Intellectual Capital

People First in the

Information Age Economy

UNI World Conference for

Professional and Managerial Staff

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Executive summary

The implications for society of Information and Communications Technology (ICT) are more far-reaching than was ever first imagined. Yet, in real terms, the ICT revolution and the information age economy are still in their infancy. Five years ago, individuals, organisations and governments were largely unaware of the potential force of the Internet. The world can no longer try and convince itself that change is an "option". It is inevitable and, to survive, organisations must accept it and move forward.

People versus machines

There is a definite shift in priorities and values in the corporate world. Whether this shift will be good, bad or indifferent for trade unions will depend largely on ICT development over the next few years and also the willingness and ability of unions to absorb new challenges and to accept the premise that they, too, must undergo fundamental reform.

The growing interest in people as a corporate asset is a part of this shift in values. The creation of the information age economy has overtaken that of the industrial era. The performance of organisations today is based on their level of intellectual capacity, particularly their human resources. "Intellectual capital" is the collective reference to the intangible assets of an organisation, including knowledge, information, intellectual property and experience.

Survival

Competition is fierce in today's markets and knowledge and information have become the new tools of power. Organisations have to be much more aware of what is going on in the environments in which they operate, and develop new, more effective management tools. New technologies are only useful if an organisation knows how to exploit them effectively. They need to know how to measure knowledge, how to create it and how to convert it into value. This is why management tools in operation up to the 1990s are fast becoming obsolete.

Traditional financial management tools offer a snapshot of an organisation's tangible book value at a given point in time. They are historical in nature. In the new economy, organisations have to be able to think on their feet, adapt to rapid changes in their different environments, operate in the present and shape the future. New tools are required to assist organisations in their task and attention is focused on the value of "intangible" rather than "tangible" assets.

Intellectual capital

Looking at today's stock markets, one can see that some companies are priced at many times the book value of their physical assets, showing that these contribute far less to the value of their products or services than their intangible assets, that is their intellectual capital. So, organisations have to be able to manage intellectual capital and measure its performance. The problem is how can this be done? The first step is in understanding what intellectual capital is in more detail.
The present document is based on the writings and activities of two people, author Thomas Stewart and Leif Edvinsson of Skandia Sweden. Stewart points out that unless an

organisation can measure and manage its intellectual capital then it is taking fundamental business decisions in a vacuum. Intellectual capital is found in one or more of three places: in an organisation's employees, its structures and its customers. The human element is the most valuable asset of an organisation and yet, even with this knowledge, employers still find it difficult to differentiate between the cost of paying employees and the value of investing in them.

Measuring performance

Achieving a precise definition of intellectual capital is difficult, as this area is new and still attracting research. The issue of how to measure and manage it is even more daunting. There are no tried and tested methods at this stage – they can only develop over time. On the whole, organisations resort to benchmarking techniques to compare results and activities with past ones and with those of other competitors.

Three basic principles are advised for organisations looking at how to measure their intellectual capital: keep it simple; measure what is strategically important; and, measure activities that produce intellectual wealth or value. Edvinsson's new management tool, the "Navigator", looks at how the different elements of the organisation interact with each other: customers, processes, financial aspects, renewal and development and the employees. It is effectively a tool for planning, management and follow-up.

Other methods of measurement include the "balanced scorecard". This model is based on four distinct organisational perspectives: learning and growth, internal processes, customers and financial results. These are expected to provide a "balanced" view of the present and future performance of an organisation. It is designed to help organisations in assessing what they must do to enhance their internal capabilities to improve future performance, including investment in people, systems and procedures. It is, in effect, a strategic management system.

Similar or related systems of performance measurement include total quality management (TQM) models and associated business quality awards. These are based on measures tracked over time to look for trends, best and worst practices and areas for improvement. TQM also focuses management's energies on the continuous improvement of all organisational operations, functions and work processes.

The network economy

Networking is the most important development in organisational activity in the information age economy. Networks are becoming the most appropriate organisational design rather than traditional hierarchies. This development has been significantly assisted by the ICT revolution, and online operations are critical to today's organisations, including unions.

The era of the network organisation will change work places completely. The greatest challenge today is to create organisations that can share knowledge efficiently and effectively and this is what networks do best. Knowledge and information must flow, internally and externally and in both directions. The changing nature of the economy and organisational structures and work processes will impact on workers and their unions. They must not be left behind and their survival depends on their ability to adapt and accept these new challenges.

Introduction

> *Does somebody know what it means to "administer" human imagination? I don't. But I know that imagination is the most important creator of wealth in the new economy. And I know we had better find the answer to my question – quickly.*
>
> Tom Peters, business consultant

Intellectual capital is the collective reference to the intangible assets of an organisation, including knowledge, information, intellectual property and experience. Intellectual capital is us: workers, managers, directors, chief executive officers, society, human beings … Any individual who doubts this fundamental truth would do well to pick up *The Cluetrain Manifesto* or visit its Web site on the Internet. The Manifesto is about a group of people, professionals in their field, who began to share experiences and beliefs across the Internet, realising that the Information and Communications Technology (ICT) revolution has given the inhabitants of our global village the means to talk to each other and re-embrace fundamental human values.

A philosophical debate for the ICT professionals of today, confined to the fortunate few who have access to the global network? Perhaps, but it nevertheless raises many interesting points which have tended to become lost in the wizadry of today's communications and which many organisations have tried to ignore by imposing controls on their employees' freedom to communicate.

The Manifesto basically states that business is human and that human conversation is the true language of commerce. It also emphasises that organisations work best when the people on the inside have the fullest contact possible with people on the outside. These principles are beginning to resurge with the advent of the information age. The Web site has experienced significant success, and a growing number of visitors are signing the Manifesto. It challenges the power of corporate electronic commerce (e-commerce) by pointing out that, whether organisational leadership likes it or not, people are becoming hyperlinked and are broadening their knowledge base and horizons.

The Manifesto is made up of 95 theses which explain what it is about and what is happening. Of these, the last three are:

93. *We're both inside companies and outside them. The boundaries that separate our conversations look like the Berlin Wall today, but they're really just an annoyance. We know they're coming down. We're going to work from both sides to take them down.*
94. *To traditional corporations, networked conversations may appear confused, may sound confusing. But we are organising faster than they are. We have better tools, more new ideas, no rules to slow us down.*
95. *We are waking up and linking to each other. We are watching. But we are not waiting.*

(Source: www.cluetrain.com, Copyright©1999 Levine, Locke, Searls and Weinberger)

This may sound dramatic, even "gimmicky", but it does force the reader to think more carefully about what ICT and the Internet represent and what they are doing to the world of work and society. Much of the power of the Internet, as well as the technology behind it, is in

the profound way it has changed the way people deal with business and with each other. People are discovering new ways to share relevant knowledge with blinding speed. Whether organisations understand or accept it or not, networked employees are an integral part of these borderless conversations, and customers and employees are communicating with each other.

