Chapter - III

- Measurement of Intangible Assets
- Limitations of Traditional Accounting
- Changing Nature of Corporate Reporting
- New Measures of Success
- Value Creating Processes
- Balanced Score Card and KM
- Conclusion
- Notes and References
3.1. Introduction

The wrong pricing strategy can destroy corporate value faster than almost any other business mistake. And when industries are about to be deregulated, managers habitually adopt ill-conceived pricing policies that are almost guaranteed to damage their companies and erode services to customers and the community, and thus ending up in a cycle of decay, says Mr. Marsha M. Hamilton. He goes on to confirm the above by citing examples where these flawed pricing policies — common among deregulating telecommunications, transportation, and utility companies as well as other businesses — represent efforts to hang on to customers. Managers cut prices preemptively to fend off new rivals and then launch full-fledged price wars in hopes of outlasting attackers and emerging victorious from the rubble.

Mr. Robert J. Hiebeler describes that measurement is the area of KM that shows the greatest gap between what companies want to do and what they are actually doing. Unfortunately, much of what KM is about know-how, intellectual property, human capabilities but does not get measured in today's management systems. Many managers feel that KM is important but face the dilemma that they have difficulty in demonstrating its value. The status of information management draws attention to the undermined practices and how difficult it is to ascribe value to information and knowledge in conventional Accounting terms. This applies even more so today to KM and has led to develop methods that can be used by senior managers to guide business strategy. Most measurement systems, of which Financial Accounting is the most developed, are based on measures of physical and tangible items such as raw
material, work in progress and finished products. In the evolving post-industrial economy, it is many of the intangible assets such as knowledge, that have a more important impact on a company's success. Existing Accounting mechanisms, however, with their historic financial orientation, do not fully account for these assets. This is most evident in the difference between a company's book value and its market value, which is often ten or more times larger says Mr. Barbara Farbey, et al. Much of this difference is due to intellectual capital. An apparent attempt here is, therefore, to explore several measurement issues - the limitations and criticisms of current Accounting methods, new approaches to measuring intangibles and the relationship of KM practice to corporate performance.

3.2. Measurement of Intangible Assets – Why?

The fundamental reason is that rather than physical assets, the intangible assets are the source of future value for the company and advanced economies in general, and increasingly recognised as such by leading economic and business commentators. Knowledge is now a crucial factor underpinning economic growth. Producing goods and services with high value-added is at the core of improving economic performance and international competitiveness. Increasing intangible investment which is difficult to measure has become a major issue for enterprises and governments. Intellectual capital is something we cannot see; we cannot touch, and yet makes us rich. During the course of review of the article, Your Company's Most Valuable Asset: Intellectual Capital by Mr. Thomas A. Stewart, three main motivations were found as to why managers want to embark on measuring their intangible and knowledge assets. The three motivations as described by Sri. Hubert Saint-onge are as follows.

a. Provides a Basis for Company Valuation (Asset Focus): Valuation is important for trading assets, or to properly value the company in the market place and earn a proper return for shareholders. There are valid reasons for
developing good external accounts for intangible assets - it presents the company to external customers, creditors or shareholders to enable them to assess whether the company is a dependable supplier, whether the bank can risk lending it more money, or whether the management has done a good job.

b. Stimulates Management Focus on What's Important (Action Focus): By developing appropriate performance metrics and making managers accountable, the right things get their attention and focus. Measurement is a critical component of any management system. Most managers recognise its vital role in communicating and tracking the achievement of an organization's strategy.

c. Base Line for Justifying Investing in KM Activities (Benefit Focus): In many companies, the proponents of KM were agonizing over what measures they could use to convince top management of its value and so continue or escalate the KM programme. Typically, the value of knowledge and KM activities is a function of indirect, often longer-term benefits that must be translated into bottom-line values that have direct relation to the enterprises, goals and objectives, given projection of how several intermediate links in the chain will be affected.

