

EBS REVIEW

**INNOVATION, KNOWLEDGE,
MARKETING AND ETHICS**

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Mapping Relations between Innovation, Marketing, Ethics and Knowledge in the Landscape of Business Thinking

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Innovation and marketing, in business practice, are directly linked in the processes of new product development and commercialisation. The over investment into the development of third generation mobile communication solutions, that has caused financial problems for some large telecommunication companies, is a recent example of how complicated anticipating the pace of introducing innovations to the marketplace can be.

The advice always given to new product innovators has been to learn from the marketplace. However, there is a need to distinguish between strategic marketing, whether or not to enter a new market or to re-define the existing business concept, and tactical marketing, dealing mainly with the problem of differentiating existing products and extensions to such products. Segmentation and market surveys appear to be most effective for routine product development projects. Latent needs analysis and prototyping are more appropriate for novel product development projects (Tidd et al. 2001, 164).

Business concept innovations that meet deep customer needs in unconventional ways (Hamel and Prahalad 1994; Hamel 2000) and the need to change the business landscape by reconfiguring the value chain and by creatively re-framing strategic mental models (Normann 2001) or even cracking the existing value codes (Boulton 2000) have become important elements of the strategic marketing agenda in recent years. Creativity, changing management skills, innovative capabilities and core competencies of organisations are discussed as the key factors of a competitive advantage.

The ability to introduce radical but market-oriented innovations is also related to organisational learning and knowledge management processes. The learning organisation can discover what is effective by re-framing its own experiences and learning from them. It facilitates the learning of all its members as well as its continual transformation (Pedler et al. 1991). Marketing can be seen as a process that generates impulses for cross-departmental learning. Knowledge management tools allow the monitoring of new market and technology trends and the facilitating of knowledge sharing and knowledge re-use. In a market-focused organisation customer relationship marketing and knowledge management initiatives have to be integrated.

Value creation is an essential concept for discussing relations between innovation and marketing and for assessing their efficiency. The innovative value of new ideas does not, however, always guarantee the highest value from the owner's point of view, at least not in the short run. From history we know that Christopher Columbus died as a poor man. Evidently the expedition that resulted in discovering America was not a profitable business project and would not have been carried out if the finance had to come from a risk capitalist looking for shareholder value. As a matter of fact, the goal of sailing to India was really not fulfilled.

There is more recent anecdotal information about the sceptical assessments given by experienced business people a few decades ago on the marketing prospects of personal computers. The turbulent and rapidly changing business environment of the 21st century will create an increasing number of

strategic choice situations, where one alternative may involve investing in the development of an innovative, new product for the market, and the other less radical alternative is to be a follower – imitating or may-be fine-tuning products developed by first movers.

A recent survey of innovations in Estonian enterprises between 1998-2000 indicated that in the year 2000 one sixth of Estonian manufacturing sales was due to new or improved innovative products, from the viewpoint of the enterprise, introduced between 1998-2000. This is two times lower than the same indicator for the European Union in 1996. Innovative products that were new for the enterprise's market account for 6% of total sales in Estonian companies. The remaining 10% were products that were only innovative for the enterprise (Kurik et al. 2002, 40-42). One could argue, however, following the four-stage model for competitive advantage development (Porter 1985), that in the factor conditions stage and investment driven stage of a transition economy introducing products developed elsewhere has generally been a less risky way to produce shareholder value than experimenting with radically new products.

In order to enter the next, innovation driven, stage the ability to develop and implement principally new products and technologies will become an essential factor for increasing company value. It assumes that managers create a broader vision of global market trends and owners are ready to invest for longer before they can cash in the increased shareholder value.

As nations race toward a global marketplace, the need for commonly accepted ethical standards has taken on new dimensions of ever-greater importance. Economic development - and the political forces trying to accelerate it - requires that ethical standards substitute for the use of force. Since trade, technology and finance are the primary tools of business; there is a crushing need to make ethical business a natural standard for all business activities.

Every day society pays a heavy price for the unethical choices made by its members. Making an ethical choice is rarely easy; in many situations there are a multitude of competing interests and values. Most decisions have to be made in the context of economic, professional and social pressures, which

often clash with personal ethical values and conceal or confuse the moral issues. People need to come to their ethical senses and make decisions according to such basic, non-discriminatory principles as trustworthiness, respect, responsibility, fairness, caring and citizenship - values that should make up the pillars of every character.

Businesses have to accept responsibility for the consequences of their activities and make every effort to ensure that their decisions, recommendations, and actions function to identify, serve, and satisfy all relevant entities: customers, organisations and society. Businesses should be aware of how their behaviour may influence or impact on the behaviour of others in organisational relationships. They should not demand, encourage or apply coercion to obtain unethical behaviour in their relationships with others, such as employees, suppliers, or customers.

Philip Kotler has written: "The future holds a wealth of opportunities for companies as they move into the twenty-first century. Technological advances in solar energy, online computer networks, cable and satellite television, genetic engineering, and telecommunications promise to change the world as we know it. At the same time, forces in the socio-economic, cultural, and natural environments will impose new limits on marketing and business practice. Companies that are able to innovate new solutions and values in a socially responsible way are the most likely to succeed" (Kotler 1997, 783).

Ethics are our beliefs about what is right and what is wrong. The marketing / planning process recognises responsibilities to consumers, channel members, and the company. This responsibility is accomplished by designing a marketing strategy to satisfy the needs of each of these groups (Dickson 1997, 308).

Good business ethics lead to better products and services, improved employee performance and greater customer loyalty. The continued well being of a business depends on its employees' and customers' healthy respect and support for its products and services. Loyalty is the thing, which binds these separate constituents to a business. Good ethics is the source and catalyst for this loyalty.

As the central figure in a modern market economy is the consumer, the company has to put lot of energy into developing good relations with consumers. Excellent customer service means providing quality products or services at a fair price, honestly representing the product or service and protecting the customer's privacy. As privacy is a basic customer right, issues concerning a customer's confidence should be treated with great attention; these issues include confidentiality, product safety, truth in advertising and special fiduciary responsibilities.

The global consumerization process manifested by the movement from brands as reference via brands as personality and company brands to brands as icons (Goodyear 2002) can also be discussed in the knowledge management context as a developing dialogue and knowledge sharing process between marketers and consumers. Virtual learning communities, where consumers can globally compare (using discussion forums and other Internet tools) the quality and price relations of different offers and advise each other about new product features and reasonable product and service packages, may become essential tools for empowering consumers to act as partners with marketers.

The ethics and integrity of a company is based on the relationship between the salesperson and the consumer. Conflicts in consumer relations arise when businesses are unethical, or when they disagree about what the right decision is when an ethical problem presents itself. For instance, business people often face the difficult ethical dilemma of whether to cut corners on quality or whether to increase prices in order to enhance profits.

The stress that marketing executives experience as a result of the problems posed by ethics can be greatly heightened by the presence of a double standard. Executives must meet performance goals, but they have to guarantee that this is done in a right and ethical way. Companies have to be committed to the ethical treatment of those to whom they have an obligation – that means their employees, customers, the community, shareholders and their suppliers. They are committed to creating a 'do-it-right' climate that emphasises core values such as honesty, fair play, good customer service, a commitment to diversity, and an involvement in the community. Companies have also got to make it clear what action they will take against unethical

behaviour and establish credibility by following through. This can be done by adopting a series of formally written codes of ethics and developing an 'unwritten' company culture that influences all decisions made in the company, including decisions about marketing.

How are the interests of different stakeholders taken into consideration during the marketing and innovation processes? How can we overcome potential contradictions between short-term marketing decisions made by managers that might generate profits and boost the share price but simultaneously undermine the long-term competitiveness of the company? We have all followed during recent years how Enron and some other large corporations in the advanced corporate governance context of the USA have become bankrupt after their true market value was identified despite auditing manipulations. It would be naïve to think that companies in less advanced security markets and owners less experienced in corporate governance practices are immune to drastically erroneous assessments of the shareholder value, especially if company managers claim that they have invested into innovation and client relationship capital.

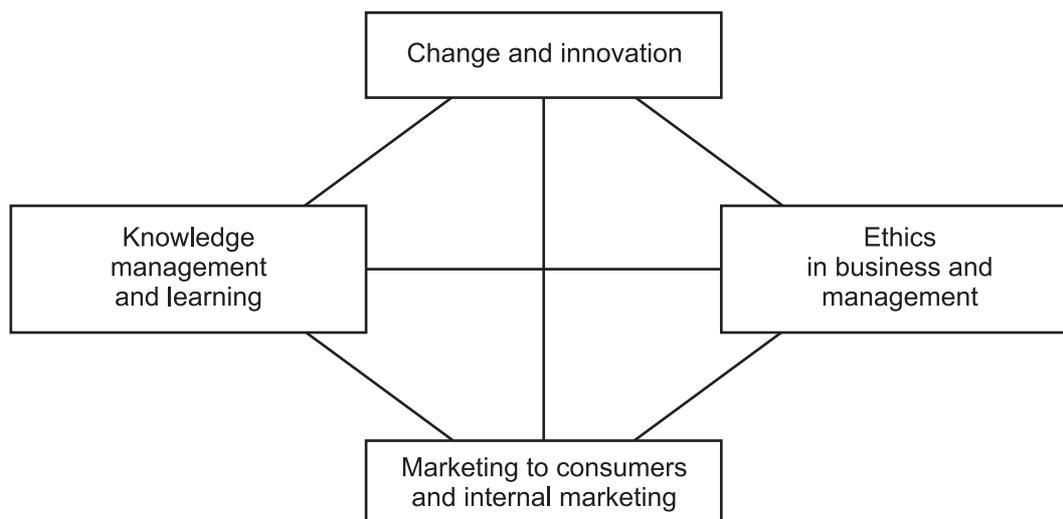
The stakeholder approach also has to deal with relations between employees and managers in market-driven and knowledge-based innovation processes. What factors support or inhibit the company's response to the changing market environment or the management of market-driven changes to strategy, organisational culture, leadership style and mission? What is the role of the learning organisation in dealing with creative transformational challenges in the integrated markets of Europe? What are the priorities for developing organisational learning and knowledge management practices in different types of organisations that do not face similar market- and technology-driven needs for innovation?

Innovative activities are not limited to the marketing of material goods and related services. In the knowledge-based economy the marketing of ideas is becoming the main focus. The emergence of new life style ideas shapes consumer preferences for buying new goods. In order to improve the innovative potential of an organisation, one has to deal with the internal marketing of new ideas in the field of creative thinking, customer relations and

knowledge sharing, and customer and shareholder value.

There are many challenging questions that reflect both a synergy and contradictions between innovation and marketing in the context of developing knowledge management and ethical business behaviour. The authors of the articles in this EBS Review discuss some of these issues.

Knowledge management development priorities in the changing business environment are discussed in the article by Tiit Elenurm. He points out links between the knowledge management agenda and the know-how versus know-why focus in organisations. Relationships between knowledge sharing as a key knowledge management concept and virtual distance learning tools are discussed in the paper by Tiit Elenurm, Ly Hõbe and Karin Liikane. The knowledge sharing theme is continued in reflections



Papers presented in this issue of the EBS Review mainly deal with the connections between key words such as those presented in Figure 1.

Figure 1. The common denominator among EBS Review papers

The paper by Silja Kurik presents a comparison of the process and product innovation track record in Estonian and European Union member countries. Ruth Alas analyses transformational changes that have taken place in Estonian companies. This article also deals with the notion of resistance to change and the development of learning ability in organisations as an essential prerequisite for implementing organisational changes more successfully. The model for an innovative and flexible IT company by Aimar Meltsa presents a vision of an organisation capable of using change to facilitate growth. A readiness to change is supported by leaders skilled in turning data and information into knowledge.

upon the use of case studies in the learning process presented in two papers: one by Mari Kooskora and the other by Manuela Tvaronavičienė.

Toomas Danneberg discusses the concept of value-based marketing. The paper by Rinaldo Michelini and George Kovčes points out contradictions between market-driven profitability and sustainable development. The authors describe integrated design and extended enterprise concepts as being the path towards feasible innovations with a reasonable economic return. The moral underpinnings of the precautionary principle by Thomas Russ draws the attention of researchers and management practitioners to the idea of preventive anticipation – indeed an important issue in the context of radical innovations. Elena Pruvli takes a look on images of women in advertising. Her surveys demonstrate that attitudes among consumers towards innovations in the advertising field are also culture-bound.

Global issues concerning peaceful cooperation between cultures as a basis for successful manage-

ment are discussed by Horst Steinmann. His paper links ethics and reason as the basis for genuine cooperation. Gundar King, Thad Barnowe and Larry Hegstad discuss ethics in business markets specifically in the Baltic context. These two papers as well as the paper by Linas Karlavičius and Birute Karlavičiene on the investment climate in Lithuania, complement the social and business aspects in this issue of EBS Review, where our intention is to share with readers new insights into the contradictions and synergy between innovation, marketing, ethics and knowledge.

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Innovation in Estonian Enterprises: Is it Sufficient for Competing in the World Economy?

Silja Kurik, *Estonian Institute for Futures Studies*

The progress of countries in transition is reaching the point where the level of innovation in single companies, but also whole economies and societies is more and more important for further development. The survey that was carried out in 2001 in Estonia provides a good opportunity for us to understand (a) what characterises the innovative behaviour in Estonian enterprises and what influences it; and, (b) where is Estonian entrepreneurship with its innovative behaviour situated in Europe. This basic information could be a good basis for exploring what these behavioural parameters mean for the future maintenance and growth of the competitiveness of Estonian companies.

The survey of innovation in Estonia defined an innovator as an enterprise which had introduced new or significantly improved products or services between 1998-2000 or had taken into use new or improved processes during this period. According to the survey every third (36%) Estonian enterprise did some kind of innovative activity. This is not at all a bad result, considering that some Western countries showed the same level of innovation in the CIS2 survey from 1996¹. But this is only one indicator of levels of innovative behaviour. The question is rather how do firms innovate.

As it has already been seen from the experiences of other countries larger firms and firms having foreign capital and a greater share of export in their turnover are more capable innovators (European Commission 2000). This also holds, to a large extent, for Estonian enterprises. The bigger enterprises and firms with foreign capital have had more resources than small local companies in conditions

where access to financial resources has until only recently been low. When we look behind innovative firms and see what they actually do, we see that the majority of Estonian enterprises innovate through the acquisition of machines and equipment and the training related to the implementation of this new technology. This kind of innovation pattern puts the Estonian economy in the investment driven stage² of economic development. At this stage competitive advantage is equated with the low cost of the workforce, raw materials and other factors of production³. And efficiency increases through the adoption of new technologies and not through any serious development of products or processes.

