Lecture 11
IMS3012 - Semester 2, 2005

The Value Proposition of KM
Dr. Henry Linger

The KMS Road Map

The first phase: evaluation of the infrastructure and aligning KM and business strategy.

The second phase: KM system analysis, design, and development.
- Knowledge audit and analysis
- Designing the KM team
- Creating the KM system blueprint
- Selecting KM technology
- Developing the KM system

The third phase: KMS deployment

The final phase: measuring ROI and performance evaluation

Evaluation Principle

“What can be measured is not always important and what is important cannot always be measured”

Albert Einstein
Knowledge Management Enablers

Knowledge Management is a broad process of locating, organising, transferring and using the information and expertise within an organisation. The overall knowledge management process is supported by four key enablers:

- Leadership
- Culture
- Technology
- Measurement

American Productivity and Quality Centre, 1999

Enterprise Knowledge Management

- Enterprises need to know:
  - what their knowledge assets are;
  - how to manage and make use of these assets to get maximum return;
  - establish rules and procedures for knowledge sharing and reuse.

- Corporate assets
  - Tangible
    - Internal (conventional)
  - Intangible
    - Internal – human resources, core competencies;
    - External – market share, customer knowledge, goodwill

Measuring Success in KM Projects

- Growth in the resources attached to the project
- Growth in the volume of knowledge content and usage
- Increased awareness and participation by others in the organisation
- Evidence of financial return

Eric Tsui, 2001
Aspects of ROI in KM

- Measurable efficiencies in product development, production, sales and service cycles;
- Improved decision-making at the front lines in the development, production, sales and support cycles;
- Better ability to get new partners up to speed quickly;
- Improved business morale because employees are better informed and are making better decisions;
- Increased customer loyalty due to better trust in employees’ expertise

Eric Tsui, 2001

Performance Measurement for KM

- Assets-based
  - intangible items in the balance sheets
  - balanced scorecards
  - Knowledge Management Assessment Tool - KMAT (Arthur Anderson & APQC)
    - Leadership, technology, culture, measurement and processes
- Activities-based
  - Links to knowledge cycles
  - Wider business benefits
  - Monitoring the difference between market value and financial value

Measuring Knowledge Assets

- Intellectual capital measures and the efficiency of intellectual capital
- Intangible Assets Monitor (Karl-Eric Sveiby);
- Balanced Score Card (Kaplan and Norton)
### Intellectual Capital

The Intellectual Capital Index (IC Index™) considers flows of knowledge from human into structural capital.

- **Structural Capital** - information required to understand specific markets.
- **Customer Capital** - the essential data about the customer base.
- **Human Capital** - the skills an individual needs to meet customer needs.

5 categories of factors affecting the growth of Human Capital:

- Training and education
- Skills
- Outside pressures and environmental factors
- Internal organisational structure
- Psychological impacts

Human Capital Growth = the sum of the increase of the above factors

This measure serves as a mechanism to balance the variations in the factors contributing towards the changes in each category.

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### Intangible Assets Monitor - Sveiby

Based on the calculation of Invisible Balance Sheet;

Invisible Balance Sheet includes subjective assessment of:

- **External Structure** (value between 10 and 99)
- **Internal Structure** (value between 10 and 99)
- **Competence of Employees** (value between 10 and 99)

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### Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visible Equity</td>
<td>The difference between the market value of a company and its visible equity.</td>
</tr>
<tr>
<td>Invisible Equity</td>
<td>The difference between the market value of a company and its invisible equity.</td>
</tr>
<tr>
<td>Tangible Assets</td>
<td>The assets in the normal balance sheet, such as cash, inventory, and fixed assets.</td>
</tr>
<tr>
<td>Intangible Assets</td>
<td>The value of the components of the company not included in visible assets.</td>
</tr>
<tr>
<td>External Structure</td>
<td>The value of external factors, such as brand, name, reputation, systems, processes, customer support, and internal management.</td>
</tr>
<tr>
<td>Internal Structure</td>
<td>The value of the components of the company, such as the value of the employee, the value of the intellectual processes, and the value of the client relationship.</td>
</tr>
<tr>
<td>People</td>
<td>The value of the components of the company, such as the value of the employee, the value of the intellectual processes, and the value of the client relationship.</td>
</tr>
<tr>
<td>Leverage Effect</td>
<td>The ratio of the company's market value to its tangible assets.</td>
</tr>
</tbody>
</table>
How to calculate Invisible Balance Sheet

1. How much of your organisation’s TOTAL assets do you guess are Intangible?
2. What are the total assets according to the normal Balance Sheet?
3. How much is shareholders’ Equity according to the normal Balance Sheet?
4. Estimate a percentage for:
   - External Structure
   - Internal Structure
   - Individual Competence
   (Tip: Reflect first which of the three categories that has the highest value. The highest must obviously be more than 33%, probably around 45-55%. Then ask yourself how to distribute the rest between the remaining two.
   - Total
5. How many employees do you have?