3.2.1. Intangibles – The Value Gap

The White Paper compiled by Alan Benjamin7 gives an interesting example of embedded knowledge having a premium value. The mechanic who, when questioned why he charged Rs.100 to fit a car door by one blow of his hammer, replied that it was Rs.5 for the time and effort, and Rs.95 for the experience which enabled him to know the force and direction of his blow, illustrates the key element of knowledge which is all too often latent. There are arguments that management should aim at eliminating the need for its
experience by robotically producing perfect components that fit together without
the need for any adjustment, human or otherwise. Thus, this experience is not
only valueless but also a sign of inefficiency if there is a need for its continuity.
But experience is not confined to craft and skills, which eventually will disappear
as technology advances. The experience of people is invaluable. People in the
mass never change. Their economic circumstances may well improve beyond
expectations. Yet the characteristics and motivation of the multitude will remain
constant. Given the repetition of environmental circumstances, namely those
beyond the control of people generally and those subject to that environment will
react in the same manner as they or their predecessors reacted. Price Waterhouse
Coopers World Economic Forum Global Chief Executive Officer Survey on
Management –“A Key Strategic Imperative in the Knowledge” contends that
traditionally, organizations have reported the value of their physical assets in
their accounts and hence, trained people to manage these physical assets.

Recently, however, a growing number of analysis have pointed out that
these physical assets in no way equate to the market capitalisation of firm’s
knowledge, etc. The point is that a firm is far more than simply the sum of its
physical assets. Indeed in today’s information-oriented society, often the firm’s
intangible assets far outweigh its physical assets. So the question becomes how
can executives and investors track whether a given firm is increasing or
decreasing the value of its intangible assets. At the heart of this is not only a
concern to be able to demonstrate to external parties the value of an
organisation’s intangible assets, but also to track whether particular managers
and leaders are developing these intangible assets in ways which will ensure the
creation of value in the future.
3.3. Limitations of Traditional Accounting

As a measure of value, the focus of Traditional Accounting is on tangibles but not on intangible assets, and therefore, does not provide a suitable baseline for justifying KM. Further, they are hardly, if ever, used as a management tool. Companies generally treat the Annual Accounts differently to internal Management Accounting. A common criticism of Traditional Accounting Methods is that they are backward looking and may not reflect the current situation. The pace and dynamism of the knowledge era brings the need for a forward perspective in managing organisational performance. Over reliance on Traditional Accounting and financial data with focus on the bottom-line means that the managers are having to drive their business looking through a rear-view mirror.

Another criticism is that apparently healthy companies can become worthless almost overnight. This discrepancy arises because Traditional Accounting Methods base value on tangible and visible assets such as plant and machinery and cash in the bank, and not the intangible hidden value by which investors value the company. Even when valued at a certain level by the stock markets, they may hold certain potential value in the eyes of others, not realised in their current structures. This discrepancy between value recorded in Accounting measures and that placed by the stock market was defined as the Q-factor.

The Q-factor is the ratio of market value (as reflected in stock market capitalization) and the book value (the replacement cost of the company's recorded assets). For many knowledge intensive companies today this ratio, rather than being close to 1 (which is typical for a steady-state manufacturing company) is often 10 or more. The value can be much higher for start-up biotechnology companies. The difference is in intangible assets. Which
intangible assets are captured by Traditional Accounting Systems? Not many. They only become recognised on a company’s Balance Sheet when that company is acquired by another company. The line item goodwill represents the difference between the book value and what was paid. It represents value or potential value in the eyes of the buyer. The buyer may perceive value in trademarks, brand names and other intangibles not recorded in the books of the company that has been taken over. In Accountancy practice, goodwill is only assigned a value when a company is sold. This portion of organization value, which only becomes objectively measurable when a company is sold, is defined as subjective goodwill. While Accountants acknowledge that subjective goodwill is real and a valid economic concept, they find it difficult to translate it into something objective, auditable and reliable. The practice of companies wanting to capitalise their brand names started the whole profession looking at how intangibles should be handled in the Balance Sheet. The important point is that something can be measured as an asset only if it can be measured as a monetary amount with sufficient reliability. Yet much knowledge value comes not from discrete entities than can be traded like physical goods, but from combination of opportunities and from locking into an organisation’s infrastructure. The franchises, licences, trademarks, quota, patents and copyrights are the most likely forms of intangible assets to receive treatment in this way. However, it says nothing about those factors such as quality of management that are ascribed value by investors and brokers. Thus, the main features of Historical Cost Accounting for knowledge-based companies are as follows:

- Recognise only a small subset of the assets of such companies;
- Purchased intellectual property may be recognised only at cost; and
- Limited recognition is possible for internally generated intellectual property. However, no recognition is possible for other forms of intangible assets.
Thus, the glaring anomaly is that the full value of intangible assets may be recognised as 'goodwill' only when one company is purchased by another, but not during the normal course of its operations. Traditional Accounting Methods also fail to recognise other anomalies of intangible assets. Some intangible assets depreciate in value rapidly, while others follow non-linear and unpredictable life cycles. Their value is volatile. The value of content is time-sensitive, user specific and varies widely - financial data can be worth millions in the morning and nothing in the afternoon. When knowledge assets are shared, their overall value may increase rather than remain the same. Intangible assets are difficult to separate, thus violating a cardinal rule of asset valuation.