Estonian enterprises do not spend enough on innovation projects. The share of enterprises with any kind of innovation expenditure was 29%. The total sum spent on innovation projects in Estonian enterprises was 1.4% of their total turnover in 2000. These numbers are far too low compared with European Union countries (Table 1). The intensity of innovation expenditure is related to the structure and composition of industry. A large percentage of rapidly changing industries with healthy profit figures also enables investment into internal research and development, the purchase of consulting services and the acquisition of machinery. The biggest difference between Estonia and the EU in the manufacturing sector is that large enterprises are investing relatively smaller amounts in innovative activities than small and medium sized enterprises. Large service firms in areas like banking, insurance, telecommunications and transport have received quite substantial foreign investment and the gap between these and the less innovative EU

members is not so great. Small service firms who are based mainly in local centres are less able to invest in innovation related activities (Kurik et al. 2002).

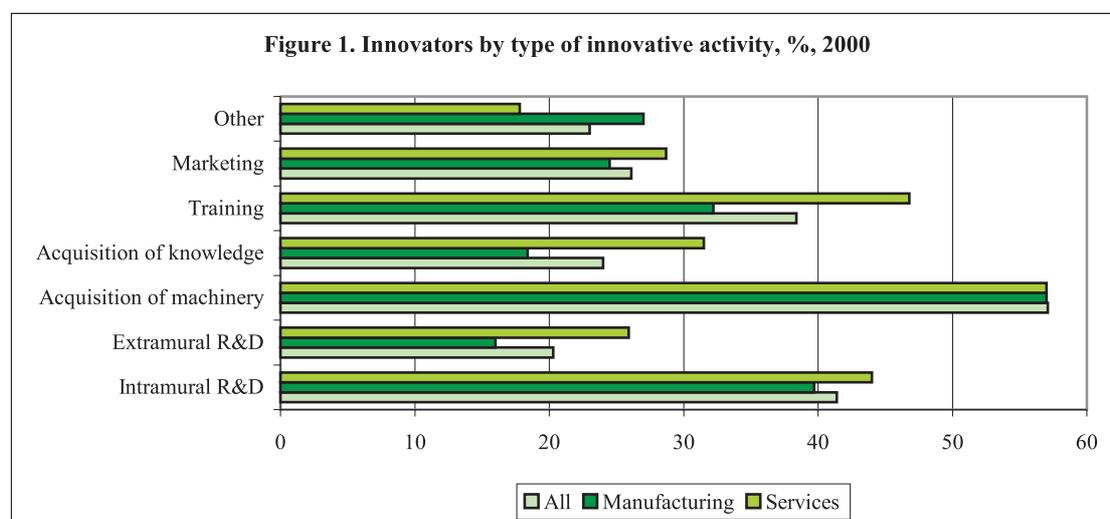
As mentioned above, the purchase of new machinery plays a big role in Estonian innovation (Figure 1) at the current level of innovation and very often it is

accompanied by personnel training activities. Estonian companies have several features in common with those of the EU (Figure 2) considering their involvement in different innovative activities, but hereinafter we see that the picture is very different if we look at the innovation expenditure structure.

Table 1. The intensity of innovation expenditure according to size, Estonia 2000, EEA 1996

| | Manufacturing sector | | | | Service sector ⁴ | | | |
|-------------------|----------------------|------------|------------|------------|-----------------------------|------------|------------|------------|
| | All | Small | Medium | Large | All | Small | Medium | Large |
| EST (2000) | 2.3 | 2.7 | 2.7 | 1.7 | 0.8 | 0.5 | 0.9 | 1.4 |
| EU-15 | 3.7 | 2.5 | 2.3 | 4.2 | 2.8 | 2.9 | 2.4 | 2.8 |
| Belgium | 2.1 | 2.1 | 1.4 | 2.3 | 1.2 | 0.9 | 2.7 | 1.1 |
| Denmark | 4.8 | 10.4 | 3.5 | 4.5 | 4.7 | 2.6 | 1.5 | 6.3 |
| Germany | 4.1 | 3.3 | 2.4 | 4.4 | 3 | 3.1 | 2.5 | 3.0 |
| France | 3.9 | 1.4 | 2.2 | 4.9 | 1.2 | 0.8 | 1.0 | 1.5 |
| Ireland | 3.3 | 2.8 | 3.2 | 3.7 | 2.1 | 6.0 | 1.2 | 2.9 |
| Netherlands | 3.8 | 3.0 | 1.8 | 4.6 | 1.6 | 2.4 | 2.4 | 1.3 |
| Austria | 3.5 | 4.4 | 3.1 | 3.5 | 3 | 2.8 | 3.9 | 2.7 |
| Portugal | 1.7 | 1.8 | 1.9 | 1.6 | 1.1 | 2.1 | 1.6 | 0.7 |
| Finland | 4.3 | 1.6 | 1.6 | 5.1 | 2.4 | 3.6 | 3.0 | 1.8 |
| Sweden | 7 | 2.6 | 2.7 | 8.2 | 3.8 | 1.1 | 6.1 | 5.0 |
| UK | 3.2 | 3.3 | 2.9 | 3.2 | 4 | 6.9 | 2.7 | 3.7 |
| EEA | 3.7 | 2.5 | 2.3 | 4.24 | 2.8 | 2.9 | 2.3 | 2.9 |
| Norway | 2.7 | 2.2 | 2.8 | 2.8 | 3.5 | 2.2 | 1.2 | 5.4 |

Source: CIS2, Eurostat/Enterprise DG; ESA Innovation survey



Consequently, the share of training in innovation related activities is significantly larger in services than in manufacturing. The greatest difference is that Estonian service enterprises are more eager to do R&D than manufacturing enterprises; in the EU the situation was the opposite (Kurik et al. 2002).

The acquisition of machinery is also the most common innovative activity in EU enterprises, as most of the firms claim to do this. But if we now look at the structure of expenditures on innovation in European countries and in Estonia the difference is huge. The largest share spent on machines and

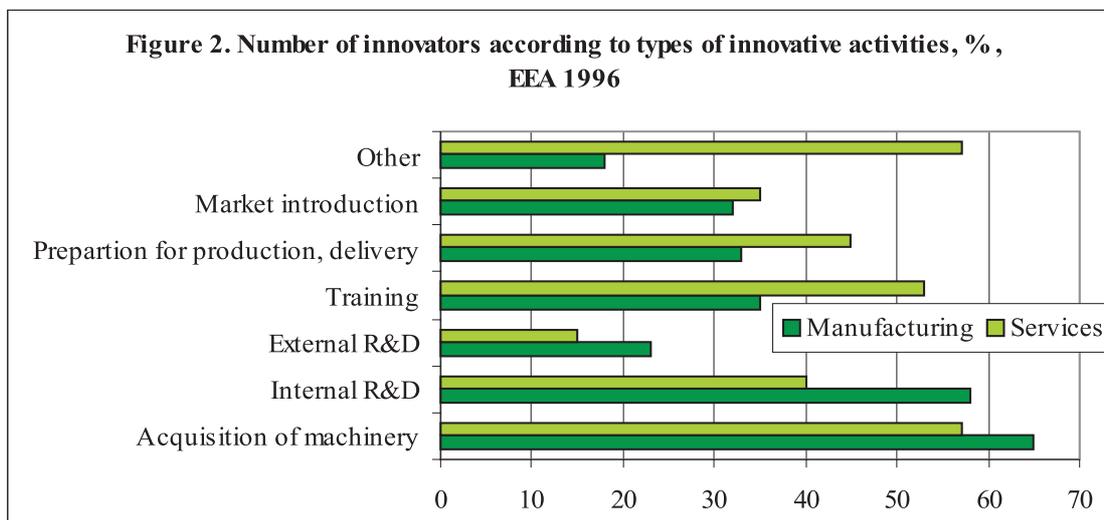
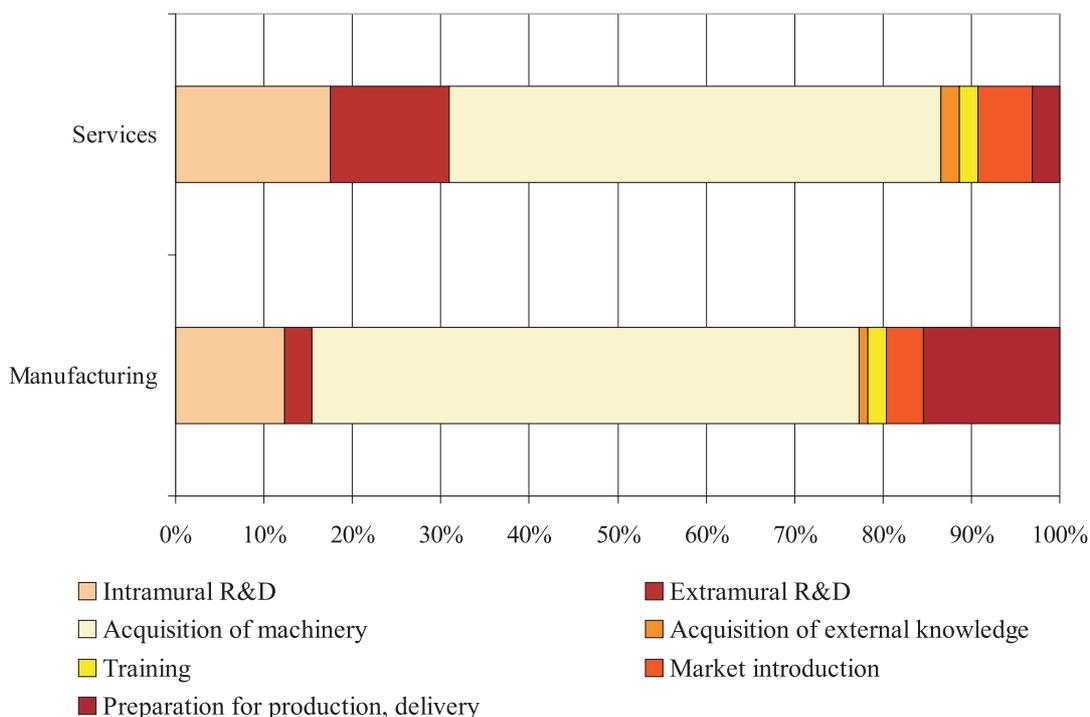


Figure 2. Innovators according to type of innovative activity in the EU¹, %, 1996

Source: Statistics on Innovation in Europe. Data 1996-1997. Edition 2000. European Commission, Eurostat.

Figure 3. Structure of innovation expenditure, 2000



equipment is in Estonia: it's almost two thirds in the manufacturing sector and half the costs spent on innovation in the service sector (Figure 3).

According to the CIS2 (European Commission 2000) the intramural R&D was the single most important innovation expenditure in European Economic Area (EEA) countries: 53% in manufacturing and 46% in services. The acquisition of machinery and equipment represents the second most important item: 22% of total innovation expenditure in the manufacturing sector and 16% in the service sector.

The one-sided innovation pattern of Estonian enterprises reverberates also in their innovation cooperation schemes. The intensity of innovation related cooperation is not lower than in the EU average, but several times smaller than in successful Nordic countries. So in general there is no problem with the cooperation intensity of Estonian firms, the worrying issue, however, is in cooperation relations, which are mostly based on the value chain (suppliers and clients, customers). The collaboration between R&D enterprises especially with universities and institutes is marginal. But these institutions are key-figures in the process of product or technology development, because of their concentration of available know-how. (Only a few large enterprises could provide their own centres with scientist and engineers. Most companies can't do it and it's not necessary anyway).

Estonian service enterprises seem to be using more complex innovation strategies than manufacturing companies: they do more in different fields of innovation (not only in the acquisition of machinery); they use different information sources more and their cooperation patterns are more advanced and better directed. The larger the service company the more it co-operates with others in order to develop processes and the less it has product development projects with others. In manufacturing no such differences were noticed. Being aware of the considerable success among the larger of the Estonian services (banking, telecommunication, and also transport) we might consider that the areas of cooperation and competition with other companies should be cleared to secure growth and competitiveness.

Although Estonian service firms are a bit more innovative than the producers it has little effect on

the international market as the percentage of the export of services isn't very big. In general market orientation has no impact of any importance on the intensity of innovation in firms. Both enterprises working for the home market and the ones with foreign market orientation innovate to same extent. If (according to the international experience of CIS2) the biggest exporters are also usually the biggest innovators, then it does not hold for Estonian exporters.

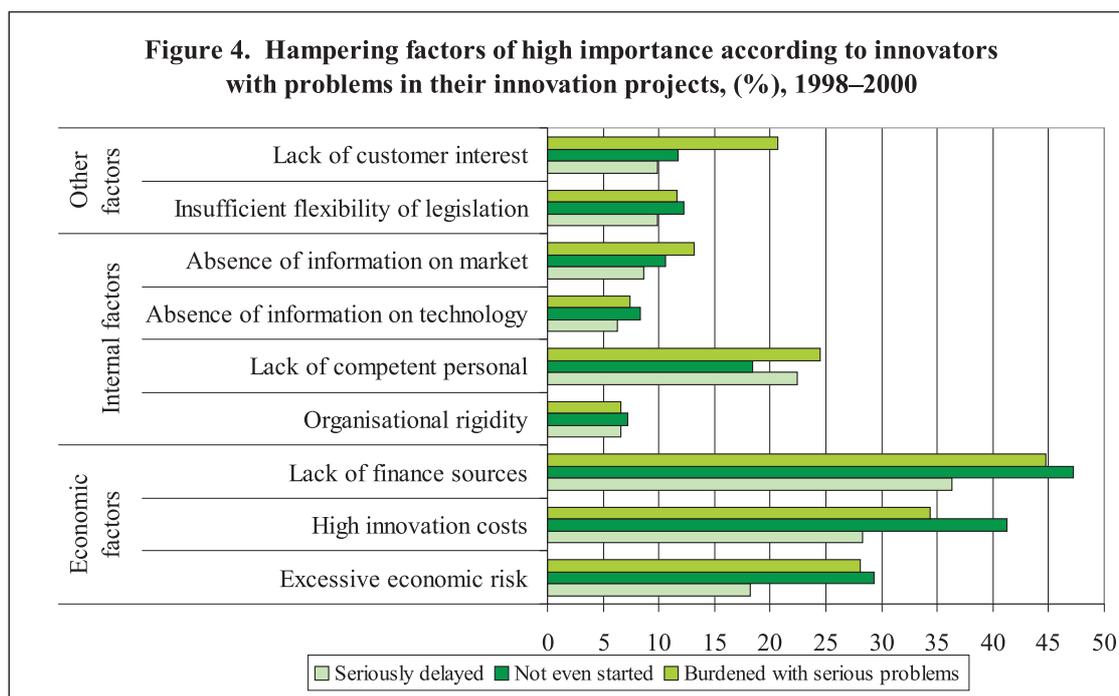
Among those firms that received over 90% of their turnover from exports the number of innovative companies was lower than in enterprises, which were oriented both to local and foreign markets. It might imply that the advantages of competitiveness for Estonian enterprises in the global market are still based on the low price of the production input, to a large extent because of subcontracting based exports. According to the exporters' survey (2002) 72% of exporters are subsidiaries, which sell and export the parent company's production.

