meeting in 2011 at Riyadh brings out a following report:

“In its extraordinary session held in Riyadh, the ICMHERS adopted a strategic foundational document on "Key Performance Indicators-A Guide for Assessment and Quality Enhancement for Universities in the Islamic World". It called for organizing seminars and workshops for raising the awareness about the document.

It urged member states to give priority to Key Performance Indicators (KPIs), start quality assurance systems for reaching excellence in academic education, and create academic links making use of factors leading to scientific and technological innovation, high quality, comprehensive excellence in the field of education” (The Islamic Conference of Ministers of Higher Education and Scientific Research concludes its proceedings in Riyadh, 2011)
Sultanate of Oman, being a member country of OIC, has, aligned its direction with that of the resolution adopted by the ICMHESR (The Islamic Conference of ministers of higher education and scientific research). MoHE, in Oman is making it mandatory that all higher education institutes in the Sultanate establish Key Performance Indicators (KPI) to measure their performances.

To support the higher education institutes in implementation of KPIs and bring them in line with the MoHE’s thinking and direction, the ministry organized the workshop in 2006, for all the representatives of higher education institutes. Oman Accreditation Council, now referred as Oman Academic Accreditation Agency (OAAA) is entrusted with the task of ensuring that during the process of accreditation of the higher education institutes by OAAA, the mission, vision statements are checked which form the basis for Key Performance Indicators formation.

It is firmly believed that KPIs, when, properly designed, formed and monitored, would reflect the performance of higher education institutes. However, this has to be enforced by all the governments of respective countries, so that the higher education institutes fall in line and formulate the KPIs and monitor them.

It is appropriate here to recall, (Ferris M. , 1992),”It is the responsibility of the government to make sure that the public funds are wisely used, and, thus, it is the government’s obligation to hold its institutions accountable for their performance”

In the Sultanate, the Ministry of Higher education is entrusted with the task of monitoring the institutes. The public (Government established) universities and colleges get their grants of funds from the Government. The private universities and colleges, are under direct supervision of the Ministry and get the support in terms of land allocation, approval of the program and all other support needed. Therefore, there is a need for a performance measuring scale for the institutes of higher education.

In the Sultanate, the largest University is, Sultan Qaboos University established by the Government in the year 1986. In the sultanate, there also exists, a number of other government and private higher education institutes.
Enforcing and monitoring KPIs system of measurement for all higher learning institutes certainly serve the purpose of the government when government resources need to be allocated amongst them.

2.3 Need for KPIs in higher education

The number of students seeking higher education is always on the increase, and so is the number of institutes catering to that need. It becomes the responsibility of the respective governments to ensure that the institutes have clear objectives and there is a constant vigil for ensuring that all efforts are being made to achieve these objectives. The KPI’s originate from the mission /vision statements of the institutes. Therefore, the strategy is to have the clear goals and objectives defined for introduction of KPI’s.

The strategy for introduction and emphasis for utilization of KPIs in higher education is further explained in this manner, “At the center of the strategy was a commitment to neo-Taylorian concepts of management and the drive to ensure that clear objectives were set against which performance could be easily measured and resource allocation policies linked with that performance. Establishing performance indicators, reducing complexities of judgment to simple measures, was part of that” (Kogan, 2004). The author goes on to say that “The selection and use of performance indicators are significantly affected by the broader policy context, the nature of the state and the resource allocation system embedded within. This means that the higher education institutes, while designing the KPIs, should consider factors such as the respective ministry’s or Government’s policy and the resources allocation frame work.

(Martin, 2011), refer to the Higher Education Funding Council for England (HEFCE) stating the five purposes of forming KPIs: ‘to provide better and more reliable information on the performance of the sector; to allow comparison between individual institutions; to enable institutions to benchmark their own performance; to inform policy developments; and to contribute to the public accountability of higher education’.

According to (Kaiser, 2004), “There is no single authoritative definition of an indicator. What distinguishes a performance indicator from an “ordinary” indicator is that the former is used as an assessment of goal-attainment. The author also quotes the European commission’s view that indicators should not be considered only in their capacity for measuring progress. Indicators
should function mainly as a basis for a constructive dialogue and exchange between Member States, as a tool to understand the reasons for differences in performance, so that other countries can learn from policy practices adopted by the most successful countries. Therefore, indicators can be used as an instrument for stimulating the exchange of good experience and new ways of thinking about policy approaches – which brings us to benchmarks.