Further, distinction between assets and expenses is often arbitrary. For example an advertising campaign or training course can be classified as a current expenditure and/or an investment outlay. Some favour cost-based approaches, others opt for transaction-based ones, and yet others look for revenue generating potential. The multiplicity of approaches is exemplified in the years of debate about Human Resource Accounting (HRA) i.e., whether and how to value an organisation's human resources. According to Sri. Geoff Hogbin and Sri. David V. Thomas, different models proposed (over a dozen in all) can be classified into three categories as presented below:

a. **Cost Models**: Historical or Acquisition Cost; Replacement Cost; and Opportunity Cost.

b. **Human Resource Value Models**: Non-Monetary Behavioural Models; Monetary-Behavioural; and Monetary Economic Value Models.

c. **Monetary Emphasis**: Discounted Earnings.
The results indicate a growing awareness of the value of information, and again highlight the difficulties of accurately assessing its value and accounting for it. It is likely that, the costs and values likely to be abnormally underestimated, as these often represent only visible and centrally held information. Consideration of the above criticisms and difficulties has led to serious consideration of new measures - of both a company's valuation and its overall performance. A useful starting point is determining what are the intangibles that account for the discrepancy between a company's financial value and its market value. This difference is largely due to the intellectual capital.

3.4. The Changing Nature of Corporate Reporting: Developing Measures that Matter

Carla O'Dell has suggested the following rationale for corporate reporting.

a. Execution of Corporate Strategy: How well does management leverage its skills and experience, gain employee commitment, and stay aligned with stakeholder interest?

b. Quality of Strategy: Does management have a vision for the future; can it make tough decisions and quickly seize opportunities?

c. Ability to Innovate: Is the company a trend-setter or a follower, what's in the R&D pipeline, how readily does the company adapt to changes in technology and markets?

d. Ability to Attract Talented People: Is the company able to hire and retain the very best people, does it reward them, is it training the talent it will need tomorrow?
e. **Market Share**: Is the company capturing the value of the current market, is it well positioned to expand that value in the future?

f. **Quality of Executive Compensation**: Is executive pay tied to strategic goals, how well is it benchmarked to the creation of shareholder value?

g. **Quality of Major Processes**: Does the organisation reduce risks and enhance return through the precise execution of its current operations? Is the transition seamless to changing conditions?

h. **Research Leadership**: How well does management understand the link between creating knowledge and using it?

Elisabeth Kjellstrom has enlisted the following parameters.

<table>
<thead>
<tr>
<th>a. Morale</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Absenteeism, (ii) Accidents, (iii) Employee Turnover, and (iv) Sickness</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b. Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Appraisal - completion rates,</td>
</tr>
<tr>
<td>ii. Per cent of jobholders for whom documented annual appraisal,</td>
</tr>
<tr>
<td>iii. Per cent of jobs for which objectives have been documented, and</td>
</tr>
<tr>
<td>iv. Per cent of jobs for which job descriptions exist.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Benchmarked remuneration levels (external benchmarks),</td>
</tr>
<tr>
<td>ii. Director and manager salaries as % of total salaries,</td>
</tr>
<tr>
<td>iii. Human resource spent per employee, and</td>
</tr>
<tr>
<td>iv. Training investment.</td>
</tr>
</tbody>
</table>
d. Long-term Development

i. Per cent of jobs within level of which emergency cover identified,

ii. Per cent of jobs within level for which long term cover identified,

iii. Per cent of jobholders for whom a development plan has been agreed,

iv. Per cent of jobs for which competencies have been audited, and

v. Training days.

Mr. Philip Bardes attempted a framework (Value Reporting)\textsuperscript{13} that provides guidance on how to incorporate information on the business's value drivers into a company's internal reporting systems, so that management can become familiar as to how the value drivers translate into sustainable cash flows. This framework includes:

- Market Overview (competitive position, regulatory environment and macro-economic environment),

- Value Strategy (goals, objectives, governance and organisation),

- Managing for Value (financial performance, financial position, risk management and business segment analysis), and

- Value Platform (drivers of value - innovation, brands, customer loyalty chain, people, reputation - social, environmental, ethical).