The previously described results show that innovation patterns among Estonian and European enterprises are different. Estonian companies do not, as a rule, currently compete with novel products and services. Inexpensive production input and efficiency levels acquired from new technologies are the main drivers. The developmental stage of the economy predicts the kind of investments since it is not possible to jump to the knowledge and innovation centred stages with insufficient production capacity. So Estonian enterprises today are rather one-sided innovators (considering the share of innovators in the total population), and not complex or radical enough because the main driver is technological renewal.

One aspect of the situation behind the simple innovation pattern and low innovation costs involves issues driven by economic factors (Figure 4) such as low prices, the need for technological transfer and a lack of financing instruments, and another thing is innovative awareness. Many Estonian entrepreneurs are lacking the knowledge of certain management issues and marketing. The survey showed that most of the firms do not deal with the strategic development of the company.

Analysis of the obstacles to innovation revealed that often companies realise after a new product has been worked out that they were not able to sell

Figure 4. Hampering factors of high importance according to innovators with problems in their innovation projects, (%), 1998–2000



it, that they couldn't identify the client. Behind the rather low dissemination of management and marketing knowledge among enterprises another issue, that of education as an obstacle to innovation, was the shortage of competent personnel. This problem was raised both in manufacturing and service enterprises, but more often by the innovative firms than non-innovative.

The survey about the potential of national innovation capacities² (NIC) (Radosevic 2002/1) finds that Estonian human capital absorptive capacity³ seems rather good, but the relationship between human capital and growth is not straightforward. There is a strong need for improvement in skills and vocational training to support industrial development. The results of the mentioned survey considered Estonia the best EU candidate country according to NIC potential. The biggest problem is how does Estonia transform NIC capacity into capability? Right now there is a big gap between NIC and current levels of productivity (Radosevic 2002/2).

What can we conclude in order to answer the question in the title: are Estonian enterprises able to compete in the world economy? The answer starts with "if". If Estonian companies start planning their activity in order to realise all their potential, and start spending some resources today for the

future's sake, then they will be able to compete in the widened EU market and also globally. Today, Estonian indicators show success based on the results of progressive reform policies, open market conditions and cheap production input. But all of them have exhausted their relevance as the main drivers of growth and competitiveness. Joining the EU will decrease the advantages of being able to offer inexpensive production costs even sooner. So, Estonian enterprises should change their plan of action (and even their attitude) very soon in order to remain competitive even after some years.

Notes

¹ The survey in EU in 1996 and the one in Estonia in 2000 were based in the same methodology of "Community Innovation Survey" developed by European Commission and Eurostat.

² Michael E. Porter (1986) has divided the economies into four development stages according to their competitive advantages: factor condition based stage, investment driven stage, innovation driven stage and wealth-centred stage.

³ 54% of Estonian exporters find that cheap production input is their main competitive advantage in the world market (Eksportööride uuring 2001, 2002).

⁴ Wholesale sector and financial intermediation not included

⁵ Luxemburg is not included. Spain and Italy are not included in the service sector. The wholesale sector is not included in France.

⁶ NIC is the index of different statistical indicators under 4 main subgroups: absorptive capacity, R&D supply, diffusion and demand. Estonia shows very good results in the last two categories.

⁷ Indicators like: expenditures in education as a % of GDP; S&E graduates (% 20-29 population); population with 3rd level education; participation in life-long learning (% of working age population).

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Changes in Estonian Organisations

Ruth Alas, *Estonian Business School*

During the last decade Estonia has passed through a transition from being part of the former Soviet Union with a centrally planned economy, to being a politically independent country with a free market economy. As there is a major difference between these systems, change in Estonian companies has been deeper than change typical in a market economy.

In Western Europe and the United States organisational change has been an object of systematic research for the last six decades. Transformational changes are mostly taking place in countries currently in transition, where systematic research in this area is rare and there are no commonly accepted theories of change worked out for these countries.

In this paper a brief overview of Western theories of change will be followed by an analysis of research results in Estonian organisations and change models for Estonian organisations.

Organisational Change

An organisation is a complex system that produces outputs in the context of an environment, an available set of resources, and a history (Nadler and Tushman 1989). Changes in the environment necessitate that organisations modify themselves from time to time. Change has become a norm for organisations, as well as for the human beings who work within organisations and, consequently, have become the focal point for understanding and implementing change.

Change could be defined as planned or unplanned responses to pressures and forces inside an organi-

sation and/or from the environment (Jick 1993). Lewin (1989b, 85) divided these forces into supporting and resisting forces.

Types of Change

There are several classifications of types of change in the literature on this topic. Changes have been compared according to initiation and scope. In this dissertation the term change will refer to planned responses to pressures and forces from the environment or inside an organisation varying according to scope. Most theorists divide change into two groups according to scope: changes taking place within the given system, and changes aiming to change the system itself.

The author argues that in order to describe the changes, which have taken place in Estonian companies during the last decades, we need more than two types. Ackerman (1984) describes three types of organisational change: (1) developmental change, (2) transitional change, and (3) transformational change. Developmental change improves what already exists through the improvement of skills, methods, or conditions. Transitional change replaces current ways of doing things with something new over a controlled period of time. Transformational change means the emergence of a new state, unknown until it takes shape, out of the remains of the chaotic death of the old state. Burke and Litwin (1992) have developed a model for making a distinction between two types of deeper changes. They argue that transformational change occurs as a response to the external environment and directly affects the organisational mission and strategy, the leadership and the culture. Transitional change deals with psychological and organisational

variables that predict and control the motivational and performance consequence of the work group climate (Burke and Litwin 1992).

The Process of Change

Both the popular press and academic literature tend to consider organisational change as a step-by-step process. A basic model of the organisational change process was developed by Lewin. Lewin's (1989a) model consisted of three steps: unfreezing, moving, re-freezing. The author of this article took Lewin's model as the bases for the comparison of other models of the process of organisational change (Table 1).

and slowly the idea of change was introduced, the immediate reaction of lower supervision and operators was to resist. According to Lawrence (1975) most of the resistance is unnecessary. According to Senge (1997), people don't resist change they resist being changed. Resistance is frequently a reaction to a loss of control, not necessarily to the change itself (Jick 1993). Self-interest, mistrust, or preference for a status quo may be concrete manifestations of more subtle cognition: people are simply questioning what the change will mean to them.

Table 1. A comparison of models for the organisational change process.

| Lewin (1989a) | Unfreezing | Moving | Re-freezing |
|------------------------------------|---|---|--|
| Cummings and Worley (1993) | Motivating change/Creating a vision/Developing political support | Managing the transition | Sustaining momentum |
| Judson (1991) | Analysing and planning the change/Communicating the change/Gaining acceptance of new behaviours | Changing from the status quo to a desired state | Consolidating and institutionalising the new state |
| Goss, Pascale, Athos (1998) | Assembling a critical mass of key stakeholders/Doing an organisational audit/Creating urgency | Harnessing contention | Engineering organisational breakdowns |
| Greiner (1967) | Pressure on top management/Intervention at the top/ Diagnosis of problem | Invention of new solutions/ Experimentation with new solutions | Reinforcement from positive results |
| Beer, Eisenstat and Spector (1990) | Mobilise commitment/Develop a shared vision/Foster consensus | Spread revitalisation | Institutionalise revitalisation/ Monitor and adjust strategies |
| Kotter (1998) | Establishing a sense of urgency/ Forming a powerful coalition/ Creating a vision/ Communicating the vision | Empowering/ Short-term wins/ Consolidating improvements | Institutionalising the new approaches |
| Galpin (1996) | Establishing the need for change/Developing a vision/ Diagnosing and analysing the current situation/Generating recommendations | Detailing the recommendations/ Pilot testing the recommendations/Preparing the recommendations for rollout/ Rolling out recommendations | Measuring, reinforcing, and refining the change |

Most of the later models developed by theorists have mainly focused on issues raised in the unfreezing phase. These issues include – how to establish the need for change, how to motivate employees and how to mobilise commitment to change. However, there cannot be hard and fast rules.

Resistance to Change

Woodwards' (1954) empirical study in British industry indicated, that no matter how carefully

Organisational Resistance to Change

Although organisations have to adapt to their environment, they tend to feel comfortable operating within the structure, policies and procedures, which have been formulated to deal with the range of present situations. Organisations, like individuals, can become saturated and, thereby, be either unwilling or unable to integrate new and deeper changes, even if these are acknowledged as necessary (Jick 1993, 7).

High formalisation, centralisation, and stratification built into an organisational structure are often seen as barriers to change (Evers, Bohlen, Warren 1976; Hage and Aiken 1970; Quinn 1988, Burns and Stalker 1961). Several studies have indicated that successful change efforts were achieved through the informal rather than the formal organisation (Beer, Eisenstat, Spector 1990; Woodward 1980).

Katz and Kahn (1978) have pointed out a narrow focus of change: the interdependencies among organisational elements, such as people, structure, tasks and the information system must be taken into account. DeWit and Meyer (1998) mention cultures, reflecting only stability and supporting rigid thinking through group inertia and closed mindsets, as the cause of resistance. It may be noted here that an organisation's systems of governance are embedded in its ways of thinking which in turn are reinforced by its systems and processes.

Strategies to Overcoming Resistance to Change

As most studies have shown that employees resist social change more than technical change, the change programs which ignore psychological resistance to change are likely to fail, irrespective of the way the new desired attitudes are presented (Schein 1986).

Jick (1993) suggests managers need to rethink resistance to change as a normal part of adaptation, which protects a person's self-integrity. Providing security and rewards is essential to creating a climate in which people will take risks.

Coch & French (1948) were the pioneers in demonstrating that employee participation is the effective approach/strategy for social change. Ever since their work participatory approaches to change have been the most popular. Kotter and Schlesinger (1979) present six strategies for facilitating change and overcoming resistance: employee participation and involvement, education and communication, facilitation and support, negotiation and agreement, manipulation and co-optation and finally explicit and implicit coercion.

In order to find out, how theories worked out in western countries fit countries in transition, the author conducted an empirical study in Estonian organisations.

Empirical Study in Estonian Organisations

Methodology

The author conducted research in 137 Estonian companies in the beginning of 2001. The companies represented different industries and were of different sizes. In the research process interviews were conducted with top managers or with members of executive boards about change in their organisations. Characteristics of the sample can be seen in Table 2.

Results

Types of Change

The analyses of change taking place in Estonian companies is based on Burke-Litwin's model of organisational performance and change (Burke and Litwin 1992). The results are shown in Table 2.

The results of the current survey indicate that 75% of companies had changed strategy, 61% had changed organisational culture. Management style was changed in 58% of companies. In these organisations radical changes have taken place, which changed the system itself. In only 10 % of the companies studied had no change occurred at all to strategy, mission, organisational culture or management style. As transformational factors had changed in 90% of the companies studied, we can conclude that changes in these companies were transformational.

Regarding transactional factors organisational structure had been changed in 77%, task requirements in 73% and individual skills in 65% of the sample companies.

There were more changes in the production sector when compared with the service sector. Ninety percent of production firms had changed strategy compared with 71% in the service sector. Organisational structure has also been changed more often in the production sector (83%: 75%). Changes to individual skills were necessary in 75% of production companies accompanied by system changes in 80% of companies in the production sector.

The fact that companies in Estonia are quite young should also be taken into consideration. As expected, there had been more changes in companies established before the 90's than in younger companies. In 87% of companies, established before the period of transition in society had

Table 2. Changes in Estonian organisations based on the Burke-Litwin model.

| | All sample | Sector -Production | Service | Established -90 | 91-94 | 95-97 | 98- | Number of employees -25 | 26-50 | 51-100 | 101-1000 | 1001 - |
|---------------------------------|------------|--------------------|---------|-----------------|-------|-------|-----|-------------------------|-------|--------|----------|--------|
| % | 100 | 22 | 78 | 25 | 49 | 20 | 6 | 28 | 19 | 13 | 32 | 8 |
| Transformational factors | | | | | | | | | | | | |
| strategy | 75 | 90 | 71 | 87 | 72 | 74 | 64 | 78 | 68 | 79 | 74 | 73 |
| mission | 49 | 53 | 48 | 64 | 41 | 40 | 36 | 38 | 44 | 58 | 51 | 73 |
| culture | 61 | 58 | 55 | 56 | 55 | 49 | 82 | 54 | 47 | 63 | 58 | 60 |
| leadership | 58 | 58 | 58 | 58 | 58 | 51 | 82 | 52 | 50 | 63 | 61 | 73 |
| structure | 77 | 83 | 75 | 80 | 78 | 66 | 90 | 72 | 74 | 83 | 77 | 93 |
| task require-ments | 73 | 73 | 73 | 84 | 65 | 69 | 100 | 72 | 68 | 75 | 68 | 80 |
| individual skills | 65 | 75 | 62 | 58 | 67 | 51 | 64 | 60 | 65 | 75 | 60 | 73 |
| systems | 64 | 80 | 60 | 71 | 64 | 54 | 64 | 58 | 65 | 58 | 63 | 80 |
| Management practices | 46 | 45 | 46 | 53 | 44 | 40 | 36 | 28 | 47 | 58 | 49 | 73 |

begun, strategy had changed. Company structure had been changed in 80% and task requirements in 85%. Organisational culture, which is considered to be very difficult to change, had changed in 56% of these companies.

The exceptional results in companies established after 1997 was a surprise. These companies had changed their strategy less than the older companies, but 64% still achieved outstanding results in such a short time. Also, fewer of these companies had changed their mission, only 36%. But to accomplish this mission and to achieve their strategic goals, the organisational culture and leadership were changed, as well as the organisational structure and task requirements. This also necessitated changes in individual skills. As Estonia had experienced an economic crisis, connected with the crisis in Asia and starting at the end of 1997, it could have been that the owners of companies established after these dramatic periods had learned how important it is to be in continuous change in order to remain competitive.