In the context of sultanate of Oman, this would mean there should be transparency about the KPIs of different institutes of higher learning, so that, the better performing institutes measurement system and the Key Performance Indicators are shared and emulated by all college.

The comparison of KPIs among Universities and colleges can go beyond the national borders and international comparison must also be possible. The performance indicators discussed, however, tend to be taken for granted (that it is followed by all institutes of higher education) - in the different countries and therefore appear to make an international comparison possible and useful, and for this reason they attract international attention. Since they are common, they are becoming the core of the emerging method of managing higher educations (Sizer, 1992.)

Besides serving the purpose as a comparison tool, it is suggested by (Rizk, 2011) that the Key Performance Indicators are considered communication vehicles that enable top management to transmit their missions and goals to employees ensuring that everyone in the institution is following the right direction that lead to development and progress.

However, how far this can be effectively put to use depends on the management of the institutes concerned to have regular channels of communication established with their employees to convey the Key Performance Indicators and its usefulness and performance measures.

Besides, the employees, the system of KPIs also satisfy growing accountability concerns of stake holders like board of trustees (Keim, 2008).

The range of stake holders of higher education institutes, include the students, student’s parents, staff members, management, the government and even the society at large. However, the direct effect of performance is usually on the students, and staff members and the management including the board members.
This view is also supported by (Suryadi, Key performance indicators measurement model based on analytic hierarchy process and trend comparative dimension in higher education institution, 2007). The author mentions that, organizations performance measurement is focused on key results. Results are used to create and balance value for students and key stake holders – the community, employers, faculty and staff, suppliers and partners, and the public.

2.4 KPI – Classifications

The KPIs can be split into two categories for ease of understanding and installation in the system of measurement. At the first level the broad classification is by the nature of these indicators. They are classified as quantitative and qualitative performance indicators.

Quantitative indicators are too simple and hide complexities in a higher education system. These indicators tend to follow the adage “only what can be counted counts”. Qualitative indicators have to be included in a set of performance indicators, and these must deal with institutional performance in such areas as teaching, creating good citizens and improving democratic processes (Bunting, 2004).

To reinforce the point, the author further mentions, that, the National Working Group (NWG) constituted by the South African government (for designing and developing a quality measurement system for their higher education system) recognized the fact that the indicators and benchmarks do not reflect properties, such as leadership, management, performance and academic standards, which can only be assessed through qualitative judgments and peer review (Bunting, 2004).

The problem is not just the inclusion of qualitative indicators but to show its effectiveness in interpretation and measurement of progress of the parameters involved.

Besides classification as qualitative and quantitative Key Performance Indicators, further divisions are as quoted by Pereira and Tavares (2002) from Hufner (1994):

1. Internal Key Performance Indicators – Based on information available with the higher education institutes – like pass rates, Number of research reports, graduation rates etc.,
2. Operational Key Performance Indicators – Student staff ratio, student computer ratio, Size of classes, Unit costs etc.,
3. External performance indicators – Data external to the higher education institutes such as employability rates, Reputation of the institute etc.,
4. Research performance indicators – Such as the number of research reports, journal papers published, conferences conducted, consultations provided etc.,

As per the (Rizk, 2011), full picture of the institute is revealed when all the above 4 groups of Key Performance Indicators are used.

In essence, the author reflects that the Key Performance Indicators, besides, being used as a performance measurement tool, it can also bring a unified direction to the employees of the institute. However, it is generally left to the top management of the respective institutes to involve the employees in the KPI system, and bring about a togetherness of the employees, (in the managements’) prescribed direction of progress.

2.5 Perceptions about KPIs effectiveness in performance measurement

KPIs, are they the panacea for performance measurement and effectiveness in the higher education institutes?

The higher education setting is characterized by goal diversity and uncertainty, diffuse decision making and poorly understood production technology (Lindsay, 1981). The author linking KPIs to production technology because of the relationship between inputs and outputs as in a production unit. As per the author, “In higher education, the complexity and intangibility of the inputs and especially the outputs, means that the available measures do not adequately quantify the concepts.”

In higher education setting, the students are equated to the raw materials and the teaching staff takes the role of workers and the machines of a production unit. However, the output in a production unit, has a linear relationship with the input but, the comparison ends there – here, in the higher education institute, the raw materials, (i.e.) the students, have feelings and have their own potential to turn out to be a better output and the teaching staff have a great role in influencing the quality of output. So, there is no linear relationship and this makes the inputs and outputs more complex, in terms of measurement.
Simply stated, the accrediting days are gone, when site visitation teams would be preoccupied with resources, for example, counting books in the library or the number of PhD’s on staff; the emerging questions for these assessors focus on what the students have done or achieved as a result of having experienced the institution. This changed emphasis is a part of larger movement to gradually introduce quality assurance assessment in the operation and assessment of higher education (Nedwek, 1994).