This activity, by its very nature, emphasises the growing importance of intellectual capital in the world of work and society in general. The purpose of this paper is twofold. First, debate on intellectual capital and new business performance measurement systems must be initiated and encouraged within key groups in UNI, particularly the Professional and Managerial Staff (P&MS) and Information Technology (IT) sections. This whole area of discussion is very recent, with the first ripples in the early 1990s. It is incumbent on UNI and its affiliates to learn more about this fast-moving area, raise awareness among the broader membership and share information and knowledge. After all, it is primarily members of UNI affiliates who are involved and affected.

Second, the P&MS and IT sections need to launch a debate on what will be the impact, if any, on trade unions and their membership. What, if anything, is required of trade unions? At the very least, it is inevitable that it will affect trade unions, their structures, the way they work, their activities and the way they organise members in the information age economy and service those members. Many business writers today prefer to talk about "organisations" rather than corporations, businesses or companies. What follows in the pages of this paper are as important for governmental and non-governmental agencies and non-profit organisations as they are for any business entity.

This paper, therefore, is expected to provide some background to the current information age groundswell and sets out to define intellectual capital, review the development of business performance measures, particularly the balanced scorecard and quality awards and models. It does not pretend to be exhaustive, as the literature that has grown up around these topics is already considerable. The annexed bibliography does limited justice to the numerous articles found on the Internet in researching this paper.

In addition, the business consultancy bandwagon that attracts phenomenal numbers of "experts" means that we must be both discerning and critical of the information and knowledge we acquire. This is virgin territory. There are few tried and tested benchmarks and we must be cautious, yet bold, as we venture forth in this international debate. For, one thing is very clear in the information age economy: it means *change* and only those willing to accept this change and move forward will survive. This includes the trade union movement.

This document should also raise questions within UNI. These may not be answered immediately; indeed, they may further stimulate a more important debate on policy and strategy. Transformation and adaptation are inevitable, and the creation of UNI this year is a clear indication of our organisation's determination to ride the ICT wave into the information millennium. The intention is not to preach, advise or criticise. We need to learn more and be open to all communications until we feel more confident about how trade unions should react and what direction the debate should take within the UNI family.

The new environment

The transition into the information age means different things to different people and different organisations. To some, it is perceived as a threat to the very survival of their organisation, to others it is seen as a time of opportunity, providing the organisation is prepared to learn, rethink its mission and share knowledge and information internally and externally. Competition has been increasing for a number of years as globalised markets and new technologies have shaken the economy to the core. It is impossible to predict what the economy will look like in a year's time, let alone five or ten years.

Organisations have to renew their missions and visions to survive. To remain alive and competitive in the information age requires them to be more aware of what is going on in the environments in which they operate and to develop more effective management tools than traditional financial reporting.

The ICT revolution, the development of the Internet and massive market liberalisation mean that organisations in previously secure positions are now facing significant threats. New technologies are not useful unless an organisation knows how to use them and for what purposes. Organisations need to learn how to stay afloat in the knowledge economy, which means that they need to know how to measure knowledge, how to create it and how to convert it into value. This is why current management tools are obsolete.

Organisations need to encourage internal support for new ways of thinking, adopting benchmarks, cultivating leadership and testing the multiplier effects of new technology. As with all fundamental transformation, in any environment, there will be inevitable obstacles and counterforces, and change will be painful and difficult, even impossible for some. Those that do not change are unlikely to survive for long in the information age economy.

In future, organisations cannot continue to measure their performance or reappraise their strategies on the basis of traditional accounting procedures. As one expert explains: "However accurate a balance sheet is, it can never be more than a snapshot of a company's tangibly computable book value at a given point in time. On tomorrow's electronic highways, that kind of report may seem as antiquated as the horse-drawn stagecoach."

One simply has to look at stock markets today to understand what is meant by this. Some companies are valued at many times the book value of their physical assets showing that these contribute far less to the value of its product or service than intangible assets that form an organisation's intellectual capital. Today, knowledge has become the primary raw material of information age industry, and intellectual capital has become so vital that an organisation that is not managing knowledge is not paying attention to its business.

The problem is that the management of intellectual capital is far from straightforward and few yet understand it or how to control it efficiently or effectively. How and where does one begin? How can a price tag be put on the value of a researcher or a report that has been produced? How can a value be given to the creative capacity of a group of employees? How does a trade union establish a value for its industrial officers? What is the value of a training programme? The first step in the process requires greater understanding of what exactly is "intellectual capital".

What is "intellectual capital"?

The human or intellectual element of 21st-century organisations is a key performance indicator and, as such, should be recognised, protected and nurtured by employers to maintain and improve overall performance in the rapidly evolving markets of the information age, in which knowledge is power and the rules of the organisational game have changed fundamentally and irreversibly.

In the late 1980s, business guru and author Peter Drucker predicted: "The factory of tomorrow will be organised around information rather than automation." To survive and excel in the global economy, a new emphasis on innovation, competency and co-operation is needed. Managing knowledge as a strategic asset enables companies to maximise long-term advantage over competitors. The ability to learn, co-operate and innovate faster than other companies has become the main sustainable source of competitive advantage. Therefore, to stay competitive, companies need to capitalise on their intellectual assets, or "capital", rather than, or as well as, their infrastructure. The prosperity of companies will become increasingly dependent on the intellectual capacity of their workers and their ability to change and adapt to a dynamic business environment.

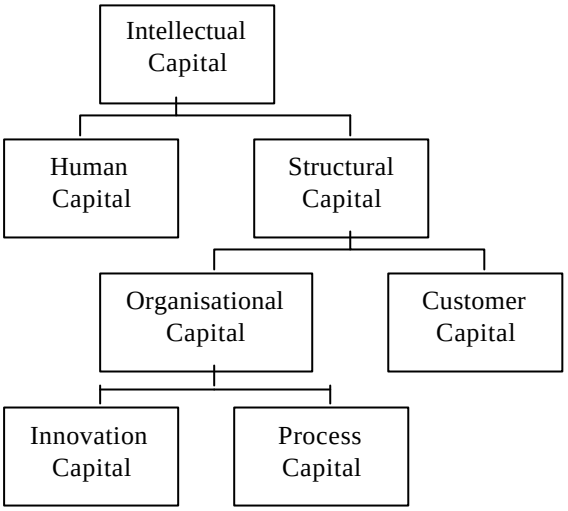
Intangible assets

There would appear to be some leading lights in the field of intellectual capital, what it is, how to measure it and what the implications may be for the future world of work. The definitions below of intellectual capital and intangible assets are based largely on the writings of Thomas A. Stewart, author of *Intellectual capital: The new wealth of organisations*, and Leif Edvinsson, Director of Intellectual Capital of Skandia, Sweden's biggest financial services group.