White Paper prepared for Executive Information Systems on A Framework for Analysis and Measurement advances the following questions for organisations to address when defining a set of performance measures

- Stakeholder Satisfaction - Who are our stakeholders and what do they want?

- Strategies - What strategies to put in place to satisfy the wants and needs of these key stakeholders?
- Processes - What critical processes to operate and enhance these processes?

- Capabilities - What capabilities do we need to operate and enhance these processes?

- Stakeholder Contribution - What contributions do we require from our stakeholders if we are to maintain and develop these capabilities?

3.5. New Measures of Success

3.5.1. Knowledge Asset Approach

Historical financial measures are lagging indicators as they are an unsatisfactory guide to future performance. The following were given as examples:14 (a) Earning per share is a hopeless measure; and (b) What we have been slow to realise is that value lies more in intellectual property and less in bits of kit. Therefore, the companies should actively manage their various stakeholder relationships with shareholders, customers, suppliers, employees, unions, community, etc. The capabilities and activities of people create the company's knowledge bank, and sustaining that knowledge bank should be the key criteria for investors. Measuring whether that bank is growing should be a key measure for management. People are the asset. Therefore, asset renewal for people is education and training on a continuous basis. Its absence leads to a reduction in the value of the knowledge base. Knowledge is to be measured through assessment of skill, the impact of education and training, and the application of skills.

Two sets of accounts on comparative basis for the same company, one based on Traditional Accounting Method and the other using a Knowledge Asset Approach is presented below.
### Comparison of Traditional Accounting Vs Knowledge Accounting

#### Cash Accounts

<table>
<thead>
<tr>
<th>Items</th>
<th>Traditional Accounts</th>
<th>Rs.</th>
<th>Knowledge Accounts</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>28,00,000</td>
<td></td>
<td>Sales</td>
<td>28,00,000</td>
</tr>
<tr>
<td>Overheads</td>
<td>5,00,000</td>
<td></td>
<td>Overheads</td>
<td>5,00,000</td>
</tr>
<tr>
<td>Labour</td>
<td>16,00,000</td>
<td>Profit</td>
<td>Capital Expenditure</td>
<td>1,00,000</td>
</tr>
<tr>
<td></td>
<td>7,00,000</td>
<td></td>
<td>People Expenses</td>
<td>7,50,000</td>
</tr>
<tr>
<td>Capital Expenditure¹</td>
<td>1,00,000</td>
<td></td>
<td>Add: R&amp;D Surplus</td>
<td>50,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Profit</td>
<td>15,00,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Accruals</td>
<td>9,00,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>∴ Cash Surplus</td>
<td>6,00,000</td>
<td></td>
<td>∴ Cash Surplus</td>
<td>6,00,000</td>
</tr>
</tbody>
</table>

**Notes:**

1. Capital expenditure is assumed to have taken place at year end (no depreciation in Traditional Accounts).

2. Since the capital expenditure was for plant and machinery, this is written off as an expense in the Knowledge Accounts.

3. Some of the people expenses for R&D and marketing are accrued as deferred costs.

4. This takes account of the future revenue generation of R&D, allowing for non-comparison, and competitive risks.

5. Deferred R&D and people costs.

#### Balance Sheet (Assets)

<table>
<thead>
<tr>
<th>Assets</th>
<th>Traditional Accounts</th>
<th>Rs.</th>
<th>Knowledge Accounts</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant and machinery</td>
<td>1,00,000</td>
<td></td>
<td>Knowledge Bank</td>
<td>9,00,000</td>
</tr>
<tr>
<td>Cash</td>
<td>6,00,000</td>
<td></td>
<td>Cash</td>
<td>6,00,000</td>
</tr>
<tr>
<td>Total Assets</td>
<td>7,00,000</td>
<td></td>
<td>Total Assets</td>
<td>15,00,000</td>
</tr>
</tbody>
</table>

Although only an outline, the two sets of accounts bring home vividly the contrast of using different yardsticks for reporting results. The key feature of this approach is that a proportion of cash expenditure on people is not written off but is allocated to the asset bank. The asset bank is effectively a promise for future cash flow. For people in R&D, the proportion assigned to future assets may be quite high, say 90 per cent, for marketing perhaps 50 per cent relate to this year's activities, but for administrative activities, there is no residual asset value. In other words, Knowledge Asset Approach depicts the human resource developed in one period is amortised over a defined period on the reasoning that their contribution is earned in more than one year while Traditional Accounts treat the salary as a period cost. The increase in the knowledge asset is solely due to the creation of human asset to the extent of Rs. 8 lakhs.