(Nedwek, 1994) Captures that the performance is linked to quality assurance assessment of the higher education institutes.

This view is well supported by (Cheng, 2011), “In the context of quality enhancement in higher education, there is a growing focus on transformation, which emphasizes the empowerment of students”.

In Malaysia, the quality parameters for higher education are entrusted to CHE (Commission for higher education - under the ministry of education). They formed 108 KPIs as the basis for the internal quality system for the academic institutes and a public entity the ONESQA (Office of national education standards and quality assurance) formed 28KPIs to take care of external assessment of the education institutes. Each of the agency’s paranoid obsession, looks at quality from different perspectives as the CHEs KPIs, are internally focused and the ONESQA is externally focused, putting all the academic institutions in an academic limbo as it means to different sets of standards. (Shawyun, 2005)

Comparatively, the case in Sultanate of Oman is clear. MoHE, has established the KPIs and keep a tab on the reports (of KPI) from the higher education institutes. OAAA carries out the quality audits, where HEIs are reviewed in relation to their mission, vision and strategic objectives. OAAA is not involved in monitoring the KPIs set by MoHE.

According to (Issan, 2010), higher education in Oman, as in many other countries, is pressured more, by both internal and external challenges. These challenges include: Securing and maintaining needed financial support, meeting regional and international standards for academic quality, dealing with the influx of knowledge and information, and responding to the changing demographics of learners.
All the factors noted above can also become part of Key Performance Indicators in the performance measurement of higher education institutes.

### 2.6 Formation of Key Performance Indicators

“The indispensable first step to getting the things you want out of life is this: Decide what you want”– To quote, Ben Stein, an American actor, writer, lawyer, and commentator on political and economic issues

In the case of higher education institutes, deciding what you want – is a complex procedure. This is precisely because, the stakeholders are so varied and many, and their expectations also can be wide ranging. In this context, it is essential to decide or list the expectations and develop a system for their measurement. The list of expectations can be drawn by the management of the institutes, who should be well aware of the expectations of all the stakeholders. Generally the expectations are transcribed as missions and visions of the college Therefore, the KPIs are a derivative of missions and visions of the college or the universities concerned.

### 2.7 KPIs from Mission /Visions /Goals and objectives

(Serdar, 2010) Mentions that “As a result we collected information regarding the vision, mission and goals of the institution that were the basis for defining critical success factors and the set of Key Performance Indicators.”

KPIs should be clearly linked to the strategy, i.e. the things that matter the most. Once you have agreed, defined and mapped your strategic objectives you can design KPIs to track progress and gain relevant insights to help manage and improve performance. (Marr, 2010)

Further as per the workshop organized by MoHE and OAAA, Key Performance Indicators are related to goals or objectives and provide means for tracking performance against that goal or objectives (Palermo, 2006). The workshop referred above, had the following information in the form of a slide.
According to the MoHE, the indicator is not one single component, but a collection of components as detailed below.

KPIs also influence the behavior of all involved in the process. KPIs direct and prioritize behavior towards achievement, of the vision, goals and objectives (Palermo, 2006). For instance, if the institute mentions in its vision statement that it wants to be the premier institute in the region, the management and the staff would plan and take the path that would lead them towards their goal of becoming the premier institute in the region.

**2.8 Analytic hierarchy process of selecting the KPIs**

(Suryadi 2007) advocates the Analytic Hierarchy Process (AHP) model for the KPI measurement. In this process the KPI’s are arranged with weights attached based on their importance. The author further states that the selected KPIs with weightages are further analyzed by a Delphi forum. This forum has the objective to determine the most relevant ones for the HEIs concerned. The selection is done by using a three point scale of ‘Not important’ ‘Somewhat important’ and ‘Most important’ (Annexure D).

**2.9 Measurement of KPIs**

Higher education institutes play a vital role in giving valuable knowledge inputs to the younger generation and thus hold the potential for changing the face of the country towards progress in every field. This would mean that the higher education institutes stay vibrant and alive to the challenges of the changing times.