Intellectual capital is the collective reference to the intangible assets of an organisation. In the words of Stewart: "Intellectual capital is intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth." People and their expertise form the collective brainpower of the organisation. Other examples of what makes up intellectual capital include networking infrastructure, business processes and customer loyalty. These elements are rarely measured, nor is their growth adequately monitored and nurtured as part of a corporate growth strategy. And yet, today more and more businesses are evolving whose value is not based on their tangible assets, that is, those typically found on a balance sheet, but on their intangible ones.

The capacity to measure intellectual capital and manage knowledge can represent the success or failure of enterprise in the 21st century. A company may not know if it has the people, resources or business processes in place to make a success of a new strategy. It might not know what expertise, management potential or creativity it has access to through its employees. Because companies are bereft of such crucial information, they are effectively operating or restructuring in a vacuum. So, they might be making expertise redundant which they may have to rehire – a phenomenon UNI affiliates have already frequently reported.

Intellectual capital can be found in one or more of three places in an organisation: in its people, its structures and its customers. A diagrammatic description of intellectual capital is presented overleaf:



(Source: Intellectual capital: The new wealth of organisations, Thomas A. Stewart, 1999)

Human capital comprises the collective expertise, creative capability, leadership and entrepreneurial and managerial skills embodied by an organisation's employees. The distinction between human and structural capital, says Stewart, is fundamental to managing knowledge. This is essentially the core reason to identify intellectual capital. It is all very well to realise that knowledge and information are either being created or exchanged within an organisation and with its customers or constituents. It is another matter entirely to identify its source and manage it effectively.

Using knowledge and information, sharing it within an organisation and transporting it internally and externally are what make up structural capital. This requires databases, computer networks, information systems, research laboratories, competitive and market intelligence, and so on. Basically, it packages human capital and enables it to be used in order to create value or wealth for the organisation. There is a fundamental difference between human and structural capital. Structural capital can be owned by the organisation whereas human capital is volatile. People can walk away, they might fall ill or die, or they might be enticed away by a competitor. They cannot be owned.

Structural capital, as indicated above, can be further classified into customer and organisational capital. Customer capital is the value of an organisation's relationships with the people with whom it does business or who make up its constituents – for example, for a trade union, customer capital would refer to its relationships with its members. Organisational capital comprises innovation and process capital. Process capital includes work processes and technical solutions, and innovation capital embraces such intangible assets as patents, legal rights, intellectual property and business secrets.

Human capital is the most valuable asset an organisation can hold today. And yet, organisations still find it difficult to differentiate between the cost of paying employees and the value of investing in them. Human capital, Stewart stresses, grows in two ways: when an organisation uses more of what people know, and more people acquire more knowledge that is useful to the organisation. Maintaining competitive edge in today's markets means that organisations must use their people, their human capital, as efficiently as possible.

Not only must organisations learn how to manage their human capital more effectively and efficiently, they must also apply the same efforts to managing their structural and customer capital. Knowledge and information must flow quickly and more efficiently across organisations and between functions and this is where information technology takes over from previous slow and cumbersome hierarchical organisational structures. Success in the information age organisation comes from the ability to provide fast, customised solutions to particular customer or constituent needs.

As with anything, too much is not always necessarily a good thing. The same is true of knowledge and information, and the value of intellectual capital should not overshadow the basic principles of management. Information overload is a very real threat and points to a key challenge in managing intellectual capital. Organisational management is an endless quest to manage all assets, tangible and intangible, as efficiently as possible.

Metrics of intellectual capital

The main question that we should put to ourselves here is do we even need to measure intellectual capital? Is it useful? How can measuring intellectual capacity help today's organisations in the development of strategy and greater competitive edge? What impact does it have on employees, jobs, the work place, trade unions? There is great interest and also great scepticism on the issue of measuring and managing intellectual capital. These questions are perhaps best answered by what has come to be known as the Macnamara Fallacy:

"The first step is to measure whatever can be easily measured. This is OK as far as it goes. The second step is to disregard that which can't be easily measured or to give it an arbitrary quantitative value. This is artificial and misleading. The third step is to presume that what can't be measured easily really isn't important. This is blindness. The fourth step is to say that what can't be easily measured really doesn't exist. This is suicide."

The one thing that can be measured easily in today's economy is money and, as a result, it has remained a major criteria in the measurement of business performance. But money can no longer be a measure of all things. A just and equitable society in the 21st century requires a new scorecard, new methods of measurement which take into account the broad and varied range of aspects that make up how and why an organisation works and achieves its goals. Managing intellectual capital requires developing methods of tracking it.

Intellectual capacity criteria are difficult to measure. One way of overcoming this difficulty is to compare activities from year to year, or compare activities with those of competitors. Comparison of this nature provides benchmarks. Without these benchmarks, the financial figures are the only ones that count and these tell investors very little. For example, if an investor or a customer is focusing on the intellectual property of a company, then historical money numbers will provide insufficient information. Benchmarking makes the invisible, the intangible assets, visible. Once they are visible then they can be measured and this is the fundamental importance of intellectual capital. When employees are underutilised or are employed in areas unsuited to their skills, this will not show in an organisation's accounts.

Stewart refers to several methods of measuring intellectual capital and mentions in passing the balanced scorecard which is outlined in more detail in this chapter. For the moment, the field of intellectual capital is too new to have been able to develop tried and tested measurement methods. Some attempts are interesting and some are too simplistic. Eventually, methods will emerge which will be able to capture the essence of intellectual assets. Methods such as market-to-book ratios are based on the premise that value is defined by the buyer and not the seller, so, for example, a company is worth what is dictated by the stock market. The simplest method of measuring intellectual capital, therefore, is to see it as being the difference between a company's market value and its book equity. Nevertheless, there are inherent problems with this method: stock markets are extremely volatile and book and market values can often be understated.