Companies established between 1991-1994 and 1995-1997, especially in regard to changes in strategy and mission showed relatively similar results. Older enterprises had more often changed structure and individual skills, and organisational culture and management style.

If we analyse companies according to number of employees, more changes have taken place in

the biggest companies. Of these companies, 93% changed structure and 80% changed task requirements and systems. Strategy, mission and management style was changed in 73% of companies. This group represented the only group where strategy and mission were changed together. The reason for this could be that in these companies strategy is officially formulated in a written format. In smaller companies strategy formulation is not always so formal.

The Process of Change

We asked managers what steps made up the process of change. Fifty-nine percent of respondents mentioned becoming aware of the necessity of change. The largest group – 76% of managers – mentioned creating a vision and strategy. The next largest group referred to mobilising commitment and achieving employee support for change. Thirty-six percent of respondents communicated a vision to the employees, 45% involved and trained employees, 24% formed a coalition and 6% mentioned creating a suitable climate for the implementation of the vision. Ten percent mentioned planning and creating short-term wins. All these activities belong to Lewin's first step of change. Only one more activity was mentioned – 21% of respondents used institutionalised changes in organisational culture.

This shows that their main attention is on initiating changes and much less attention is given to such

later steps of the change process as assessing the change process and making modifications and consolidating improvements. Nobody mentioned identifying forces of resistance.

Resistance to Change

Resistance to change appeared on all levels of the organisations. According to this survey resistance to change mostly came from inertia in the thinking of employees. This obstacle was mentioned by 36% of respondents. Fear of new and unknown situations caused resistance for 23%. And 9% saw employee resistance as a response to changes that were too quick and not clearly presented. These three obstacles are the result of poor communication between the organisers of the changes and other members of the organisation about the rationale, content and process of planned changes. Obstacles in the sharing of information was mentioned by 4% of respondents, and 5% saw misunderstandings among members of the board and doubts among the owners as a source of resistance to change. It could make the change process really confusing for lower level employees, if even the people at the top do not agree.

The unwillingness or incapability of employees to do additional work was also mentioned by 15%. This indicates that the system of motivation didn't support the changes. According to 10% of managers, management plans to make certain employees redundant resulted in those same employees creating an organised resistance to the change.

The author also asked what the most difficult issue was during the implementation of the changes. The biggest difficulty according to 32% of respondents was the unlearning of what they had done before – 24% found that employees didn't realise how necessary the changes were for the company – 14% found it difficult to find personnel qualified to implement change – 12% mentioned difficulties concerned with merging different cultures – 6% pointed out insufficient information and differences of understanding probably making it difficult to sustain trust between managers and employees.

Strategies for Overcoming Resistance to Change

Kotters and Schlesingers' (1979) six strategies for overcoming resistance were taken as the basis for the analysis of this point. Research in Esto-

nian companies indicated that communication and education was the strategy most often used to overcome resistance to change among managers implementing organisational changes. These strategies were used by 85% of managers. Only 24% mentioned participation and involvement, 21% used facilitation and support and 15% negotiated with the employees. Coercion was used in 6% of cases and manipulation was only used by 2% of respondents. Several companies changed their reward system. A lot as to be done by managers to increase employee participation and the support of the management team to overcome resistance to organisational change in Estonian organisations.

Managers were also asked what they would do differently next time. More careful planning and preparation of the changes was mentioned by 22% of respondents and 14% said they would turn more attention to establishing goals – 22% would explain the changes to employees more and share more information in a co-operative way – 16% of managers said they had learned how important it is to already involve employees at every level of the organisation at the early stages of the change – 14% would do more teamwork and 5% would take the human factor more seriously into account – 4% would do a preliminary survey among employees to ascertain their attitudes toward the planned changes – 5% of managers would like to have more control over the process of implementing change and 3% would turn more attention to assessing change.

Most of these points are once again connected to Lewin's first step. Only the last two are directed to the last step, which was completely missing from the managers' answers to questions about the process implementing changes.

Conclusions

The survey results indicated that 90% of the companies studied have experienced transformational changes. The biggest difficulty during the implementation of change was inertia in the thinking of employees. Employees did not realise how necessary the changes were for the company and it was difficult to them to unlearn what they had done before. There was also fear of the unknown.

Estonian managers underestimated the resistance to change and said they would consider it much more in the future. Managers learned from these

experiences how important it is to involve employees from every level of the organisation already in the early stages of the changes.

Based on the survey results the author proposes a change model for Estonian organisations consisting of four steps. Similarly to presentations from other authors where the most attention was turned to Lewin's first step (Table 1), preparing for the change, Estonian managers also turned most of their attention to this step. The author of this study divided Lewin's first step into two parts: (1) Determining the need for change and creating a vision and (2) Determining the obstacles to change and gaining the participation of organisational members. The change model for Estonia companies is presented in Figure 1.

During the first step managers scan the environment and compare the actions taken and processes in the company with similar activities in leading companies in the same field. This may then lead to recognising the need for organisational change. A vision of the future state of the company must then be created on the basis of these observations and the current resources of the company. At the same time managers must analyse their assets concerning know-how and then they may recognise the need for new know-how, attitudes and behaviours in the organisation in order to accomplish this new vision. Managers also need to create vision of the people with this new expertise, attitudes, and behaviours.

During the second step, to determine the force of resistance as an obstacle to change and learning manager must conduct force-field analyses. As employee participation was the most popular strategy for overcoming any resistance to change, strategies are developed for gaining employee commitment to the changes. One possibility for increasing employee involvement is to encourage employee activity, willingness to take initiative and participation in decision making. Managers should make sure, that employees are aware of the organisation's business objectives and use a collaborative setting of missions and strategies. The creation of the conditions and motivation for learning and open minded and positive attitudes toward risk-taking could also be helpful.

The third step, implementing change, is similar to Lewin's second stage. Plans made during the

earlier stages are carried out. Changes in structure, operations and processes are implemented. Employees unlearn old skills and learn new skills and behaviours. Learning by mistakes takes place. The ability to use collaborative skills and teamwork is very important in this stage. There is a growth of open communication and the willingness among employees to develop themselves. The manager's role here is to support the personal development of employees.

The fourth step is for evaluating the results of the change effort and for consolidating positive results. Successful changes in behaviours and processes are cemented in procedures, and changes are institutionalised. Institutionalising learning means storing all knowledge obtained in the organisation. The information system should enable the storage of knowledge so that after people leave their knowledge remains within the organisation. It should also make information available to all the people making decisions or conducting analyses.

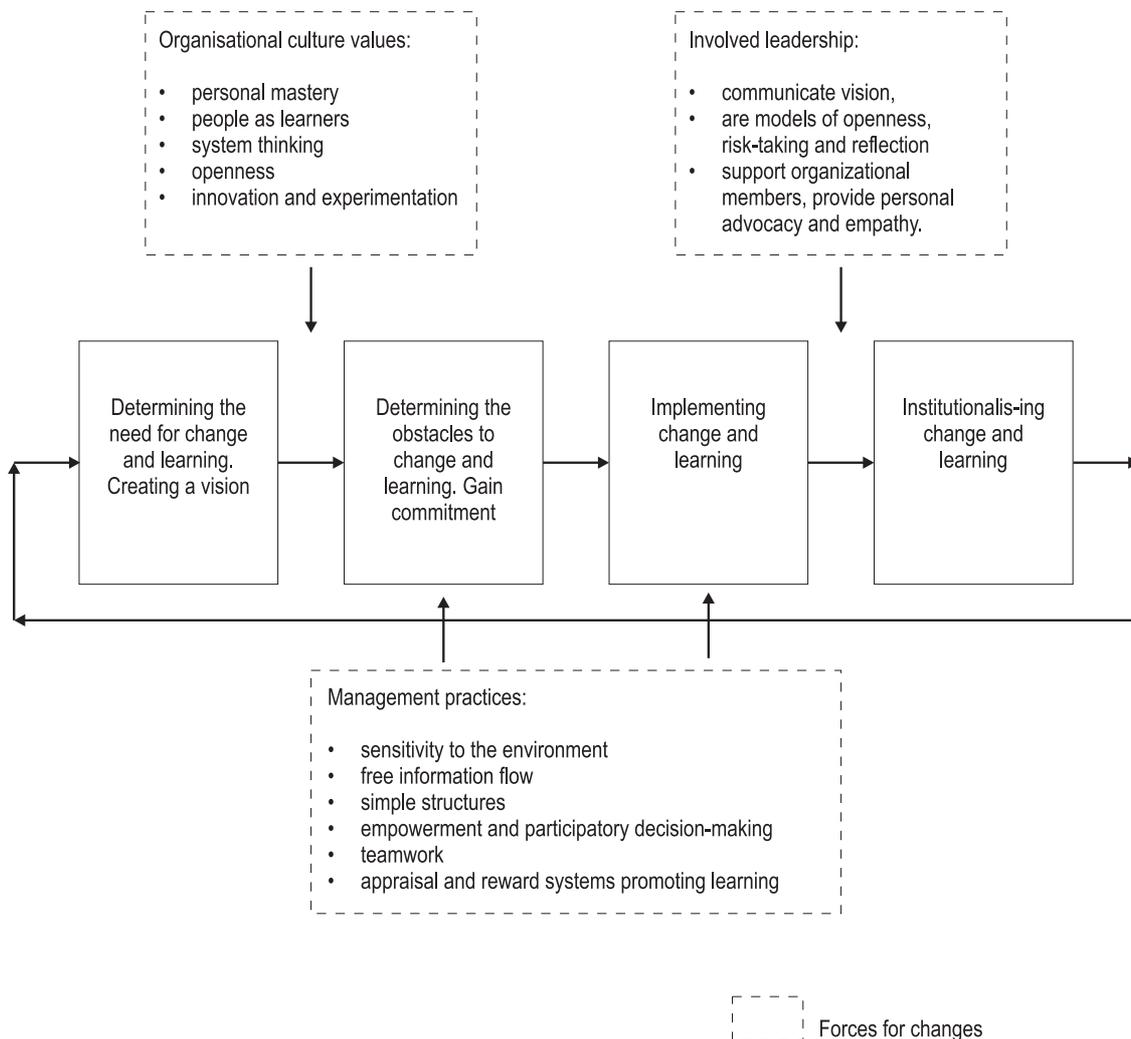
During all four steps of the organisational change process the company's management has a central role and a participatory style of leadership has a great part in the success of the change process.

In conclusion, the results indicate that managers of Estonian companies found the development of a learning ability in organisations useful for implementing organisational changes more successfully.

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Figure 1. Model of organisational change and learning in Estonian companies.



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Model of an Innovative and Flexible IT Company

Aimar Meltsa , *NOVO Systems AS*

“Organisations, services and products become more and more alike. ...The new competition battlefield is not like an engine or an air conditioner – it is a new design, warranty, service, image and finance package. The Economist writes, that the new “test” is whether it hurts when you drop your own competitive advantage on your toes, if it does, you must rearrange your way of acting.” (Ridderstråle and Nordsröm 2001).

The continual development and improvement of information systems and IT devices enables a more rapid circulation, dissemination and discovery or recovery of information. New technical solutions and product up-grades reach customers faster, but they also reach the competitors. Customers’ demands increase and product life cycles shorten. It is more difficult to build entry barriers, to protect one’s own share of the market – the tactic of hiding in the fort is no longer successful. In this kind of rapidly changing environment an approach that guarantees the organisation success in such an “open landscape”, where change can be instigated by competitors, customers or by ourselves, becomes essential. What should the model, enabling a small company to succeed in this “open landscape”, be like?

According to the concept of Thomas L. Doorley and John M. Donovan (Doorley and Donovan 1999), a growth model should contain three cornerstones:

- Strategy – sharp focus on the marketplace and an efficient business system to satisfy customer needs;
- Commitment to growth – an organisational culture supporting the will to grow;
- Capability of growth – processes and infrastructure that support the realisation of the strategy.

Strategy

In a rapidly-changing environment, the linear approach – having a mission, goals, strategy, operational plans and a budget – will not bring the right effect. During the time used to create a successful strategy, the supposition on which our strategy is based, changes. This is caused by our actions and the actions of others. Traditional budgeting and planning are based on an analysis of previous periods. But the results of the previous periods, which we project into the future, do not say anything about the future.

William E. Fulmer defines **the successful planning of strategy as a continuous process of learning, the most essential contents of which are modelling (not guessing) the future and the analysis of feedback** (Fulmer 2000). This creates a model with questions like “What if...” as well as continuous improvement based on feedback from the real world. A steady collection of information, both about competitors and customers and the continuous improvement of the model give the organisation a direction to move. In the ideal case, the result of this process not only provides goals, towards which the organisation can move, but also values, which can prevail in the organisation.

When defining the strategy, we must again and again find answers to questions like:

- Who are our customers and in which segment of the market are we operating?
- What are the needs of our customers and how do we fulfil these needs?
- How can we be more successful than anyone else in satisfying the customer’s needs efficiently?

Commitment to Growth – Readiness to Change

According to Fulmer (Fulmer 2000), organisational culture must be based on four core values:

- External focus (not internal politics);
- Supporting diversity;
- Responsible risk taking;
- Openness.

Changes in organisational culture should be based on changes in the way people think in the organisation. Rather than seeing the cost-push as just a management driven effort to increase profits, they can begin to see it as landscape or competitor driven. If they wish to be viable in their own particular landscape, and certainly if they aim to be among the fittest, they have to be at least as good and hopefully even better than their competitors.

Supporting a diversity of ideas, skills and experiences may identify new and previously unconsidered options for solving problems or challenges facing the organisation.

To create a risk-taking environment means finding ways to actively and visibly encourage and support people who want to try new things and reassuring them that they will not be punished for efforts made in good-faith that fail. The key element in supporting risk taking is holding people responsible for their failures.

An external focus, supporting diversity and responsible risk taking are not very useful unless there is an open climate that encourages debate and discussion about critical issues.

The transformation of organisational culture also raises a serious challenge to the leader of the company. The leader cannot be a “hero”, who tries to manage the company alone – he must be a **supporter** and a **catalyst**. The main role of the leader is to study and to analyse the changing environment and to share gained know-how. The leader should go beyond just helping others to understand the direction the organisation is headed, whether it is a business or technology direction. It is the duty of the leader to convey, both in words and deeds, a clear and effective message about what the operating environment is like, what business they are practising and the direction they are headed.