As a result, the Higher Education Institutes (HEI) are faced with the need to reform many of their existing management practices and mind sets. One of the current issues of interest is the need for performance management, especially measurement of Key Performance Indicators. Key Performance Indicators (KPI) is a fundamental concept in the area of performance management (Suryadi, Framework of Measuring Key Performance Indicators for decision support in higher education institute, 2007).
Many of the Colleges list the KPIs and keep updating the values against each one of them. At best, it is in an Excel format and the management / Ministry is updated with the latest values, with the relevant comments. No doubt, this is one basic way of measuring/ monitoring the KPIs.

Traditionally, figures like income, expenses, student numbers etc., where the metrics associate with numbers and are easier to compare and measure. But, in the case of higher education institutes, there are several non-financial parameters or KPIs, like the quality of teaching, student learning, student satisfaction employability etc., which should also be monitored and measured along with financial metrics to get a balanced view of the performance.

2.10 Balanced score card (BSC)

The way forward was first proposed in the early 90s, by Drs. Kaplan and Norton of Harvard Business School and is referred as Balanced Score Card (BSC).

The characteristic of the balanced scorecard and its derivatives is the presentation of a mixture of financial and non-financial measures each compared to a 'target' value within a single concise report. The report is not meant to be a replacement for traditional financial or operational reports but a succinct summary that captures the information most relevant to those reading it. It is the method by which this 'most relevant' information is determined (i.e., the design processes used to select the content) that most differentiates the various versions of the tool in circulation. The balanced scorecard also gives light to the company's vision and mission. These two elements must always be referred to when preparing a balance scorecard. (http://en.wikipedia.org/wiki/Balanced_scorecard, 2013).

This is further reiterated by (Nefstead, 2006) generally these financial measures report on outcomes also known as lagging indicators. This after-the-fact approach does not communicate the real drivers of future performance. What is needed is to define and manage indicators that show value through investments in students, faculty, staff, technology and innovation. To address these issues the BSC was developed by Kaplan and Norton to help overcome limitations of managing only with financial indicators.

In these days of globalization and increasing competition, the only way of staying ahead is to have a system of appraisal that keeps the management alive and responsive to the continuous
changing perspectives of the stakeholders (Students / staff / Management and the society in the case of HE).

If the current decade can be termed as information era, it is realized that the institutes of higher education should go beyond management of financial assets and liabilities and exploit its invisible assets.

This was one of the primary objective of Prof. Robert S. Kaplan of Harvard Business School and Mr. David Norton, President, Renaissance solutions Inc., the architects of the Balanced Score card concept and a management tool for performance measurement that is adopted by major multinational organizations across the world.

The name Balance Score Card draws strength from the fact that it gives equal weightage or provides a balance between external measures for shareholders and customers (students / students’ sponsors (parents) and internal measures of critical business processes, innovation, learning and growth. In other words, the measures are balanced between the outcome measures - the results from past efforts and the measures that drive future performance – according to (Kaplan R. &., 1996).

The essential elements of a Balanced score card of Dr Kaplan and Dr. Norton is reproduced in Figure 2.1 below: It is to be observed that all the four elements stem from the clearly formed and purposeful Mission and Vision statements of an Enterprise. The owners and the board of directors of the enterprise should look at the Mission statement not from an ornamental point of view but from the realization that the statements reflect the entire organization and its intentions.

The figure also guides the reader how one can go about in making use of the four elements as proposed by the authors of BSC.
The Figure 2.2 given below looks at the same four classifications in a different perspective. This table is configured taking into account the college where this study was conducted. The table is taken from (Kaplan R. a., 1996) and the contents are modified and applied to the College.
It is reported (Farid D. N., 2008) that BSC concept has been widely adopted in the business sector but the education sector has not embraced the BSC concept widely as indicated by the dearth of published research on this topic. Arid et al further state that in higher education as in business there are acceptable conventions of measuring excellence. Rather than emphasizing financial performance, higher education has emphasized academic measures.

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<table>
<thead>
<tr>
<th>1. Financial</th>
<th>Profitability/Return on Capital employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Customer-</td>
<td>Student employability</td>
</tr>
<tr>
<td>Students /Students Parents</td>
<td>Student satisfaction</td>
</tr>
<tr>
<td>3. Internal/</td>
<td>Quality of Teaching and learning</td>
</tr>
<tr>
<td>Business Process</td>
<td>Management Process</td>
</tr>
<tr>
<td>4. Learning and Growth</td>
<td>Staff Skills &amp; Students learning skills</td>
</tr>
</tbody>
</table>

Figure 2-2  Links in Performance Measurement

(Adapted from Balanced Score Card book by Dr. S. Kaplan and David Norton)
In higher education institutes, it is the teaching staff skills that translate ultimately into higher admissions and financial performance of the Institute and as per Balanced Score Card, the links are from Learning and growth of the institute (primarily through the staff of the college), Internal business process (facilitated by the Management process of the Institute), customer satisfaction and then the financial performance of the institute takes care of itself.