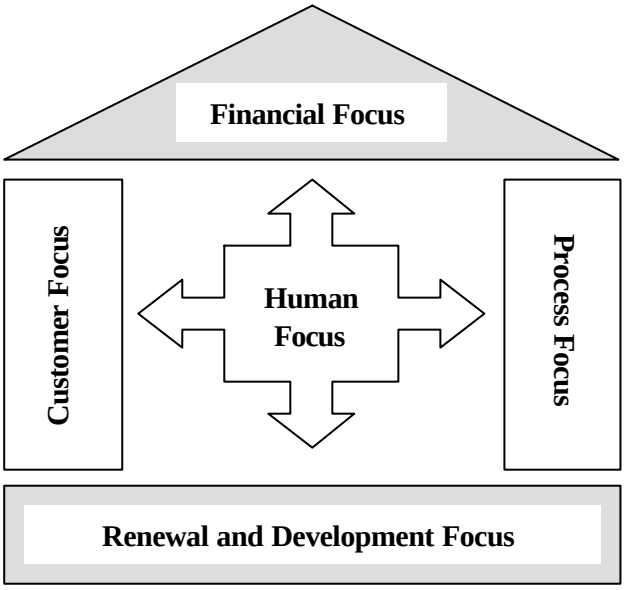
Basically, no single measurement can ever really adequately describe a company's stocks and flow of intellectual capital. Intellectual capital accounting needs to look at organisational performance from several points of view. What might be a key indicator for one company might be unimportant for another. The difficulty confronting organisations today is that the area is so new and untested and yet there are already a number of methods being marketed. Which one to use, if any? The danger is that organisations might use too many of them, or not

the right one, and end up with vast stores of inappropriate information. Three basic principles are advised for any organisation looking at how to measure its intellectual capital:

- keep it simple,
- measure what is strategically important for the organisation,
- measure activities that produce intellectual wealth, focusing on items that provide information on intellectual capital.

The Skandia Navigator

In order to be able to visualise the interaction between intellectual capital criteria, Skandia has developed a special tool called the *Navigator* (see diagram below). This tool consists of five value-creating fields, each focusing on a different sphere of interest.



The Skandia Navigator

Edvinsson describes the function of the Navigator by comparing the domain of intellectual capacity to a building. The top of the building, the roof, would be the *financial focus*. It is in the attic where the recorded accounts are kept. External customer relations (*customer focus*) and internal organisational processes (*process focus*) serve as the supporting walls of the intellectual capital building. The basement, or foundations, of the building is the *renewal and development focus*, and at the centre is the *human focus*.

As mentioned previously, the traditional measurements of the financial historical past of an organisation remain an important feature. The organisation's people, customers/constituents and processes are its very existence. The innovation and development capacity of the organisation are its foundation and future perspective. The internal human element (*human focus*) interacts with each of the others.

Edvinsson emphasises that intellectual capital accounting, unlike traditional financial reporting, not only considers what happened in the past through traditional accounting, but it also charts a future course for the organisation. The Navigator is effectively a tool for

planning, management and follow-up. It considers the present with the past and the future in the context of internal and external relations.

The development of global electronic networks means that organisations need to know more about the value and activities of their intellectual capital. To cope with the ICT revolution and the new network economy, says Edvinsson, organisations need to improve their management and performance measurement tools. For Skandia, the development of the Navigator is a part of their efforts in this process. Traditional financial reporting, according to Edvinsson and Stewart, can be misleading as figures can be manipulated according to what an organisation might be trying to show or hide.

A new playing field

Charles Handy, author of the widely acclaimed book *The Empty Raincoat*, which focused on making sense of the future of work, emphasises that intangible assets will mean different things to different companies and will be measured in different ways. It should be kept in mind that, in the business world, if anything is seen as a business opportunity, then numbers and/or measures will emerge. Handy points out that many boards of larger companies now have separate committees for social policy, ethics, remuneration and the environment. All companies, he states, should be required to undergo an annual social audit. He emphasises the following in his concluding remarks: "They [companies] will resent the bureaucracy and the costs involved, they will chafe at the restrictions on their freedom of action, but by counting the invisibles they will better balance the present against the future and the interest groups against each other. Sometimes, it seems, we have to be forced to be sensible. Once the playing field is level and the rules are known, the game can start."

This point is also made by Edvinsson. He underscores how new this whole area is and many organisations and communities are not yet ready for this fresh wave of thinking. However, the intellectual capital wave is inexorable and there will be no stopping it. The very foundations of society have changed with the ICT revolution and the new network economy – everything else will surely change to adapt to the new environment.

It will take some time before intellectual capital becomes an integral part of management and organisational performance measurement and people become familiar with the taxonomy and vocabulary. The challenges of knowledge management and intellectual capital management are extreme and some have not yet even been discovered. As well as the timeframe involved, setting up new reporting systems and technology will be key to the success of the new process. Leadership and user commitment are also very important and this will be based on awareness raising and education.

There is already a number of companies world-wide that have introduced intellectual capital auditing and management systems. Skandia, Ericsson and ABB in Sweden are among them, but the list also includes EDS, Wal-Mart, Toyota, Hallmark Cards, Amazon and a whole series of Internet-based companies. How successful they are or will be, only time will tell. Not everyone has good things to say about the growing interest in intellectual capital and some are heavily critical of this new vision of management, accounting and reporting. This is inevitable and even healthy, as it will result in closer attention being paid to this very new concept. It is hoped that it will result in improvements and refinement and it is not the intention of this paper to fall into a "for" or "against" position. It is a portrayal of what is out there in the network economy today and the growing support for it. It seems sensible to agree

with the premise that, in vastly changed economic and societal environments, organisations will be managed differently in future and new methods will have to be developed to measure performance.

Corporate scorecards

In essence, a corporate scorecard is a sophisticated business model that helps an organisation understand what is really driving its success or lack of it. It keeps track of many things, including financial progress and other abstract measurements, from customer satisfaction to return on investment, that need to be managed to attain corporate objectives. The *balanced scorecard* is perhaps one of the best known of these systems. It was developed in the early 1990s when the Nolan Norton Institute, the research arm of KPMG, sponsored a one-year multi-company study entitled "Measuring performance in the organisation of the future".

David Norton, President of Renaissance Solutions Inc., and Robert Kaplan, Professor at the Harvard Business School, led the study, which resulted in the development of the balanced scorecard. It is described as "a management system that can channel the energies, abilities and specific knowledge held by people throughout an organisation towards achieving long-term strategic goals". It is designed to translate vision and strategy into a tool that effectively communicates strategic intent and motivates and tracks performance against established goals. These are then further translated into a system of performance measurements that should communicate a strategic focus to the entire organisation.