The three levels for successful management are: (Tissen et al. 2000)

Leading

- Stress the importance of knowledge in your company. Mention and underline it whenever you can.
- Give the goal a meaning. This means producing a vision, a mission, strategy and core values, which reflect the importance of knowledge.
- Allow disturbing questions. Get your people to challenge orthodoxies.

Facilitating

- Establish an integrated knowledge environment.
- Provide proper human resource instruments.
- Create the right architectural and organisational design.

Stimulating

- Set the right example. Make the lessons you have learned accessible to everybody, and encourage everybody else to do the same.
- Encourage teamwork. Promote multidisciplinary teams for a whole range of activities. Use non-hierarchical teams. Give encouragement to young potentials.
- Promote learning. Make sure, there is time for reflection. Stimulate the writing and publishing of articles on as wide a range of subjects as possible.

The main competencies developed for an organisation to achieve changes in organisational culture, can be divided into three groups:

Learning from Information

- Sourcing means knowing where to look for the information you are after. It also deals with how to find particular information.
- Questioning means turning data into information and making sure it answers a specific question. Knowing what question to ask is half the battle.
- Sensing means being responsive and open to new information. It means postponing judgement on any matter until all information is available. It means listening with an open mind, observing and perceiving.

Improving Thinking

- Analysing means developing skills based on logic, systematic thinking, reasoning and mental modelling. This is a rational approach to thinking.
- Creating requires an emotional approach, as we move outside the constrictive box of orthodox thinking. This means we allow our minds to move laterally and creatively.
- Reflecting is the ability to ponder over lessons learned and developing the art of self-reflection.

Social Competencies

- Networking is vital for it helps us to build up a close circle where we can find the information we are seeking or at least pointers that lead us in the right direction.
- Teamwork assists in developing the ability to collaborate and to share knowledge.
- Dialoguing is the ability to rid your minds of any preconceptions and listen to all arguments with full attention and without trying to interject views or ideas that may occur.

The main resistance to the process of changing organisational culture is the attitude – knowledge is power. People who know are more powerful than people who do not know. Knowledge is used as a weapon in internal one-upmanship - not for the greater good of the company.

To avoid this “cultural resistance” and to achieve collaboration they (Tissen et al. 2000) suggest that a company should:

- Create direction and a shared understanding of goals and opportunities;
- Determine clearly whose lifeline is producing valuable knowledge;
- Create a transparent structure, which allows professionals to see exactly where they are in relationship to their company’s environment and what the value of their work is to the company as a whole.

Supporting the Organisational Environment – the Adaptive Organisation

Rene Tissen, Daniel Andriessen and Frank Lekanne Deprez define the continuously changing business environment as the knowledge-based economy. The goal in a knowledge-based economy

is not to capture all the knowledge we can, but to acquire knowledge that adds value. It is not enough to generate knowledge, make it available, and hope for the best. Companies need knowledge management, and they need it in a value-based manner. There are three ways in which a company can use knowledge management to add value - by making its knowledge:

- More efficient
- Better connected
- Tremendously innovative

Organisations (defined by the authors as knowledge-intensive organisations), successfully dealing with the task of knowledge management, differ from others according to three distinctive features (Tissen, Andriessen, Lekanne Deprez 2000). They are:

- Process-based
- Team-based
- Virtual Community-based

Fulmer has determined the organisation, which is viable and able to survive in an environment where the rate of changes and the level of risks only increase, as the adaptive organisation. There are five general characteristics of the structure of **an adaptive organisation** (Fulmer 2000):

- Relative decentralisation
- High span of control
- Extensive use of temporary structures
- Powerful information system
- Constantly evolving structure

The main question, which should always be asked by the creator of an organisation, is – How could we promote a faster and more effective process of decision-making?

A Model for an Innovative IT Organisation

As defined above, when defining the strategy we must continually find answers to questions like:

- Who are our customers and in which segment of the market are we operating?
- What are the needs of our customers and how do we fulfil these needs?
- How can we be more successful than anyone else in satisfying the customer’s needs efficiently?

Originating from a sector’s development potential and the company’s know-how, the market segments

have to be defined according to target customers. Let's presume, that those segments could be:

- Health (the rearrangements taking place in this market segment and the new demands upon organisations regarding efficiency and quality levels) and
- Forestry (mostly the need to effectively administer the resources of state forests (planning, observation, logistics)).

Certainly, this definition cannot be final. When analysing the needs of the market and the opportunities for the company, the segments of the market must be redefined again and again and the customer must also be defined anew.

Methods for achieving a competitive advantage could be more general and suit different segments, and in this way remain stable. The operating strategy could be defined as follows:

We develop information systems to raise the efficiency of the work. Our activity is based on innovative solutions and collaboration with partners, and targeted mainly in the field of health and forestry.

The strategy, which is valued by the organisation, can be expressed using the following concepts: *innovation and alliance*.

The next step after defining *who* and *how* is to clearly formulate the competitive advantage compared with other companies in the same branch and to evaluate barriers for the entry of these competitors (how unique is the competitive advantage of the company).

Originating from the concept of *innovation*, in a more precisely defined strategy, the competitive advantage of a company in the field of healthcare and forestry involves software solutions and prototypes based on new innovative technologies and devices. Using the competence the segment has obtained along with innovative solutions, it is possible to build higher barriers to entry and thereby gain a unique competitive advantage.

Originating from the concept of *alliances*, a unique competitive advantage for the company could be a *quality certificate*. All companies on the market can develop partnership and collaboration; the competitive advantage is assured here by the

supply of a subcontracted service according to internationally recognised quality criteria.

"The company must first of all be capable of noticing the changes in its environment soon enough to respond to them before it is too late. Thereafter it must own a cultural readiness to judge the change and to react to it, and finally, it must have the necessary know-how and capabilities for competing in the environment formed after the change." (Markides 2000).

To support the constant development of strategy and the transformation of the organisation so that it is flexible and adjustable, the company must create an environment, which supports change – an *organisational culture, where the employees accept that change is inevitable* and hopefully even enjoy carrying out changes. The company must create an atmosphere, where the employees enjoy the process of learning and where there are possibilities to share both the experiences of success and setbacks. The positive relationship between employee satisfaction and growth also makes sense. *"Companies that are growing fast are beating out of the competition and gaining market share. Employees share this feeling of "winning""* (Doorley and Donovan 1999).

On the grounds of the determined strategy, the supporting values (innovation and alliances) and with the purpose of creating an organisational culture that supports change, the following *action program* can be developed:

- The development of contacts and a knowledge base to support participation in cooperative international projects;
- The creation of a project organisation with flexible teams (the rotation of team members who participate in different projects in different roles passing on experiences and skills from the same project to as many members of the organisation as possible, and the participation of each member of the organisation in different and various projects).

The creation of various working environments (the possibility of working at home – *home office*, open and changing office environments based on *wireless* connections – *open office*, working with a partner team – *partner office*);

- The creation of possibilities and motivation for the generation and collection of new ideas (a virtual "drawer of ideas" for the employees; regular brainstorming on differ-

ent levels of the organisation – occasionally including representatives of stakeholders – so the author of the idea can always participate in the realisation of his idea);

- The simultaneous commencement of several development projects, the creation of different prototypes and testing, collaboration with customers (the best competence of the branch) in development projects, the continuous evaluation and analysis of development projects;
- The conversion of human capital into capital for the organisation via a systematic collecting and saving of successful and unsuccessful experiences and the continual learning from them;
- The deployment of different collaborative and motivational systems in order to divide the successful results and risks between the company and employees (for example: co-operation with the top-specialists of the company based on partnership and possible premiums for the top-specialists).

- Creating the possibilities and motivation for the generation, analysis and protection of new ideas
- Creating contacts and a knowledge base in order to support participation in international cooperation projects.

Comparing the estimates of this group of experts with the average estimates in the IT sector some differences were founded (Figure 1. and Figure 2. (Source: Author of the article)). The priorities in regard to internal factors are almost diametrically opposed regarding the organisation’s development and exploitation of new technologies.

The company experts gave significant priority to actions connected to the enhancement of the organisation and management (reorganisation of the company was the bottom priority according to average estimates). The use of new technologies was estimated by the company experts as a lot less significant (this factor was given the highest priority in the average estimates of the sector).

One concrete organisation was chosen to test these ideas in practice. According to the experts in this organisation the most influential action was estimated as the *creation of an innovative environment* including:

- Starting development projects
- Exploiting new technologies

In regard to external factors there was a greater similarity between the estimates. There is a slight difference in regard to the priorities of the average where, unlike in the results of the study, the experts of the sample company gave higher priority to the achievement of facile financing than to actions assuring a competent workforce.

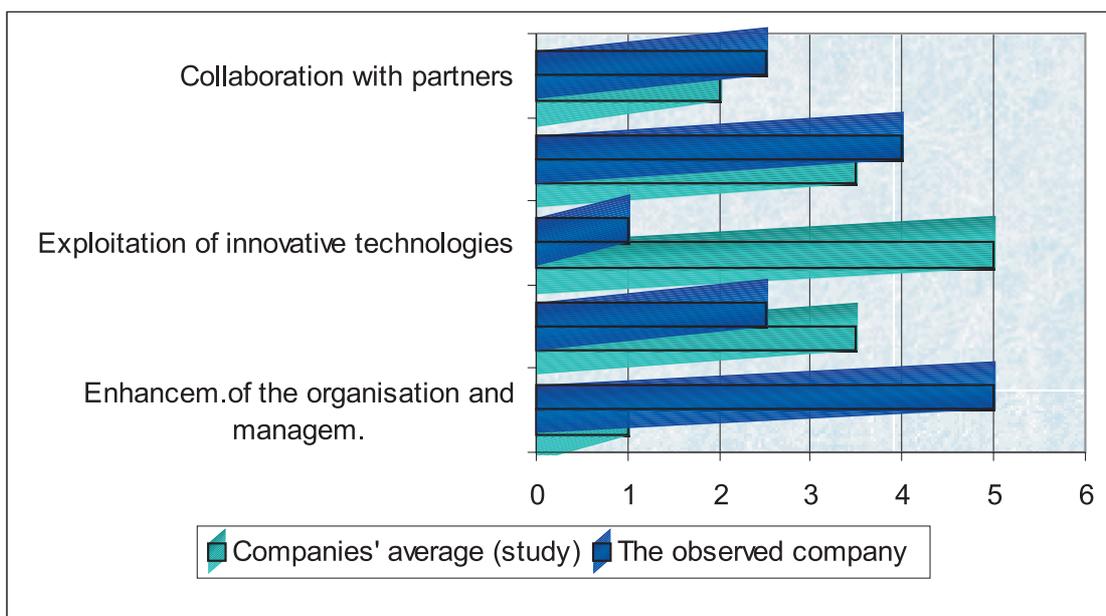


Figure 1. A list of activities prioritised according to how they support growth.

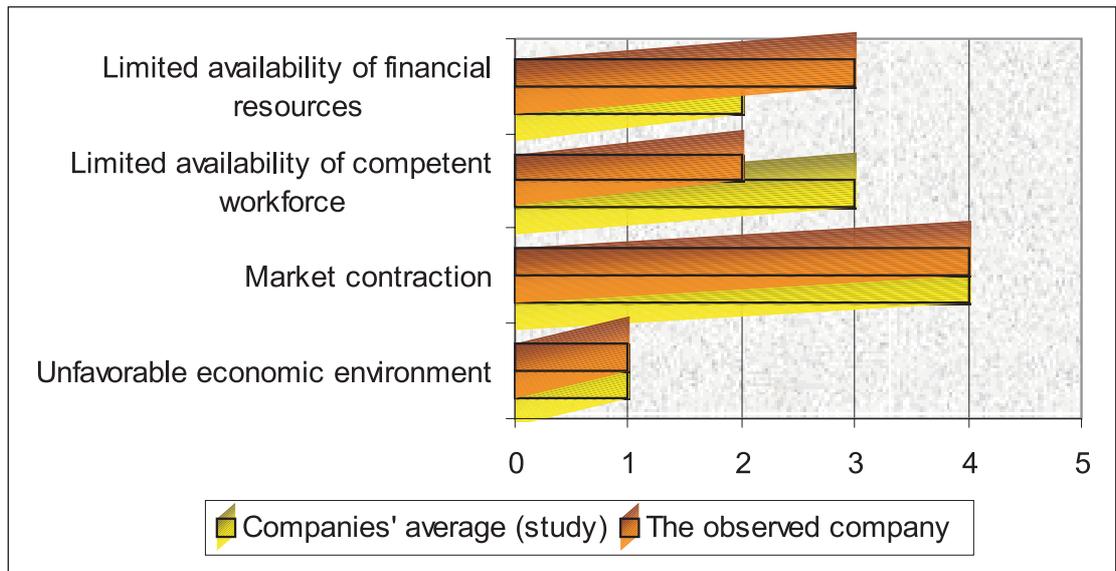


Figure 2. A list of activities prioritised according to how they prevent growth

In regard to concrete actions the highest priority was given to actions neutralising the influences of tight market rivalry (all members of the expert group placed this in first place):

- “Creating the market” using new products/ innovative solutions
- Large-scale coverage of customer needs (different solutions for the present customer)

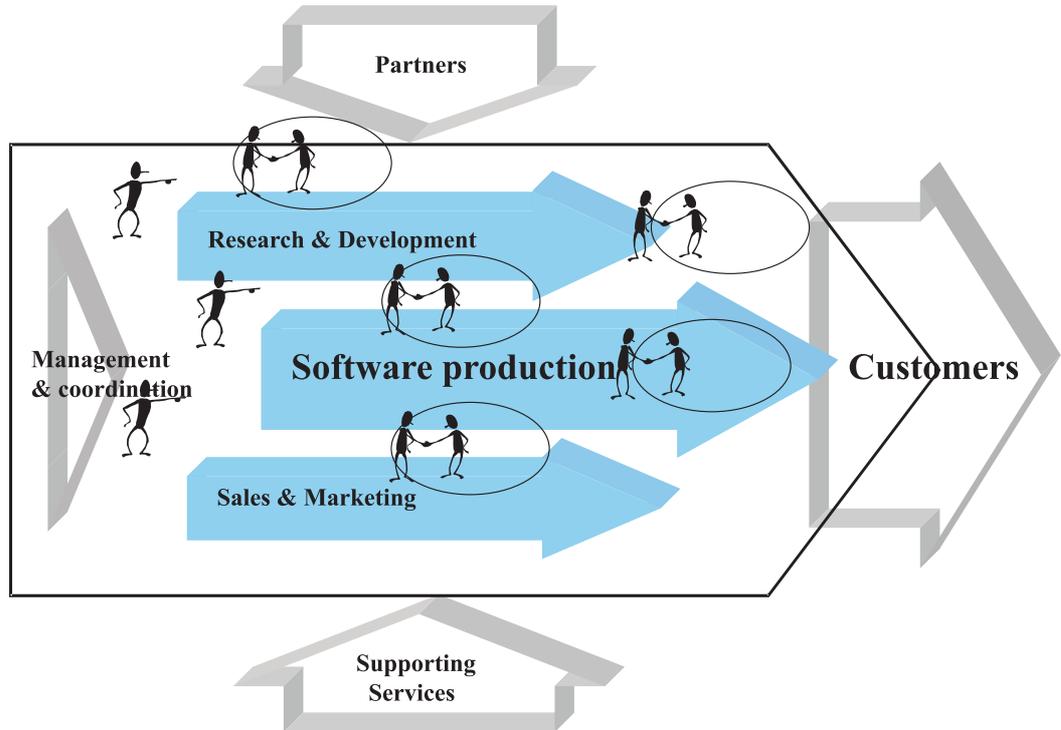


Figure 3. The chart of a process based organisation.