It becomes the responsibility of the Management of the institute to provide an environment that hones the skills of the teaching staff as well as create an ambience conducive to the effective teaching and learning practices.

However, the appropriate response of the management of higher education institutes should be calibrated primarily by strategies, the strategies planned to reach their pre-defined standards and goals. It is seen that there is a link from the skills of teaching staff to the financial performance of the institute. Each element in the link has a reflection of quality associated with it. For instance, the skills of the teaching staff depend on the quality of their delivery to the class of students. The effectiveness of teaching and learning strategies has a ring of quality and the process of assessment of this effectiveness has to be based on a quality system.

2.11 Goals of the Institute

In their paper, Farid et al (Farid D. e., 2008) report that every stake holder in higher education (eg student, government and professional bodies) has a particular view of quality dependent on their specific needs. This many fold expectations are difficult to match unless the Institute develops a set of goals and devises a systematic strategy to achieve these goals.

The college in which this study is being done, responded by identifying a set of four goals – after a daylong meeting of all the staff and the executives of the college in the year 2009. These goals primarily are connected to the Mission and Vision statements of the college and are reproduced below:

1. Enhancing the institutional climate to facilitate innovation and creativity
2. Enhancing the employability of the graduating students
3. Establishing a center of excellence, and,
4. Progressing the green agenda of the college
All the goals spring from the Mission and Vision of the college.

The four elements of BSC are now explained in the context of the College where this study was undertaken:

1. Financial perspective – How do we look to stakeholders?

In the case of an Engineering college, the main stakeholders are the management, the students and the staff members of the college. Others include the Ministry (Government), the parents, the employers and even the society.

The financial perspectives would include, for instance, the number of students, (hence the income), the expenses, cash flow, the funds from research and consultancy, the grant/aid from the Govt., etc. However, for the purpose of this research, this section has not been dwelt any further. It is believed that the college has adequate financial indicators. The reflection of Key Performance Indicators from the remaining three realms certainly impact the financial performance of the college and hence the focus will be on these remaining three regions, namely, Customer focus, Internal Business Processes and Learning and Growth.

2. Customers’ Perspectives – How do customers see us? For an Engineering college, the main customers are the students in the college. What is the student’s perspective of the college and his learning experience in the college? The employers perspective of the product (student), is taken into account while designing the key performance indicator in this section.

3. Internal process perspective – What must we excel at? The internal processes and internal growth perspectives show how the organization creates the outcomes of Financial and Customers perspectives. This way, managers can identify a causal chain from the performance drivers to financial outcomes. The internal process perspective relate to the quality of the teaching staff, the quality of teaching, the research and consultancy work, the operational excellence, etc., The Key Performance Indicators are designed to relate to the mission and how the institute can excel at them?

In the case of the college under consideration, in terms of the Goals of the college, the Management is able to identify the area in which the College should excel at – They have chosen
the specific field of Waste to Energy as the theme and decided that the College should work
towards establishing a center of excellence in this specific identified area.

4. Learning and Growth perspective – How can we continue to improve and create value? The set
of KPIs look at the institute as a whole and relate to the vision of the college and how the Board,
Management and staff learn from their own experience and pace take the path towards growth.
The staff development activities, Currency of the programs of the college, etc., this set of KPIs
should reflect the pace with the technological advance and the Globalization factors. The internal
processes must be supported by an organization’s learning and growth.

For the college, the systematic learning and growth potential is not only for the students – but also
includes the staff of the college. Realizing the importance, the college encourages the staff to
engage in research work and motivates them by incentivizing the staff to undertake Research /
Consultancy work.