In contrast to the traditional, financially based measurement systems, the balanced scorecard is based on four distinct perspectives:

- *Learning and growth perspective* – which directs attention to the organisation's people and infrastructure. Adequate investment in these areas is critical to long-term success.
- *Internal perspective* – this indicates the level of development of a true learning organisation. It focuses attention on the performance of the key internal processes that drive the business. Improvement in these processes today is a key lead indicator of future financial success.
- *Customer perspective* – in order to translate improved processes into financial success, businesses should provide customer satisfaction. This perspective considers the business through the eyes of the customer to ensure that focus is maintained on customer needs and satisfaction
- *Financial perspective* – this measures the ultimate results that the business provides to its shareholders.

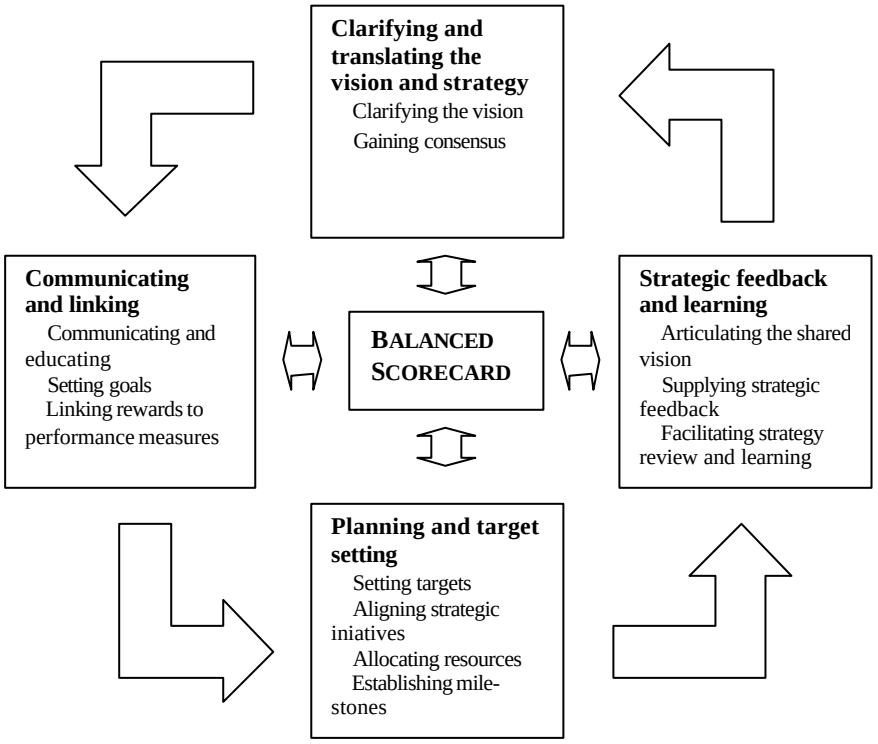
It is interesting to note the similarity between the perspectives above and the focus of the debate on intellectual capital in previous chapters. Together, these four perspectives are expected to provide a balanced view of the present and future performance of the business. The balanced scorecard, therefore, is a mixture of the traditional historical financial measures and measures of the drivers of future performance. It should help organisations in assessing what they must do to enhance their internal capabilities to improve future performance, including investment in people, systems and procedures.

Kaplan and Norton emphasise that: "The measures represent a balance between external measures for shareholders and customers, and internal measures of critical business processes, innovation, and learning and growth. The measures are balanced between the outcome measures – the results from past efforts – and the measures that drive future performance. And the scorecard is balanced between objective, easily quantified outcome measures and subjective, somewhat judgmental, performance drivers of the outcome measures."

The balanced scorecard is more a strategic management system than a simple measurement system and a growing number of organisations are using such systems (there are many clones or derivatives of the balanced scorecard today). The concept of the balanced scorecard is relatively straightforward. If a company focuses too much on its financial outcomes, then it runs the risk of forgetting about its end-users, the customers, as well as its employees and corporate knowledge and information. In addition, such a company will probably under-invest in its business processes. On the other hand, if a company focuses purely on customer and market outcomes, then it may over-invest in processes which focus on the customer, its employees and its knowledge.

If a company pays too much attention to its process performance, then it may not satisfy customers, retain its employees or produce the financial results it is looking for. If a company focuses only on its employees, then again it may not satisfy its customers, operate good business processes or produce good financial results. Therefore, strategic and performance management is about creating a *balance* between the four groups of measures mentioned above: financial, customer and market, process, and people, skills and knowledge.

The balanced scorecard advocates the development of a framework cycle (see diagram below), which begins with a clarification of the company's mission or vision and the translation of this into strategy. This first stage also involves an internal consensus-building process as to what an organisation is about and should be striving to achieve. The next stage involves the communication of the vision and strategy throughout the organisation by developing appropriate education programmes. Goals are also set for different departments and units.



(*Source: Robert S. Kaplan and David P. Norton, "Using the balanced scorecard as a strategic management system", Harvard Business Review, January-February 1996*)

The organisation then identifies the objectives and measures for its internal business processes. The final link to learning and growth objectives is in the area of investment of re-skilling employees, information and technology systems and enhanced organisational procedures. Investments in people, systems and procedures (intellectual capital) generate major innovation and improvement in internal business processes, for customers and, ultimately, for shareholders. This final link, according to Kaplan and Norton, is the most innovative and important aspect of the scorecard management process. It supports management learning and enables it to monitor and adjust the implementation of the strategies developed in the earlier phases of the scorecard process. It also enables the organisation to change the strategies if necessary. Therefore, according to the authors, the balanced scorecard not only measures, but also fosters change. Organisations in the information age operate in rapidly changing and complicated environments and feedback is crucial in order to remain competitive in the global market.

Kaplan and Norton emphasise that "information age companies will succeed by investing in and managing their intellectual assets". The way that markets have developed, global trading and competition has increased and the way businesses now have to be run have a fundamental impact on the way in which business performance is measured and assessed. The traditional financial model is inadequate in isolation as it was developed for trading companies and industrial age corporations. It measures events in the past and does not provide any focus on investments in capacity that will provide value in the future.

In this context, the balanced scorecard provides new methods for measuring business performance based on organisational strategies, which makes greater common sense. The balanced scorecard does not reject the traditional financial model; indeed, it retains financial measures of past performance. However, it also introduces the drivers of future performance.

The balanced scorecard and non-profit organisations

The balanced scorecard concept can also help improve management of non-profit organisations, including trade unions. Financial measurements provide little or no indication as to how effectively or efficiently a non-profit organisation operates. A more appropriate measure for these organisations is to what extent and how well they have met the needs of their constituents. In the case of trade unions, their constituents are their members. Tangible objectives should be defined for constituents and, although financial considerations do play a role, they will rarely be the primary objective.