These were followed by actions connected to the establishment of an innovative environment:

- Creating an organisational culture of continuous analysis and retention of experience.
- Creating the possibilities and motivation for the generation and collecting of new ideas.
- Exploiting new technologies.

And finally those actions connected to collaboration with partners:

- Creating a network of collaboration partners.
- Contending for finances in the framework of different collaboration programs.

The most significant criterion, which should be followed by the reorganisation of the company, is the evaluation of planned actions – *how does this promote a faster and more effective decision-making process?*

A new model, which could be implemented in an innovative IT company, is the process-orientated “adaptive organisation” model (Figure 3. (Source: Author of the article)).

The organisation has been established on the basis of three main processes.

- Software production
- Research & Development
- Sales & Marketing

The supporting services (hardware sales and configuration, personnel employment, advertising etc.) are mainly outsourced. The processes are controlled by process owners, responsible for the total effectiveness of the process from inputs to outputs and all relations between processes. Knowledge accumulation and sharing is organised into knowledge domains (special areas in the Intranet), controlled also by the process owners. Users of knowledge are responsible for the codification and dispersion of knowledge. As they are the users of knowledge, they have a special interest in making sure it is available and up to date.

The specialists of the company are not subordinated hierarchically to fulfil a narrow function; on the contrary, they act in virtual teams in different roles, which guarantees a collecting and sharing of different experiences. They are also not attached to one specific process; on the contrary, they are

included in the teams according to the need for different competencies in a specific project. The partners (individuals and companies) are included in both the development and implementation process. The specialists of the company also participate in the partners projects. In order to include the best competence of the branch, the immediate co-operation of customers is practised. The effectiveness of the virtual teams is guaranteed by the creation of various working environments (the possibility to work at home – *home office*, an open and changing office environment based on wireless connections – *open office*, working with a partner team – *partner office*).

The most important feature of the teamwork is *empowerment* – both the responsibilities for the results and the ability to make decisions have been delegated to the teams. The duty of the management is to create a synergy in the knowledge base at the strategic level. The duty of the teams (mostly of those, who work closely with the customers) is to create and to improve the knowledge base with adequate information about the market and customers at the operational level.

One actual IT organisation that was about to embark upon reorganisation has started to implement this model. The organisation is a long way from its defined goals, but there are some results of this process already – some innovative products have been developed.

A wireless sales and ordering system manages client information and visit plans at point-of-sale, including:

- Sales processes in a PDA; printing invoices (CRM activities, credit control, sales order entry, sales from car stock, weekly/monthly plan fulfilment, sales campaigns)
- Monitoring field force activities
- Reporting

The system enables synchronisation and data transfer between the PDAs and the enterprise’s information systems (FIS, CRM, ERP, etc.) via a communication server (Figure 4).

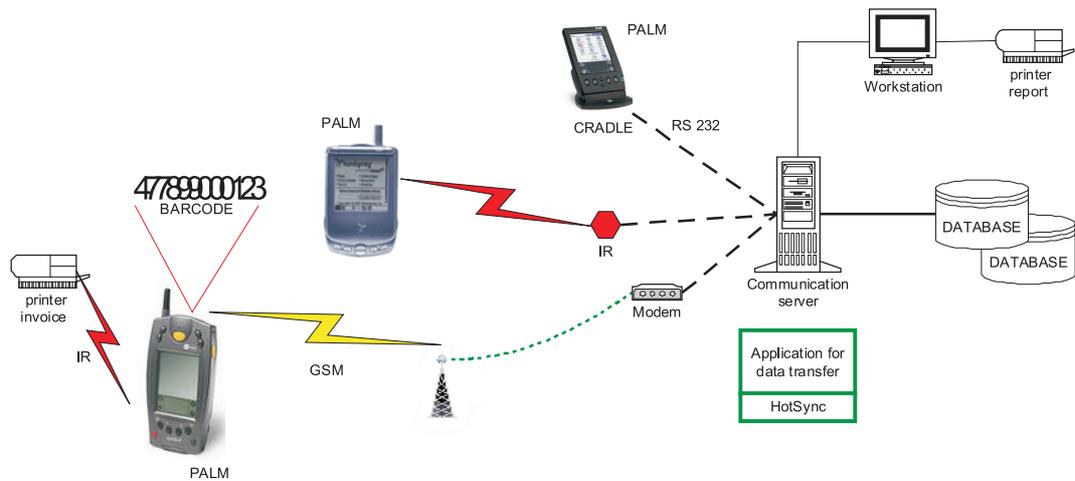


Figure 4.

A pocket medical notebook providing a patient's records and treatment schedule at the point-of-care (Figure 5).

- Registering medical procedures done by a nurse on time
- Preparing information for analysis
- Monitoring clinical force activities

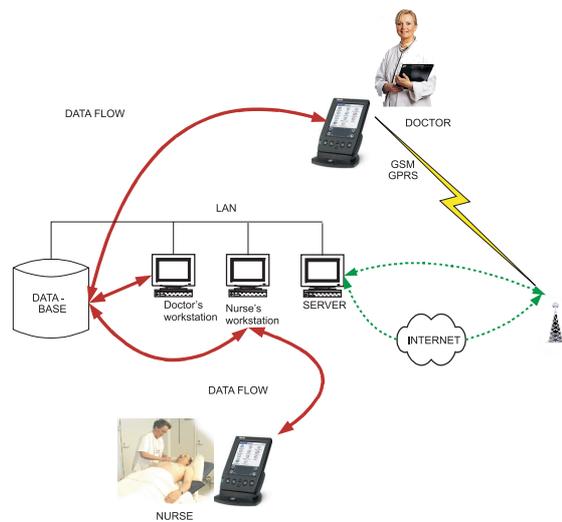


Figure 5.

The application consists of the following components:

- Tracking the treatment process in a PDA
 - Assigning and control of instructions to the nurse
 - Register and/or control of results of analysis
 - Keeping track of a patient's condition
 - Making notes and commentaries
- The clinical care process in a PDA
 - Planning nursing processes

To sum up - the model for an innovative and flexible company should contain three cornerstones.

- Strategy
- Commitment
- Capability

A suitable model that includes and connects those three components is the knowledge-based adaptive organisation model.

Any company implementing this model needs to adopt a balanced approach and work simultaneously on six core skills. These can be summed up as follows: the ability to **respond** swiftly to changes in the market, and at the same time **anticipate** future customer needs; **produce** products and services while at the same time **learning** from your experiences; develop the ability of your professionals to **create** knowledge while at the same time **building** a company that will last.

There are three stages involved in changing into a knowledge-based innovative and adaptive organisation.

1. The first stage is to become truly market driven. This is the kind of organisation, which listens carefully to its customers and market and is able to react quickly and effectively to changing market circumstances and behaviour.

2. In the second stage the company becomes a team-based process organisation; an organisation, which rests on competencies rather than on functions or hierarchies.
3. In the last stage the company becomes a continuous learning organisation.

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Priorities in the Development of Knowledge Management in a Changing Business Environment

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Abstract

In this paper the priorities and challenges in knowledge management are studied in the context of the changing business environment of Estonia. Links between the theory of knowledge management, organisational learning, innovative learning and the transfer of international management knowledge are discussed, and the overviews of two surveys are presented to identify differences between companies representing domestic and international owners and facing different strategic choices. The results of a third survey are used to explore fundamental assumptions and the development of knowledge management by comparing more and less organic organisations and the influence of the know-how focus versus the know-why focus on topical knowledge management problems and development priorities.

Key words: knowledge management, innovative learning, knowledge transfer, transition economy, and strategic choice.

Introduction

In the first decade of the 21st century, an important challenge for managers in transitional economies is to understand the relationships between international competitiveness and company core competencies, globalisation and European integration, organisational learning and the emerging knowledge management practices – as factors of a knowledge-based economy.

The development of new information and communication technology solutions in the Nordic countries has supported similar development in Estonia. At the beginning of 2002, 39% of 15-74 year-old Estonians were Internet users (Emor 2002). There were 543 mobile phone subscribers per thousand of the population in 2001 (Statistical Office of Estonia 2002, 34). From December 2002 permanent wireless Internet connections through combined WLAN and GPRS solutions are available practically all over the territory of Estonia.

As a result of privatisation and foreign investments throughout the 90's, companies from Nordic as well as other countries have influenced, through their subsidiaries, business and management practices in Estonia. Private business organisations as well as the public sector in Estonia, during the transition process, have been exposed to intensive international knowledge transfer opportunities and learning challenges. The objective of the present paper is to study the emerging practices and priorities of knowledge management and to link them to the agenda of strategic choices, international knowledge transfer and organisational learning. Differences in strategy-driven knowledge acquisition needs and the resulting knowledge management development priorities in Estonian companies representing domestic and international owners will be discussed in the paper. Differences between knowledge management challenges and development priorities in organic know-why or know-how driven organisations versus mechanical, industrial or bureaucratic organisations are explored.

Concepts for Analysing Knowledge Management and Organisational Learning Challenges

Understanding the company as a knowledge system and stressing the importance of knowledge for business development (Wikström and Normann 1994) has been an important point of departure for modern approaches to knowledge management. The need to align knowledge management projects and strategic business goals is a key challenge for implementing knowledge management concepts in advanced market economies (Davenport 1998; Tiwana 2000). Defining, assessing and re-defining core competencies are linked to business concept innovation and re-framing value chains as the main way of competing for the future (Hamel and Prahalad 1994; Hamel 2000; Normann 2001).

Mapping strategic knowledge has been studied in the domain of qualitative research by identifying mental models (Rughase 2002), entrepreneurial narratives (Porac et al. 2002) and group cognitive mapping of core competencies (Johnson and Johnson 2002). Mental models of managers are the basis for their interpretations of strategic alternatives. Mental models themselves may, however, change under the influence of receiving new information if personal agility and the organisational environment support such change. A cognitive research challenge is to explore links between the essential strategic choices as interpreted by decision makers in organisations, related competencies and knowledge gaps in order to understand how these factors shape knowledge management practices and development priorities.

Quantitative questionnaire-based surveys in inter-organisational studies are suitable for measuring such attributes of phenomena, which are understood in the same frame of reference by respondents. Knowledge management is however a relatively new concept. Presenting meaningful interpretations of its relationship to the strategy context, assessing existing knowledge management practices in organisations and identifying development priorities of knowledge management assumes an understanding the essence of knowledge management, available tools and best practices in the field.

Qualitative methods have strengths in descriptive and explorative research or where the context and

the respondent frame of reference are important (Marshall and Rossman 1995). Qualitative research enables one to get close to the object of the study in order to identify important variables, patterns and meaning structures for participants in order to investigate little understood phenomena (Remenyi et al. 1998, 107-113). MBA students, studying the knowledge management and intellectual capital course were chosen in our research as experts for reflecting the knowledge management practices and challenges of certain organisations, where they are employed as managers or specialists.

The relationship between tacit and explicit knowledge (Nonaka and Takeuchi 1995, 62-69) has been a central issue in the knowledge management discourse. The transition to a market economy resulted in a large number of new small and medium-sized enterprises in the trade and service sectors. In the first stage of development the business success of such enterprises was largely based on the tacit know-who knowledge enabling them to access suitable business partners, cheap supplies and to negotiate with state and municipal authorities. Extensive codifying of their organisational knowledge would have been even dangerous, especially if the entrepreneur partly operated in the shadow economy.

Today economies of scale have become an important success factor in this sector. Business growth and corporate mergers push key personnel in companies to transform their business knowledge into an explicit form. They have to devote their teams to codifying the division of labour, decision-making rules and other elements of organisational knowledge. One objective of our research of knowledge management assumptions and tools is to get an insight into the extent that socialisation, externalisation, internalisation and the combination of knowledge are linked to knowledge management priorities and are supported by relevant tools in different types of Estonian companies.

Knowledge management and intellectual capital concepts stress the relationship between human capital development and organisational learning (Sveiby 1997; Roos et al. 1997). Organisational learning has in recent decades been an important agenda for theory development (Prange 1999). The classical distinction of single- and double-loop learning by Argyris and Schön (1978) linked single-loop learning to incremental change, where

continuous adjustments of organisational practices are made on the basis of rapid feedback. Double-loop learning is associated with radical changes involving the governing variables of the system. The third type of learning, deuterio learning, challenges the basic assumptions of the learning process that have been used so far for single-loop and double-loop learning (Morgan 1997). Although managerial discourse, where double-loop learning is portrayed as superior to single-loop learning, has been criticised by organisational learning theorists (Easterby-Smith and Araujo 1999, 3-4), the transformation of economic systems cannot usually be managed as a continuous adjustment and inevitably includes radical changes.

The innovative learning concept has already been used in a global context in a report to the Club of Rome in 1982. Innovative learning was distinguished from learning by shock, which destroys the equilibrium of the social system, and normative learning, which reproduces the *status quo*. Innovative learning is based on two processes – anticipation of future changes and participation in problem solving based on new information (Botkin et al. 1982). Innovative learning as a model of active adaptation to radical changes is not only limited to describing individual learning behaviour, but can also be applied to small groups, organisations and social institutions.

Social and economic transition provides many examples of learning by shock that result from shock therapy reform steps. Knowledge management tools support anticipation and participation inside an organisation or in a wider learning community. One could ask, however, to what extent and at what stages of the transition process do systematic knowledge management initiatives gain a profound social basis in transition economies. Is their potential limited to organisational development of individual businesses or could they influence the whole society?