3.5.2. Balanced Score Card

One method growing in popularity is that of the balanced scorecard, devised by Kaplan and Norton. Balanced scorecard measures financial and other perspectives such as customers, internal business processes and innovation and learning as a whole. The balanced scorecard helps organizations move from being financially driven to mission driven. In other words, it becomes a key part of the wider management system of planning, monitoring and control. The exact measures for each dimension are specific to each situation. They are developed as a result of dialogue in management workshops and cross-functional teams. The scorecard has been taken up as a major tool in over a hundred organisations. There are three criteria behind a good balanced scorecard. They are:

- Cause and Effect Relationship: Measure selected can be related to a cause that reflects an aspect of the strategy,
• **Performance Drivers**: Measures should be a mix of traditional lag indicators and lead indicators - the ones that drive future performance such as customer satisfaction, and

• **Financial Linkages**: Measure must ultimately link to key financial indicators.

Developing a scorecard is not without difficulties. It forces managers to consider soft factors which is a departure from the past. It also forces managers to link to strategy. Several cases were using or starting to use one or more variations of the scorecard, and saw it as complementary to KM activities, particularly since metrics in the innovation and learning quadrant could often be directly improved through KM activities.

**3.5.3. Economic Value Added**

A final perspective on the asset view is provided by economic value added (EVA) - a method of evaluating corporate performance, developed in the 1980s by the New York consultancy firm Stern Stewart. It provides a measure most directly linked to the return on capital employed. In simple terms,

\[
EVA = \text{Operating Profit} - \text{Cost of Capital} \quad \ldots (3.1)
\]

EVA is also related to another performance measure viz., market value added (MVA) which measures stock market capitalisation against shareholders funds and when used as a management tool, EVA shifts managers focus to a Balance Sheet rather than an income focus. By assessing a charge for using capital, EVA makes managers care about managing assets as well as income, and for properly assessing the trade-offs between them. All key management decisions and actions are thus tied to just one measure, EVA. By drawing managers' attention to the cost of capital, it focused actions towards the effective use of assets. By charging for the cost of capital employed in the business, one could achieve better inventory control. EVA also complements TQM in
continuous improvement - whereas the latter concentrates on products and processes; EVA focuses attention on continuous value creation. Other adjustments may include adding back research and development costs, and appropriate parts of marketing expenditure as well. If this is not done, the EVA would show a short-term reduction even though the investment may ultimately increase the MVA.

3.6. Value Creating Processes

Guiding the development of value is a model of the various components of intellectual capital. This value scheme, as pronounced in the research paper on Creating Value: the Best and Worst, shows how the building blocks combine to create market value, which is the sum of financial capital (what is reported in a company's Financial Accounts) and its intellectual capital. The gap between the book value of the company and its market value is its market value added, and is what investors will examine more closely. Each component has a number of measures of value and processes to enhance that value. It stresses an important feature of managing the model by turning it upside down. Thus, the factors that enhance future market value are innovation and renewal, and this is where management attention should start. Shareholder value is commonly based on financial measures that strategies have to be assessed on the basis of economic advantages that they guarantee to the shareholder, either in terms of dividends paid or capital gains. Fundamental issues for the future role of Management Accounting in supporting value creation are presented below.

- **More Mature Market**: With the growing intensity of competitiveness, there is a continuous reduction in competitors' time to react to the ongoing performance of marketing activities.

- **Turbulence/Unpredictability Scenario**: The uncertainty of the competitive environment has a great impact on business planning capacity and on the possibility of effective performance measurement. The
contribution of Management Accounting in facing this uncertainty is to evaluate the effect of environmental change on business performance and on the avenues for achieving goals besides providing timely action plans that reflect changed circumstances.

- Customer Satisfaction as a Base for Competitiveness: In a market characterized by excess supply — demand that makes the market — a key competitive advantage is customer satisfaction. The effect on the organization is the creation of a cross-functional approach where processes are driven by a common objective — give value to the client, both internal and external. The effect of this change on the Management Accountant is double. On one hand, it requires a shift of role to that of "teammate", fixing common objectives in different positions to favor this horizontal approach; on the other hand, the Management Accountant has to define a different Accounting System to reflect this process-oriented organization. The attention to results and the increasing importance of value creation are going to be the prime focus of leading Management Accountants in their business planning, controlling and in development activities.