For example, government agencies world-wide are being held more accountable to taxpayers and constituents. Many governmental functions are being outsourced to the private sector or eliminated entirely. As a result, government agencies are expected to emphasise the importance of the customer focus of the service they supply and taxpayers expect their performance to be measured and improved upon. For example, an inter-governmental agency task force in the United States, called Performance Measurement Action Team (PMAT), was created to "assess the state of the current [procurement] system, identify innovative approaches to measuring performance, and develop strategies and recommendations for measuring the health of agency acquisition systems". Based on its research, the task force developed a balanced scorecard which retained the four perspectives of the corporate scorecard indicated above and added a fifth one. This one, entitled *employee empowerment*, was designed to emphasise the role that federal employees should play in new, more customer-focused approaches for government agencies.

There are a number of examples in the United States of how non-profit organisations and government agencies have used the balanced scorecard system or even developed their own. In one way or another, any organisation should communicate its mission internally and externally. In addition, it should develop objectives and measures against which its performance can be assessed. According to Kaplan and Norton, a balanced scorecard can provide substantial focus, motivation and accountability in government and non-profit organisations. The scorecard essentially provides the rationale for their existence and communicates with external constituents and internal employees on the outcomes and performance drivers by which the organisation will achieve its mission and strategic objectives.

Total Quality Management

The balanced scorecard process, as can be seen from the diagram in the previous chapter, is a continuous cyclical process, similar to that of the *Deming* model of Total Quality Management (TQM). The system is based on performance measures tracked over time to look for trends, best and worst practices and areas for improvement. It provides information for managers to assist them in the decision-making process.

Like the balanced scorecard, TQM focuses management's energies on the continuous improvement of all corporate operations, functions and, above all, work processes. The end result of these processes, the final product or service, is what matters to the customer/constituent. An organisation looking to implement TQM would assess the following:

- overall quality levels throughout the organisation;
- market position and customers' needs and expectations;
- cost of poor quality to the organisation;
- employee attitudes towards existing quality efforts.

The similarities running through all these concepts are evident. On the basis of the above assessment, the organisation would then develop a quality action plan, defining short- and long-term goals and listing individual responsibilities. The next stage would be to develop support within the organisation for the application of TQM and an order of priority. This will change depending on existing structures and, of course, the nature of the organisation. Although simplified here for the purposes of this paper, TQM is a wide-reaching and wide-ranging concept.

The Deming model was developed by eminent American psychologist W. Edwards Deming. He states that organisations should aim for constant improvement in the product or service they offer their customers. This cannot be done without maintaining a high level of motivation and satisfaction of the people that make up the organisation. Quantitative analysis of process is very important, and organisations should closely monitor "before and after" changes, using what is known as the "*plan, do, check and act cycle*" repeatedly. An area that is therefore reinforced is one of constant learning.

Business quality awards

TQM has brought with it a rapid growth area of awards that promote the concept of quality and excellence in organisations, for example, the Malcolm Baldridge National Quality Award (MBNQA) in the United States, the Swedish Quality Award, or the European Quality Award (EQA) of the European Foundation for Quality Management (EQFM). UNI-Europa's Business Services Working Group organised a conference on the areas of TQM and business quality awards in Brussels, Belgium, in October 1999, and is particularly interested in the impact of TQM and quality awards on trade unions and their activities and also in the development of a sustainable working environment.

The basic aim of these awards is to promote models for TQM and to instil a culture of quality within all aspects of an organisation. TQM institutes have developed a wide range of education, training and awareness-raising programmes and the awards are an integral part of these. The main criteria of the various models focus on the following areas:

- *Customer focus* – all products and services are destined for an end-user, the customer, client or constituent, and ultimately it is they who judge levels of quality.
- *People focus* – all the people involved in the organisation and the supply of the product or service need to be included in the improvement of quality. This includes the development of competence and a sense of involvement and ownership.
- *Leadership* – a culture of quality needs to be initiated at the highest level of an organisation and then filtered down the various layers by leadership through example. If an organisation's leaders are not committed then the process will fail.
- *Management by facts and processes* – where decisions taken are based on reliable data and processes are clearly understood by all and systematically managed.
- *Continuous improvement* – all aspects of the organisation, including human resources, are constantly being improved, reviewed and improved again. The improvement cycle is continuous.
- *Benchmarking* – to develop further, organisations must be prepared to learn from others by comparing what they do with those who are best at doing a specific process.
- *Public responsibility* – whereby efforts should be made to see all aspects of the organisation within the context of the wider environment and society.

TQM and business quality awards should help organisational leadership to develop a sense of commitment to the organisation, its employees and the community. Strategic planning should directly involve employees and they should have greater opportunities to achieve their full potential, develop a sense of belonging and ownership and benefit from a healthy balance between their working and private lives. A system of continuous review and improvement (*plan, do, check, act*) should be established. The wider community, society and the environment should benefit from more socially and environmentally responsible policies and processes.

TCO 6E and Investors in People

There are two quality programmes currently in use that may be of particular interest to the trade union movement and these are described in brief below. Any UNI member that would like further information on these should consult the conference background paper and report of the UNI-Europa Business Services Forum, Brussels, October 1999, available from the UNI secretariat in Geneva.

TCO 6E Programme: A practical model for a sustainable work place

TCO is the Swedish Confederation of Professional Employees, a trade union organisation with 1.2 million members. The TCO 6E programme, developed by the TCO Development Unit, is defined as follows, and these definitions together symbolise integrated environmental work.

- **E**cology means that, in the first instance, organisations use renewable or recycled material and cause as little disturbance to the environment as possible.
- **E**missions means that organisations should eliminate or reduce all harmful emissions or releases into the air, water or land and emissions of noise, ionising, radiation and electromagnetic fields.

- **E**fficiency means organisations should take full advantage of the human capacity for creativity, imagination and knowledge, while making best use of environmentally adapted technology to develop good production processes, products or services.
- **E**conomy means basing inflow, resource utilisation and outflow on an economic standpoint that optimises natural and energy resources for the benefit of employees, the company or organisation and the environment.
- **E**nergy means the use of energy-efficient technology for all production and utilisation of products.
- **E**rgonomics means that organisations should arrange the working environment and production processes for optimum manipulative efficiency, while avoiding health risks. The aim is maximum benefit for the company and its customers while retaining job satisfaction for the staff.