The concept of the learning organisation (Senge 1990; Senge et al. 1999; Pedler et al. 1991) can be adapted to change management in different organisational environments. The aim of increasing the capability of an organisation to learn by systematically processing new information about a changing environment and by critically reflecting upon past experience is especially relevant to business organisations in transition economies. These organisa-

tions have to deal with the challenge of radical and partly unpredictable changes in their immediate competitive environment and monitor changes in the larger socio-economic environment.

The organisational learning approach has been used in the context of economic transition for studying productivity changes in CIS companies (Liuhto 2000). Earlier studies of managers in Estonian companies has pointed out market-driven changes in strategy, organisational culture, leadership style and the mission of their organisations that can be interpreted as the increasing role of radical transformation factors in 90's (Alas 2002, 20-23; Alas and Sharifi 2002, 313-331). Further studies are needed, however, in order to understand the real influence of these changes on organisational learning practices and on shaping mental models of managers that could be useful for facing the new challenges of European integration and could support sustainable competitiveness in a more mature market economy.

The first decades of the 21st century may bring more creative transformational challenges than the past decade of adapting to a market economy for many Estonian business organisations. Developing new products and services that are internationally competitive could turn the learning organisation and knowledge management into more practical concepts than in the last decade of the 20th century, when filling some empty market niches by importing foreign products or acting as a cheap subcontractor dependent on the product ideas of a foreign partner were, for many Estonian entrepreneurs, profitable business models.

The historical framework of economic transition in Estonia and the future challenge of internationalisation are briefly discussed in order to explain the context for studying the future priorities of developing knowledge management and its links to organisational learning.

Organisational Learning and Knowledge Management Opportunities within the Context of Economic Transition

Knowledge sharing readiness and an openness to external impulses are seen as crucial preconditions for knowledge management practices using concepts of knowledge management (Wikström and Normann 1994; Nonaka and Takeuchi 1995;

Davenport and Prusak 1998; Quintas 2002). It is an especially important historical challenge for countries that were part of the Soviet command economy for more than 50 years.

The Finnish mass media of the 70's and 80's was, for many Estonians, a special factor that enabled some monitoring of the opportunities, trends and problems in a market economy and transferred some basic knowledge for understanding market-based business thinking. It was quite easy and popular for Estonians in the northern part of the country to follow Finnish TV and radio broadcasts as part of their everyday activities. Decades of such practice have increased Finnish language skills in Estonia. A Finnish employer recruiting an Estonian work force may find that in the northern part of the country it is quite easy to recruit employees who have some command of the Finnish language. It is not so easy in Tartu or other regions of southern Estonia. Finnish TV broadcasts did not cover these more distant regions. One could also find, during the years of Soviet stagnation, indeed even in Central Russia, some active listeners of the Voice of America or the BBC who were able to develop a competence for understanding the logic of a market economy.

Following and openly discussing at people's places of work such "enemy propaganda" could not, however, have been such a widespread practice there as following and discussing Finnish TV and radio programs had been in Estonian work places. Soviet authorities did not consider Finnish TV a channel of open anti-Soviet propaganda although some Estonian Communist Party functionaries at the beginning of the 80s started to blame Finnish TV for the low efficiency of their own ideological work.

American management concepts were introduced into Estonian higher education many years before *perestroika* and *glasnost*. Ideas of management consulting and organisation development already gained some popularity in Estonia in 70's. The agenda of consulting services was indeed limited by the realities of the command economy and mainly focused on fine-tuning the division of labour and on applying management psychology inside enterprises.

An important initiative in the context of innovative learning was the concept of Estonian economic

autonomy (IME) first presented in September 1987. Although this concept was never fully implemented in the Soviet system, public discussion of its principles and action plans was a good learning exercise for a large number of people, preparing them for the real vision of independent Estonia and for thinking about the international competitiveness of its economy.

An environment of supporting knowledge and a positive orientation towards a market economy was already created in Estonia before *perestroika* started to gain momentum. The disintegration of the command economy and introduction of market economy logic was not learning by shock for many decision-makers in enterprises and other economic institutions. Unlearning the dogmas and rules of the command economy and accepting the basic "rules of the game" of the emerging market economy was easier for them than similar processes in such regions of the former Soviet Union which were less exposed to foreign influence and lacked a national identity linked to the historical market economy experience.

There were elements of anticipation and participation that enabled innovative learning at the beginning of the transition process although Estonian management practitioners were not able to predict the pace and specific forms that transition towards the market economy would take. In the discourse between management practitioners, trainers and consultants, essential mental models supporting company-level strategic decision making (SWOT, defining business ideas, Boston consulting group matrix etc.) were explained, but these models were in reality not internalised by management practitioners as business thinking tools so long as the real market economy context was missing.

The importance and role of knowledge management for business organisations in transition economies should be analysed, taking into consideration their specific history, development logic, present competitive position and future challenges. There are cases where privatisation and restructuring of former state-owned industrial companies, especially in military and semi-military sectors, has resulted in downsizing product development activities and switching over to subcontracting for foreign customers. Technology and product development know-how, which represented valuable knowledge for the former closed Soviet econ-

omy, has at least partly become obsolete in such enterprises, and managing knowledge for communicating with foreign clients and monitoring subcontracting orders has become the top priority.

As a result of the privatisation process many large and medium-sized companies have become subsidiaries of foreign companies. Local managers of such companies have to position themselves in knowledge-sharing networks comprised of international corporations and to prove to head-office what value their existing core competence could represent for the corporation. Our training and consulting practice has given us the opportunity to observe and analyse different ways of transferring international business knowledge to companies in a transition economy.

Missionary style propaganda from the free market economy, attempts to transfer the corporate culture of foreign headquarters and global branded management concepts representing the management guru and management fashion phenomenon (Jackson 2001). The real time support system for managing specific stages of economic transition and organisational change processes has to deal with monitoring new management ideas on the international scale, assessing and adapting these ideas to the changing practices of organisations in transition economies (Elenurm 1993). An international learning community applying knowledge management tools could create the knowledge base for this system.

Entrepreneurs and local owners of growing businesses face an increasingly competitive environment and have to decide whether they have the finances and knowledge resources for developing their business on an international scale or if an international strategic partnership is a better alternative for improving the resource base of their company. Innovative re-defining of business concepts could be the key driver of knowledge management for some advanced companies, but many others evidently conclude after using knowledge mapping (Tiwana 2000, 155) that they should prefer a conservative knowledge strategy (Zack 1999). Such a choice is based on the assumption that cheap labour and other cheap production factors will enable them to continue as capable competitors despite the globalisation process.

Analysis of strategic opportunities and threats in the future business environment and monitoring changes in the global business environment will provide essential knowledge for such strategic choices. We use a survey for identifying strategic choices and needs for re-defining business ideas, which are driven by opportunities and threats in the international business environment, in order to assess the priorities of knowledge management for aligning business strategies with the changing environment facing Estonian companies.

During the period 1993-2000, as the managing director and main owner of the training company EM-International, I had to closely monitor new trends and competitors in the Estonian training market and to analyse client needs and their knowledge gaps by using regular training needs and after-training feedback surveys.

The target groups easily understood training needs related to the changing business legislation and other well-structured fields of knowledge, but some more complex training needs were not perceived by managers at a time when knowledge gaps in these areas had already started to influence management practice. Anticipatory learning to prevent knowledge gaps was not supported by critical self-analysis and learning communities that could facilitate attitude change. That limited the chances, in many companies, for innovative learning and led to managerial mistakes and learning by shock.

The changing focus of training needs is described in Table 1. It is indeed a simplified interpretation of the diversified training market dynamics in order to point out examples of the essential training agenda related to different phases of the transition process. The table differentiates perceived training needs and unperceived training needs which resulted in knowledge gaps. Unperceived needs refer to training agenda that were actually relevant for solving crucial problems experienced by managers and entrepreneurs but were not considered a high priority by the majority of potential training customers at that stage of transition (see Table 1).

The first stage (1988-1991) was in a sense "a golden age" for new management training programmes. Potential clients were interested in a large variety of new training topics. Corporate governance is classified in Table 1 as an unperceived training need between 1992-1993. This topic, however,

Table 1. Dominant training needs during the transition process

| Transition stage | Perceived training needs | Training needs that were not perceived – knowledge gaps |
|--|---|--|
| Disintegration of the command economy (1988-1991) | ABC of the market economy, corporate finances, Soviet regulations of foreign trade and joint ventures, new legal opportunities for entrepreneurship | Entrepreneurship as a life style, team building |
| Introduction of Estonian National currency, beginning of macro-stabilization, first banking crises (1992-1993) | International business contacts, foreign experience of entrepreneurship, sales skills, foreign languages | Risk management, cost analysis, business plan, sub-contracting and logistics, corporate governance, business ethics |
| Large-scale privatisation, new patterns of trade with West and East, development of stock market and other market economy institutions (1993-1997) | Marketing as function, changing business legislation and accounting rules, contract law, concerns and corporate governance, foreign languages | Business ethics, business networks, portfolio management, future scenarios, strategy for becoming international |
| Adaptation to crises, preparation for EU accession (1998 - ...) | International business visionaries, leadership, e-business, balanced scorecard, critical chain, collecting debts, ... project management | Strategic alliances, influence of EU accession on competitive environment in different sectors, creativity and new product development |

moved to the perceived training needs category during the second half of the 90s. If the critical mass of entrepreneurs and board members had identified corporate governance and risk management as crucial competence areas earlier, this might have resulted in better company restructuring, investment risk and crises management decisions between 1997-1999.

A Survey for Identifying Strategic Choices Driven by Future Opportunities and Threats in the International Business Environment

In 2001 we conducted a survey to identify knowledge gaps related to strategic choices, opportunities and threats, which would be caused during the next 10 years by changes in the international business environment. Structured essays by 66 distance students and 53 evening students were used for this purpose. All trainees were employed in companies under analysis and 40% of them had managerial jobs.

Thirty-five percent of respondents can be identified as employees of partly or completely foreign-owned companies. Students representing foreign-owned companies demonstrated a relatively strong ability to link global threats (instability of energy prices, financial and currency markets) to trends influencing Estonian macro-economic and competitive environments (introduction of EU environment regulations, dynamics of labour costs, use of Internet, new foreign investments). Representatives of companies owned by Estonian capital seemed to be less used to operating with multi-factor mental models for systematic monitoring and linking

global events to the business prospects of their employers.

Representatives of companies based on Estonian capital stressed monitoring EU-related legislation, new target markets and the actions of international competitors as a critical competence area. They were also looking for the skills to build a positive international image for their enterprise. Gaps in international business skills were identified as an elementary question for some companies (incl. "How to start selling abroad?"). Others stressed a more advanced organisational learning agenda – understanding new trends in international logistic systems and information technology, and movements in the field of quality systems from ISO to TQM. In the same way as in our earlier survey of 94 Estonian exporting companies (Elenurm, 2001) strategic issues of export development were mainly considered to be critical competence areas by representatives of larger enterprises that had already accumulated practical experience with export operations.

This can be conceptualised as the changing priorities of three interrelated components of knowledge critical to internationalisation – internationalisation knowledge, foreign business knowledge and foreign institutional knowledge (Eriksson et al. 1997; Blomstermo et al 2001). SME-s representing the sub-contracting type of export operations, in the first stage, focus on the lack of institutional knowledge highlighted by the legal aspects and customs requirements of foreign trade. Only after accumulating some practical export experience they start to understand the need to conduct sys-

tematic market research in order to broaden their business knowledge about existing and potential target markets.

Uncritical and mechanical implementation of EU regulations and a lack of knowledge for predicting the impact of this harmonisation process on the international competitiveness of Estonian companies was seen as a potential problem by several respondents. Respondents from companies owned by Estonian capital presented general statements about new and large European Union target markets, but more specific entrance strategies were linked mainly to Latvia and Lithuania. Targeting Baltic countries for investing and starting operations abroad was a more popular strategic issue than going international by using opportunities provided by EU membership.

Strategic thinking among owners and managers in Estonian companies has not developed to a level where they could make full use of the larger European economic space. This conclusion corresponds to results from the survey by Kari Liuhto and Jumpponen (2001) on internationalisation practices and the priorities of the largest Baltic corporations. Monitoring the international business environment is an important knowledge management challenge for companies in a small open transition economy.

An Assessment of Knowledge Management Assumptions, Tools and Development Priorities in 2001 and 2002

Knowledge management issues have received some attention in the Estonian business community in recent years. Knowledge management principles and tools are; however, not so well known that a survey posted to a large representative sample of Estonian companies could produce meaningful insight into emerging knowledge management practices. In autumn 2001 we arranged an assessment of knowledge management assumptions, tools and development priorities in 31 Estonian companies. The assessment was conducted by using a learning by doing assignment for master students employed in these companies as managers or specialists. After studying basic knowledge management concepts and tools during their course they had to give their expert assessment by specifying 10 high priority preconditions for efficient knowledge management in their organisations. A checklist of knowledge management assumptions

and related tools compiled by Tarmo Toiger, from IBM Estonia, was used in the assessment process but experts were free to modify the list by adding additional assumptions and by redefining elements of the checklist.

After creating the priority list of knowledge management preconditions, experts assessed to what extent these preconditions had already been created in their organisations, described the content of the development work that had been conducted for creating knowledge management preconditions so far and pointed out knowledge management development priorities for the next two years. Some of the experts were able to specify relevant objectives and tools in detail as well as present a specific vision for developing knowledge management.

A similar research design was used in autumn 2002. In this survey 52 companies were analysed using the same basic checklist of knowledge management assumptions as in 2001. There was an additional sub-task in the assignment. Master students had to position their organisation in the matrix that combined two dimensions: mechanic versus organic organisations and product versus service-focused organisations (Nurmi 2000, 67). In the knowledge management context the importance of know-how was pointed out as the crucial feature of organic product-focused organisations and managing knowledge about changing client needs, the know-why, was described as the main feature of organic service-focused organisations.

The experts had to decide if their organisation could be classified as a mechanic product-focused industrial organisation, as a mechanic service-focused bureaucratic organisation, as an organic service oriented know-why organisation or as an organic product-focused know-how organisation. They were asked to present their vision about possible re-positioning of their organisation from one field of the matrix to another and present the reasons behind it. It was also possible to prove that their organisation combines features related to different fields of the matrix. The matrix was introduced as a tool for targeting the knowledge management development efforts.