3.7. The Balanced Scorecard and Knowledge Management

In recent years, there has been a renewed interest in "human resources" and "collaboration" under the term "knowledge management". Here, the focus is on the relationship between the balanced scorecard and knowledge management. This cause-and-effect hypothesis is fundamental to understanding the metrics that the balanced scorecard prescribes. There are four stages to this chain of cause and effect, as outlined below.

a. The foundation or fundamental cause for strategic success has to do with people. The innovation from creative people provides the only assured source of long-term success and competitiveness. Because, every other aspect of an organization can be duplicated by others. The right people must be hired, properly trained and mentored, and the learning process should become continuous and endless.
b. In a learning and growing organization where the culture encourages people make suggestions and question the status quo, a steady flow of new ideas arises from the rank-and-file employees. These ideas are vital to the future of the organization, because they come from the experts - the people who are involved with the business processes on a daily basis. The balanced scorecard, using efforts such as employee surveys and analysis of training data, is able to measure the degree of learning and growth, allowing leaders to assess the potential for long-term success.

c. Improved business processes lead to improved products and services. For example, if an improved process saves time, this results directly in a shorter delivery time to the customer - something that any customer will appreciate.

d. Finally, improved customer satisfaction leads to loyal customers and increased market share, which directly affect the bottom line - whether that line equals profit, RoI (return on investment) or ROCE (return on capital employed) in the private sector, or NoR (net operating result).

The steps in the causal chain are similar to the four perspectives of the balanced scorecard in its original form. This shows the basic reason why the perspectives (and their underlying metrics) are defined as they are. Any modifications to the metrics should take into account the hypothesis that is being proposed as the cause of long-term strategic success. Corresponding to the steps in the causal chain, there are four general areas of strategic management activities.18

a. Learning and growth is fostered by KM activities and initiatives. These include strategic recruiting, hiring, training (both formal and informal), team development, document management, collaborative communication systems,
knowledge and skills audits of employees, knowledge base developments, and fostering of communities of interest within the organization.

b. Business process improvements may range from moderate and localized changes to wide-scale changes in business processes, the elimination of paperwork and steps in processes, and the introduction of automation and improved technology. Deployment of the balanced scorecard measurement system itself is one of these processes.

c. Customer loyalty cannot any longer be taken for granted within the government, nor is it sufficient to manage it in an ad hoc or anecdotal way. Rather, customer relationships are becoming increasingly structured and measured. Not only must the agency work closely with customers on a personal level, it must also gain documented and continuous feedback on customer perceptions and loyalty. These efforts come under the general heading of customer relationship management (CRM).

d. Financial management is giving way to proactive initiatives in Activity-Based Costing (ABC), Functional Economic Analysis (FEA), Earned-Value Management (EVM) and other practices by which managers can learn more from financial data, in order to track projects more closely and make better cost estimates. In conclusion, management experts agree that learning and growth are the key to strategic success as well as the foundation for the future. A learning and growing organization is one in which KM activities are deployed and expanding in order to leverage the creativity of all the people in the organization.
3.8. Conclusion

Measurement is the area of KM that shows the largest gap between management expectations and actual achievement. Traditional Financial Accounting measures do not represent the true value of knowledge-based companies.

There are two main ways that companies appear to be focusing on knowledge measurement - the first is an asset-based approach and the second is based on more direct links to knowledge use and its business benefits. The starting point in the asset approach is identification of intellectual assets. The intellectual capital is divided into market capital, human capital, infrastructure capital and intellectual property. The manager's attention is then focused on growing the value in these assets. The other approach works mostly on a balanced scoreboard, not specifically asset based, where financial measures are balanced against customer, process and innovation perspectives. Justifying investment in KM initiatives remains problematic. Whatever the ambiguity in numbers, successful KM do demonstrate clearly defined links to the value proposition - its bottom line being a contribution to business benefits. The changing nature of reporting juxtaposed with the limitations of Traditional Accounting Systems drew the need for New Measures of Success like Balanced Score Card, EVA, Value Chain Analysis, etc. The measurement of value creation by processes in the context of changing emphasis in KM and the ever increasing demand of stakeholders. Fundamental issues for the future role of Management Accounting, in supporting value creation, have also been dealt with in detail especially in the context of hypothesis originally envisaged for this Thesis.
Notes and References


13. Philip Bardes, Professor of Accounting and Finance, Stern School of Business, New York University, "The Reform of Corporate Reporting and Auditing" (other details are not known).


18. Ibid.