The above points are not independent of each other. They are inextricably linked by a network of mutual respect and interdependency. The model uses a step-by-step method based on a vision, internal environmental competence and support material.

The principal aim of 6E is to create the conditions for improving the external and working environments. It promotes environmental work that unites consideration for nature with decent working conditions and a healthy economy. The model is accompanied by support material designed to help in the systematic environmental adaptation of the organisation's operations.

To identify the most important areas for change, the organisation is first assessed in terms of its effect on the external and working environments. An analysis of the current situation is carried out and priorities identified. Environmental goals and policies are then formulated and an action plan drawn up. The plan is implemented with appropriate working methods and routines developed, which integrate environmental considerations into actual business practices.

Finally, internal reviews supported by external auditing assess the organisation's operations prior to granting 6E approval. Environmental work continues, using the same principles as the benchmarking process - plan, implement, follow up – always striving for continuous improvement. Permission to use the 6E label to profile an organisation depends on the result of an independent third-party review.

Approval remains valid for three years. The 6E secretariat keeps track of the work being done through an annual internal environment audit of the organisation. An external audit is carried out every third year. The scheme has been in operation since 1997 and it takes a minimum of three years for an organisation to obtain the 6E certificate.

Investors in People (IIP)

British finance sector union UNIFI is one of the few trade unions in the UK to have been certified for Investors in People (IIP), a national standard which sets a level of good practice and training and development of people to achieve organisational goals. The standard was developed in 1990 by the National Training Task Force in partnership with leading national businesses, personnel, professional and employee organisations, including the British TUC. There is also an Investors in People International section which is beginning to develop primarily in Europe and Australasia, although it is also stretching its boundaries to other

countries around the globe through a network of partner organisations for education, training, implementation and assessment.

In the UK, the standard provides a national framework for improving organisational performance and competitiveness through a planned approach to setting and communicating objectives and developing people to meet these objectives. The result is that what people can do, and are motivated to do, matches what the organisation needs them to do. The process, like others, is cyclical and should engender the culture of continuous improvement.

Once an organisation applies for the standard, an independent assessor will examine its policies and procedures, conduct confidential interviews with workers and will review the organisation's assessment at least once every three years. The IIP standard is based on four key principles:

- a public commitment from the top level of the organisation to develop all employees to achieve objectives;
- reviewing regularly the needs of all employees and planning their training and development;
- taking action to train and develop staff throughout their employment;
- evaluating the investment in training and development to assess achievement and improve future effectiveness.

UNIFI has been pleased with the positive impact of IIP on the organisation and its employees who have been able to progress within the union. There was some trepidation on the part of union representatives in the initial stages, particularly if their views effectively criticised the organisation. However, the end result has been successful.

The network organisation

Networking is the most important development in management in the information age economy. In organisations whose wealth and value is intellectual capital, networks rather than organisational hierarchies are the most appropriate organisational design. Networks have been a part of society for many, many years. However, they were largely informal or unofficial in nature. The difference with the networks of the 1990s and the new millennium is due to the ICT revolution. Technology has supercharged social networks which have become the means by which organisations work. Online operations are critical to today's organisations, including trade unions.

Stewart emphasises that the extraordinary economic power of a network is available to any organisation that wishes to make the best use of its intellectual capital. The greatest challenge for the information age manager today is to create an organisation that can share knowledge effectively and efficiently and this is what networks do best. This area is put under the spotlight in *The Cluetrain Manifesto* because networks subvert traditional managerial authority by inspiring an informal style of work and allowing employees to work across departments and structures, rather than information having to pass up and down hierarchical structures.

The era of the network organisation will change the face of the work place completely. Network organisations are becoming leaner and developing into communities of smaller organisations rather than heavy corporate structures. Consider this comment by a manager at 3M in the USA: "All you really have to do in management is provide an environment; it's almost alive, always ebbing and flowing." Organisations today must "flow", say intellectual capital experts. Knowledge and information must flow both internally and externally, and it should flow in both directions.

"The job of management," explains Stewart, "used to be to plan, organise, execute and measure – POEM. In the networked organisation, the manager's job is best described in organic terms – indeed, in terms of the fundamental material of life. The manager's job is DNA: Define, Nurture, Allocate."

Defining who the organisation is and what it is doing; *Nurturing* the human, structural and customer capital which makes up the organisation; and, *Allocating* resources, work and measuring the results. It would appear that in the "webbed" or "wired" world the flat, networked organisation will ultimately be the successful one. UNI and its affiliates have seen much evidence in support of this theory. Big corporations are breaking up, creating smaller business units which are either quasi-independent or independent companies, outsourcing of various services is on the increase, internal hierarchies are being dismantled and there is an increase in the number of Small and Medium-sized Enterprises (SMEs).

New organisational designs include the establishment of the "virtual corporation". Skandia's Assurance and Financial Services Division (AFS) defines itself as a virtual corporation, developed through the field of work carried out by Edvinsson. AFS puts its capital, both financial and intellectual, into developing insurance products, operating its internal and external networks and opening global markets. However, it neither manages mutual funds nor deals directly with the public. This work is carried out by its partners in its virtual network of sellers and fund managers. AFS has used its intellectual capital where it is strongest, that is development and networking, and the partners have likewise used their intellectual capital

efficiently in areas of strength, either selling insurance or managing mutual funds. Companies world-wide are beginning to focus their activities and investment on core activities and are shedding the rest to other companies within their virtual network. This is also true of all industries and economic sectors, commerce, financial services, manufacturing and information technology. The focus on managing "intellectual assets" according to Stewart is the key to making virtual corporations work.

In a virtual network organisation, people often work in different locations, even different time zones and with different managers. The commonality is a shared idea of where they are going and what is required to get them there, namely "knowledge navigation" as Edvinsson terms it. The intellectual capital gurus claim that these new organisational designs require a new style of leadership that is both supportive of human capital, promotes independent behaviour and creates structural organisational capital which enhances the flow of information, energy and ideas. Tomorrow's managers must be trained to recognise and deal with intellectual capital flows. Human capital must be transformed into sustainable structural capital.

The key to organisational success in the network lies in information and the ability of organisations, networks and individuals to enhance the value of information and speed up its flow. The centre of all new organisational designs is intellectual capital. These designs share the "same Information Age logic: that ideas, knowledge, information processing, and other intangibles – human, structural and customer capital – can generate wealth much faster and less expensively than physical and financial assets traditionally deployed. The arithmetic of the goods economy is addition; in the knowledge economy, it's multiplication."