2.12 Strategy Map

All the above four elements of a BSC, are integrated in the form of a strategy map that shows the
relationships between the four elements. This strategy map is also advocated by Dr. Kaplan and
Norton. The strategy map is a visual framework of the cause and effect relationships among the
components of an organization’s strategy, and it is used to integrate the four perspectives of a
BSC — financial, customer, internal, and learning and growth. It provides a uniform and
consistent way to describe strategy so the objectives and measures on the BSC can be established
and managed (Kaplan S., 2004).
This Figure 2.3, is based on the strategy maps concept by Dr Kaplan and Dr. Norton and by (Farid D. N., 2008). The top the element ‘Financial perspective’ – ultimately, all the elements contribute or cause concerns to the financial status of the institute. However, it appears possible to keep any one of the four elements at the top – depending on the need and priority of the institute. The arrows between the elements point to the relationships. However, while, the elements of the
strategy map is clear in the above Figure2.3, the relationships are not that striking between the elements, as the strategy map is not clear about the interdependency between the elements.

### 2.13 Strategy Map for the College

Taking the above map basics, a strategy map for the college is developed as given in the Figure2.4, below:

<table>
<thead>
<tr>
<th>Customer/ Stakeholder Perspective</th>
<th>Students Employability</th>
<th>Programmes Availability and Quality</th>
<th>Affiliations/ Ranking/Recognition by Industry</th>
<th>Students’ Transformational experience and</th>
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<tbody>
<tr>
<td><strong>Internal Business</strong></td>
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<tr>
<td>Teaching Excellence – Aids to Excel in Teaching</td>
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<tr>
<td>Curriculum Excellence – Bench Marking-</td>
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<tr>
<td>Knowledge Excellence Research and</td>
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<td></td>
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<tr>
<td>Efficiency/ Effectiveness skills/ work and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Learning &amp; Growth</strong></td>
<td>Human Capital Teaching Staff</td>
<td>Information Capital-system establishment</td>
<td></td>
<td>Organizational Capital- Transparent</td>
</tr>
<tr>
<td>Selection/ Staff development/ Continuous</td>
<td>Adaptation of latest trends- Blackboard-</td>
<td></td>
<td></td>
<td>Culture/ Leadership styles/ Motivation/Trend</td>
</tr>
</tbody>
</table>

*Figure 2-4  Strategy map of Caledonian College of Engineering*
2.14 Representation of KPIs

KPIs are presented in different manners to the decision making group within the higher education institutes. The current practice in Oman appears to be using the record of files/papers for the representation.

However, the dashboard way of presenting the KPIs is also available. The dashboard gives a visual display of the important KPIs in a single computer screen (Nefstead, 2006). The author also proposed using excel spreadsheet and using symbols and colour codes for the different KPIs.

![Dashboard Table - Scroll](Ref: www.BSCdesigner.com)

Table 2-1 Excel spreadsheet as KPI dashboard

The advantage is that, even if the number of KPIs are many and cannot be accommodated in one sheet, the same can be viewed in one screen of the computer by using the scroll as shown in Table 2-1.

There are several dashboard softwares specially designed for higher education institutes and are commercially available. Any of these softwares can be chosen to suit any individual college/universities requirements.
2.15 Chapter summary

In this chapter, a review of articles by authors on the classification of KPIs and their usability as measuring tool is seen. It is clear from the literature review that the colleges and universities should be aware of their vision/mission and goals. Once the destinations are clear, strategies can be worked out and KPIs that would indicate the performance can be developed.

As proposed by Dr.Kaplan and Dr.Norton, Balanced Score Card methodology can be a performance measuring system containing four elements and a strategy map can be developed for a clearer visualization of the goals linking with the performance of any organization. A strategy map of the college was developed using the Balanced Score Card methodology.

In the college, where the study is undertaken, it has been decided to look at the KPIs from the three main stakeholder’s points of view. The three main stakeholders are the students, the Teaching staff and the Management. The programs offered by the college are given in annexure 5.

For this study, Management here means, The Dean, Deputy Dean, and the Three Associate Deans of the college. It is assumed that the listed five full time executives are fully responsible in guiding the direction and the progress of the college. Though, the executives, as they are referred, report to the Board of Directors, it would be difficult to design the KPIs for the board of directors, in the context of this thesis.

The effectiveness of the KPI monitoring can be done using either the excel work sheet with color codes or any special softwares that would meet the requirements of the college.

It is also to be realized that an identified set of KPIs which are common for many universities help in ranking the Universities. http://www.topuniversities.com/university-rankings/asian-university-rankings/2012 gives the ranking of top 300 Universities in Asia.

In the next chapter, the Vision and Mission statements of the college is taken up for developing the Key Performance Indicators and the process of identifying the Key Performance Indicators is also discussed.