Leverage Effect

<table>
<thead>
<tr>
<th>Leverage Effect</th>
<th>Intangible Asset</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Intangibles</td>
<td>$32</td>
</tr>
<tr>
<td>Individual Competence</td>
<td>$11</td>
</tr>
<tr>
<td>Internal Structure</td>
<td>$5</td>
</tr>
<tr>
<td>External Structure</td>
<td>$8</td>
</tr>
</tbody>
</table>

Intangible Assets

<table>
<thead>
<tr>
<th>Intangible Assets</th>
<th>$150,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Structure</td>
<td>$100,000</td>
</tr>
<tr>
<td>Internal Structure</td>
<td>$40,000</td>
</tr>
<tr>
<td>Individual Competence</td>
<td>$0</td>
</tr>
<tr>
<td>Total Intangibles</td>
<td>$150,000</td>
</tr>
</tbody>
</table>
Balanced Scorecard

- Balanced Scorecard is introduced to measure the level of learning in the organisation and support management decision making;
- It integrates measures of past and future performance;
- Serves as a performance indicator;
- Facilitates a process of sharing the understanding between the employees on their performance taking into consideration various perspectives (hard and soft measures).

Balanced Scorecard presents management information from four different perspectives:

- Customer
- Financial
- Process
- Innovation and learning (learn/grow)

Each indicator is presented as some measures and objectives for which these measures are introduced.

Aims to establish a link between the company scorecard and its compensation programs.

Are dynamically revised according to the results.

Balanced Scorecard Objectives

- Financial Perspective
  - increase asset growth
  - minimise cost
- Customer Perspective
  - strengthen customer loyalty
  - provide service and goods
  - make price competitive
  - provide superior brand image
- Operational Perspective
  - create supplier network
  - design effective retail
  - maintain product quality
  - handle customer complaints
  - reduce operational cost
- Learn/Grow Perspective
  - develop company culture
  - train staff
  - research for new product development
  - utilise the technology
Balanced Scorecard Measures

- Financial Perspective
  - Net income operating margin
  - ROCE
  - Earnings per share
  - ROSA
  - EVA
  - Revenue growth
  - New product revenue

- Operational Perspective
  - Safety
  - IT enhancement
  - Operational efficiency
  - Productivity
  - New product introductions

- Customer Perspective
  - Customer satisfaction, external
  - Customer loyalty
  - Customer satisfaction, internal

- Learn/Grow Perspective
  - Personal development
  - Employee satisfaction

Sample Balanced Scorecard

<table>
<thead>
<tr>
<th>Customer perspective</th>
<th>Innovation and Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective</td>
<td>Measures</td>
</tr>
<tr>
<td>Strengthen customer loyalty</td>
<td>Customer retention</td>
</tr>
<tr>
<td>Provide superior brand image</td>
<td>Market share</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objective</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop company culture</td>
<td>Time spent on working group</td>
</tr>
<tr>
<td>Train staff</td>
<td>Productivity</td>
</tr>
<tr>
<td>Research for New Prod.Dev.</td>
<td>High quality new product</td>
</tr>
<tr>
<td>Utilise the technology</td>
<td>Invest in IT</td>
</tr>
</tbody>
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Electronic System Supporting BSC

Performance against strategic objectives is measured and reported on many formats:
- Graphical performance indicators
- Performance trend information
- Measurement data and bar charts
- Information sharing and dialog
Comparison of the three frameworks

<table>
<thead>
<tr>
<th>Sveiby</th>
<th>Kaplan &amp; Norton</th>
<th>Edvinsson</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intangible Assets</strong></td>
<td><strong>HSC</strong></td>
<td><strong>Intellectual Capital</strong></td>
</tr>
<tr>
<td>Internal Structure</td>
<td>Internal Processes Perspective</td>
<td>Organizational Capital</td>
</tr>
<tr>
<td>External Structure</td>
<td>Customers Perspective</td>
<td>Customer Capital</td>
</tr>
<tr>
<td>Competence of Personnel</td>
<td>Learning &amp; Growth Perspective</td>
<td>Human Capital</td>
</tr>
</tbody>
</table>

Sveiby, 1998

Limitations of KM Metrics

- No standard metrics
- Dynamic nature of knowledge and organisation
  - What you need to measure may not exist before you set up the metrics
  - Organisations change as a result of KM activity (no fixed expectations)

Pitfalls in choosing KM metrics

- The wrong things are measured
- Using too many metrics (some can give opposite results)
- Using metrics that are hard to control
- Using metrics that are hard to focus on
- Using metrics that emphasise hard results and neglect the ‘soft’, human side
- Using metrics that are analogous to ‘rear vision mirrors’
- Using metrics that have passed their expiry dates

Tiwana, 2000 in E. Tsui 2001
References

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- Tobin, D.R. (1993) Re-educating the Corporation, Oliver Wright Publications Inc., USA
- American Compensation Association (ACA), (1999)
  http://www.zigonperf.com/PMNews/making_bsc_payoff.html