To assimilate what is happening in organisations today, keep an eye out for titles such as "knowledge centre", "learning centre" or "innovation centre" in organisational structures. In Skandia, Edvinsson has established the Skandia Futures Centre. This office, set in a house away from the Skandia offices, is the hub of their virtual networking organisation. According to Edvinsson, this office is a gateway "where information is switched globally, while serving as an arena for knowledge safaris, strategic knowledge meetings, knowledge games … and much more." While such establishments and descriptions may cause our mouths to twitch as we attempt to hold back knowing smiles, one cannot deny the enormous success of Skandia's AFS, one of their virtual organisations.

Skandia's centre is not only for workers within the Skandia Group. It has had considerable success as a meeting place and discussion centre for people from companies, organisations and higher education institutions world-wide. The centre is also the Swedish node in a new intellectual capital network – UNIC, *Universal Networking Intellectual Capital,* where organisations exchange information and experiences, monitor what is going on in intellectual capital around the globe and test new ideas. The experiences and knowledge accumulated by the centre is made available to workers throughout the Skandia Group, and once again the focus is on rich and fast information flows. The Skandia Futures Centre is effectively a tangible product of the renewal and development focus of the Skandia Intellectual Capital Navigator.

Closing comments

Normally, the title of this section would be "Conclusion". But how can one possibly draw a conclusion from this paper? There is none. There is hardly a beginning nor an end. The fundamental structure of our society and our economy has now irreversibly changed. We have moved from the industrial age to the information age, and intellectual capital and networks have taken on new forms and new meanings. They are the concepts by which the world of work will be shaped in future.

Five years ago, the Internet was not even included in organisational literature. Today, it is a vital tool to businesses and organisations world-wide. A search on the Internet on terms such as "intellectual capital" or "balanced scorecards" will result in hundreds of thousands of hits. It is becoming increasingly difficult to keep pace with change and new developments. When information can be flashed around the world in the blink of an eye, then the stage upon which life is played out changes its scenery every few seconds. What has been reproduced and collated together here prior to this UNI conference may already be subject to new developments by the time the meeting takes place.

Effectively, increased interest in intellectual capital and its measurement will affect the trade union movement. It impacts upon its members in a very tangible way as the work environment has changed and is changing again. It affects the personal lives of every member and trade union official. It also brings into question the structures and focus of trade unions themselves and is certainly an area for further debate within UNI. What will be the shape and structure of trade unions in the future? What will be the style of industrial relations? How do unions fit into the development of virtual organisation? Do they become virtual organisations themselves? What services will be required of them?

Similar questions must form in the minds of professional and managerial staff, the front-line workers probably most affected by these deep and rapid developments. What will this mean for these workers? If Stewart and Edvinsson are to be believed, then management will change fundamentally and irrevocably. Indeed, the term "management" may no longer be appropriate – "co-ordination" seems closer to the concept of the network organisation and intellectual capital. Awareness needs to be raised among UNI members and debate must be stimulated and encouraged. This is not a management concept "fad" – it is not going to go away and be replaced by a new, more fashionable term next week. The changes are already there for the world to see and learn. Workers in the expanding service sector have experienced the impact of these changes throughout the 1990s and they have been the subject of considerable debate already within UNI: re-engineering, downsizing, outsourcing, teleworking, mergers and take-overs.

To use the phrase coined by Edvinsson, the trade union movement needs to "futurise". Trade unions have a wealth of their own intellectual capital and already benefit from vast and experienced networks. Perhaps it is time for discussion and strategic decisions as to how to enhance and enrich trade union intellectual capital, increase information flows across the union network and shape the future – futurise the trade union movement of the information age. If nothing else, this paper provides food for thought, whether the reader agrees with the contents or not – it challenges our fundamental beliefs, knowledge and hopes for the future. Above all else, UNI believes that people must come first in the information age economy.

Recommendations

This document is the beginning of an ongoing process within UNI. The issue of intellectual capital is new and requires more research and discussion to assess the manner in which its development will impact on different workers, working conditions, the work place environment and trade unions themselves. In terms of follow-up, UNI proposes the following recommendations:

- The secretariat will look at areas of further research into the area of intellectual capital and its measurement and the impact on workers, working conditions, the work place environment and trade unions.

- The UNI P&MS Committee will give full consideration to this background document and discussions at the World Conference in order to establish an action plan.

- The Committee and secretariat will focus attention on raising awareness among affiliates on the area of intellectual capital with the objective of stimulating discussion at the national level and the exchange of information and experiences.

- The Committee will discuss quality models, particularly TCO 6E and Investors in People, and launch initiatives into the relevance of such models for trade unions and their work. Discussions will include how the models can be tailored to different national situations and how the monitoring and support processes can be developed.

- The secretariat will initiate further study into the area of benchmarking. The emphasis will be on how to ensure that core labour standards and specific union concerns are integrated into the benchmarking process.

- The secretariat will pursue contacts with the Skandia Futures Centre to examine its development and activities and prepare a research paper on the relevance of a similar initiative for the trade union movement at national, regional and global levels.

- The secretariat will initiate a process of continuous monitoring of research in the field of intellectual capital and new forms of business performance measurement and will encourage affiliates to do the same in each of their countries. A Web page will be created to publish new developments and to encourage an exchange of information between affiliates and interested parties.

- The secretariat, through a process of example, will encourage affiliates to conduct internal intellectual capital surveys and develop union-related performance measurement tools. These experiences will become the subject of a research project by UNI to develop a set of management tools for trade union organisations world-wide. This process will be set in motion within the UNI secretariat before being extended to national affiliates. Change is no longer an option and the trade union movement must lead from the front.

Bibliography

Accounting for minds: An inspirational guide to intellectual capital, Gottfried Grafström and Leif Edvinsson, Skandia
Harvard Business Review on Measuring corporate performance (Harvard Business School Press)
Intellectual Capital: The new wealth of organisations, Thomas A. Stewart (Currency and Doubleday, 1999)
Measuring business performance: Why, what and how, Andy Neely (The Economist Books, 1998)
Performance drivers: A practical guide to using the balanced scorecard, Nils-Göran Olve, Jan Roy and Magnus Wetter (Wiley 1999)
The Balanced Scorecard: Translating strategy into action, Robert S. Kaplan and David P. Norton (Harvard Business School Press, 1996)
The Cluetrain Manifesto: The end of business as usual, Rick Levine, Christopher Locke, Doc Searls and David Weinberger (Perseus 1999)
The Empty Raincoat: Making sense of the future, Charles Handy (Arrow, 1995)
Total quality management: Implications for the development of a sustainable working environment, UNI 1999