Survey samples do not represent average business organisations in Estonia. Companies engaged in foreign trade and subsidiaries of foreign companies are over represented. Thirteen of the enterprises in

the autumn 2001 sample were foreign-owned. The MBA students as experts could have been biased towards presenting the development of their company in a positive light. In practice most of them were, however, focused on problems in existing knowledge management practises. The priority list of knowledge management assumptions that received the highest average importance rankings from experts is presented in Table 2.

without an overly formal approach to knowledge codification. This is also supported by a general high level of Internet penetration, development of e-state services and a readiness for virtual communication in Estonia. Growing SME-s, however, face the challenge of applying the SECI model (Nonaka 1998) for matching their informal practices with more sophisticated information technology support (Tiwana 2000, 238).

Table 2. High priority assumptions for efficient knowledge management

| Assumptions for efficient knowledge management | Priority rank (importance) in 2001 | Priority rank (importance) in 2002 |
|--|---|--|
| Free circulation of information. Product and client information easily accessible. | I | II |
| Promoting information sharing between colleagues, linked to bonus schemes | II | III |
| Virtual databases and colleagues are more valuable sources of information than paper documents | III | IV |
| The integration of the data bases of headquarters, suppliers and business partners | IV (II – in subsidiaries of foreign companies) | V |
| Trust between employees as a basis for knowledge sharing | V | I (broader interpretations than in 2001) |

The autumn 2001 survey indicated that subsidiaries of trans-national companies in Estonia have relatively good technological bases for developing knowledge management practices. The integration of locally used knowledge sharing tools in Estonian subsidiaries with data and knowledge bases from their international headquarters, suppliers and customers is, however, in many cases low. That is perceived by the local Estonian staff in these companies as a high priority challenge in knowledge management development.

Small and medium-sized companies owned by local entrepreneurs often miss full-text search and data mining tools, virtual team rooms and other advanced information technology applications. They are, however, sometimes able to compensate for this by developing an organisational culture and informal communication practices which enable knowledge sharing and organisational learning.

Knowledge sharing at the organisation level is basically the same as at the team level due to the limited number of employees and good informal relations. Face-to-face communication combined with file sharing and intensive e-mail traffic in simple computer networks is sufficient for ensuring adequate socialisation and tacit knowledge. Some externalisation of knowledge is also attained

The five highest-ranking knowledge management assumptions in 2001 and 2002 remained the same, although their mutual ranking order changed. In 2002 trust between employees received the highest rank and the experts added additional interpretations reflecting different aspects of this knowledge management assumption to the basic checklist. We are not interpreting the differences between 2001 and 2002 data as reflections of trends of change. The organisations that were involved in the assessment were different. Following the logic of the qualitative research, we try to reflect differences in patterns of knowledge management assumptions and knowledge management development agenda depending on how experts related their organisation to mechanic versus organic and product-focused versus service-focused organisation types.

Among 52 organisations, five experts identified their organisation as mechanic and product-focused and one as a combination of mechanic and product-focused and bureaucratic organisation. In this group trust between employees and the free circulation of information were pointed out as important knowledge management assumptions. Moving from paper documents to virtual databases was seen as the third important priority. Links between knowledge management, defining future core competencies in the organisation, monitoring

business processes, quality management and cost control were stressed in knowledge management development visions. The level achieved in creating knowledge management assumptions in practice was most often critically assessed in the field of free circulation of information.

Six organisations combined features of bureaucratic and know-why organisations and two organisations were positioned as bureaucratic (service + mechanic) organisations. In this group there were also some state offices. As a matter of fact the majority of organisations in this group already had information technology solutions that could support knowledge management. In state offices one of the development challenges was the integration of IT-solutions used in different ministries. The problem of information overload was pointed out. The free circulation of information was also considered to be the most important knowledge management assumption in these organisations, but it was linked to more clear procedures, responsibility of information providers, information search tools and to the analysis of existing information flows. Critical assessments of the existing level of knowledge management assumptions were related to different assumptions in different organisations belonging to this group.

The group of eight companies combining features of organic product-focused organisations and organic service-focused organisations involved Estonian subsidiaries of some international IT-companies, but also small consulting companies and organisations involved in import of sophisticated technological products, tourism and medical services. Although the level of experience and available tools of knowledge management are quite different in these organisations, one could find a common denominator.

How can one broaden the expertise of employees representing different functional roles – the serviceman should not be limited to repairing and the salesman should not only sell. Members of this group stated as a result of group discussion that information technology is necessary, but not sufficient for creating the essential knowledge management assumptions. Three high-ranking knowledge management assumptions in this group of companies included the free circulation of information, virtual databases and colleagues as more valuable sources of information than paper documents, and

trust between employees as a basis for knowledge sharing. Several experts in this group pointed out full-text search and data mining tools for integrating different databases as the missing knowledge management assumptions in practice.

Twenty companies were positioned as combining features of organic and service-focused organisations (know-why organisations). Links between customer relationship marketing and knowledge management were stressed in this group. A common development challenge was collecting practical knowledge about interactions with clients for the knowledge base. Improving possibilities for clients to use existing databases and solving related compatibility problems were seen as part of the knowledge management development agenda. Larger organisations pointed out the need to “link existing islands of knowledge-sharing”.

E-learning was also seen as a field of knowledge management development in this group. The ranking list of knowledge management assumptions in this group of organisations started from the readiness of employees to share their expert information with others, followed by trust between employees as a basis for knowledge sharing and free circulation of information. Attitude change in the sales staff and other employees supporting client relations was linked to such development challenges as motivated teamwork and training systems but also to improving the quality of databases, information search and filtering tools. The vision of the future role of the chief knowledge officer was also presented by some organisations in this group. Access to different sources of information, including central corporate knowledge bases in international headquarters, and institutionalising knowledge sharing practices on a daily basis were ranked as the weakest knowledge management assumptions in some organisations belonging to this group.

Nine organisations were positioned by experts as organic product-focused know-how organisations. Although the focus on matching the internal know-how and knowledge exchange concerning client needs was the common feature for this group, the knowledge management development agenda appeared to be quite similar to know-why organisations. It seems that organisations represented in this group were not involved in generating new products or technologies through intramural research and develop-

ment. They were mainly adapting and diffusing new know-how that had been created elsewhere. Project management, risk analysis and reflecting experience and mistakes in different process stages were pointed out as fields for applying knowledge management methods. Knowledge management development needs were also related to improving transactions in the value chain.

The readiness of employees to share their expert information with others, followed by trust between employees as a basis for knowledge sharing and recognising the knowledge of employees via bonus schemes were three high-ranking knowledge management assumptions in this group of organisations. Access to different sources of information, free circulation of information and virtual databases were pointed out as missing knowledge management assumptions. There were also critical assessments of the situation in the field of full-text search and data mining tools and institutionalising knowledge sharing practices on a daily basis.

Virtual project team rooms and electronic cards or "yellow pages" describing education, competencies and project experience among employees were assessed as missing knowledge management assumptions in many organisation belonging to different groups. These assumptions were however, not ranked among the five most important in any group. Many experts explained that their organisations are still too small to generate value through such tools.

Creating virtual rooms for project teams and electronic employee competence profiles were described among future knowledge management development trends. Visions of these trends also often stressed the integration of different databases inside the organisation, applying joint catalogues and full text search tools.

The ability to use knowledge management tools for organising the activities of international project teams is an important challenge for managers and experts in business organisations under transformation. This will influence their chances of becoming a competence centre in a large transnational company or of taking an active role in international knowledge-sharing networks among independent companies.

Recommendations for Developing Knowledge Management Practices

Survey results indicate the need to apply the diagnostic approach in order to understand the specific context for knowledge management development efforts. The knowledge management development team should identify if it is realistic to treat the organisation as an organic one, where the trust between employees, free circulation of information and other basic knowledge management assumptions are sufficient for creating a real competitive advantage by investing in the knowledge management infrastructure.

In the transition economy, the historical background of processes of change which have influenced the organisation and the present impact of the service-focus are important for identifying driving and inhibiting factors of knowledge management initiatives. The study of innovation in Estonian enterprises 1998-2000 that was based on the sample of 3 490 enterprises with more than 10 employees and 777 enterprises with 2-9 employees indicated relatively advanced innovation patterns in the Estonian service sector in general and better developed cooperation strategies of service companies compared to industrial enterprises (Kurik et al. 2002, 32-33).

At present the readiness of service companies combining product and process innovations to develop and exploit advanced knowledge management solutions in cooperation with their clients could be better than the same readiness among product-focused know-how organisations engaged in new product development efforts. Only 2% of Estonian enterprises use over 4% from their turnover for research and development activities (Kurik et al. 2002, 39). If R&D activities, including intramural R&D, become more important as a part of the business strategy, the special knowledge management needs of know-how organisations will deserve more attention in the Estonian innovation policy.

Business organisations and entrepreneurial managers in transition economies have to strengthen their organisational learning skills in order to compensate for the diminishing advantage of low labour and other input costs, with a more sustainable knowledge-based competitive advantage in the wider European or even in global context. The management training focus is to build an awareness

of the strategic choices resulting from globalisation and European integration and to develop skills for monitoring international business trends. This is a prerequisite for strategic targeting of knowledge management development efforts.

Growing SME-s in transition economies need guidance on how to use their limited resources to choose and apply the appropriate knowledge management tools to link them to wider knowledge networks and international learning communities. E-learning, including WebCT virtual forums, is one method for developing learning community orientation and related skills (Elenurm 2002). This will prepare decision-makers for applying virtual-knowledge sharing tools in their organisations. Knowledge management development should be strategically focused and has to be based on the common understanding of emerging strategic choice situations, and on the present and future core competencies of the organisation.

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Opportunities and Challenges in Managing the Process of Knowledge Sharing in Different Learning Environments

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Introduction

In many countries distance learning schemes became established parts of the education system several decades before the Internet started its booming growth and the knowledge management concept gained its present popularity. Contemporary distance learning practices are, however, largely based on similar information technology solutions to knowledge management systems. The learning organisation and organisational learning approaches advocate an integration of learning processes across the levels of individual, group, organisational and intra-organisational learning communities. Understanding learning as a life-long process, that is not limited to schools and classrooms but that should penetrate all development activities in organisations and communities, creates new opportunities for applying distance management. It also assumes an understanding of the potential of distance learning as a knowledge management development tool.

As the departure point for our article we discuss the role of knowledge sharing in knowledge management practices and specify how distance learning can contribute to the knowledge sharing processes and competencies. We try to understand the role of different learning environments for promoting knowledge sharing. The experience with distance learning in the Estonian banking system since 1995 is analysed in order to identify factors supporting and hindering the efficiency of distance learning.

The results of a survey among master studies students participating in a knowledge management course at the Estonian Business School are used for assessing their attitudes and priorities concerning distance-learning opportunities. The same survey was used for analysing the application of the WebCT virtual learning environment as a distance learning and knowledge-sharing tool. By comparing two pieces of homework, one of which was presented and mutually commented upon by students through the WebCT virtual forum, and ranking the factors that lead to the educative impact of homework based on virtual knowledge-sharing, served as the bases for developing a synergy of distance learning and knowledge-sharing applications in the classroom. The survey results are also compared with information about the main factors leading to positive results in the field of distance learning from the training practices of the banking sector.

Knowledge Sharing and Distance Learning in the Knowledge Management Context

Knowledge management has been defined as any process or practice of creating, acquiring, capturing, sharing and using knowledge, whenever it resides, to enhance learning and performance in organisations (Scarbrough et al. 1999). Knowledge management is focused on creating and retaining greater value from core business competencies (Hamel and Prahalad 1994; Klasson 1999) and on mapping strategically important knowledge (Huff and Jenkins 2002). Knowledge management is

based on the systematic process of finding, selecting, organising, distilling and presenting information in a way that improves the core competence of an organisation. Knowledge management facilitates organisational learning. Organisational learning occurs through shared insights, knowledge and mental models and builds on past knowledge and experience (Dixon 1994). The concept of the learning organisation during the last decade has promoted disciplines of personal mastery, mental models, shared vision, team learning and system thinking (Senge 1990; 2001), and explained the link between continuously transforming an organisation and facilitating the learning of all its members (Pedler et al. 1991). Significant overlap and correlation has been found between knowledge-based companies and the learning organisation approaches (Skyrme and Amidon 2002).

A learning organisation is an organisation skilled at creating, acquiring and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights (Garvin 1993). In order to link individual training and organisation-level learning, members of the organisation have to define their training objectives using the core competencies of the whole organisation as their terms of reference.

The efficiency of the organisational learning process depends on the free circulation of information, the use of the accumulated competence of colleagues, reflection upon past experience (lessons learned) and re-use of knowledge that has been validated in earlier projects and other practices, and joint efforts to monitor new trends and to assess new ideas for changing the organisation. These factors belong to the knowledge management agenda. Knowledge management initiatives also support systematic monitoring of the competitive environment, emerging technological trends and best practices of other companies, and knowledge sharing with clients in order to make the right choices for product and service development.

Without developing knowledge management, the learning organisation would miss its supporting processes and infrastructure. At the same time we have to understand the role of learning as an essential prerequisite of efficient knowledge management practices. Knowledge management tools such as knowledge bases, searching and indexing tools, Intranet, GroupWare and other collaborative

tools assume basic computer and software user skills. Knowledge-sharing competence is however, not limited to technical skills. It has strong social, organisational and personality-related dimensions.

Knowledge management concepts stress the conversion of employees' tacit knowledge to explicit knowledge (Nonaka and Takeuchi 1995), the design of an infrastructure for knowledge management systems (Tiwana 1999), the inclusion of knowledge bases, the use of data mining and other information technology applications for enabling rapid access and re-use of relevant knowledge and the development of organisational culture (Sveiby 1997) and internal markets (Davenport and Prusak 1998) that support the sharing of knowledge between members of the organisation.

Knowledge management initiatives are not limited by the boundaries of the formal organisation. Most formal organisations consist of overlapping communities of practice (Seely and Duguid 2002, 23-26) trying to create new know-how out of their interrelated activities and joint problem solving efforts. Learning communities can also represent different organisations if their members are integrated by common professional or learning practices and have enough interest, trust, knowledge-sharing competence and suitable communication tools for sharing best practices and new ideas. Creating the learning community, establishing ground rules for online communication, facilitating virtual discussions and encouraging social interaction among online learners are important tasks for the online tutor (Duggleby 2000, 127-130).

In the present article we will investigate the opportunities offered by different learning environments for developing knowledge-sharing competence and for practising some essential knowledge-sharing skills such as:

- Presenting new information and ideas in an organised and meaningful way;
- Relating it to the context other members in the learning community work within;
- Screening, assessing and connecting various pieces of information received from different sources in order to convert them to the new knowledge that is linked to one's practical experience;
- Using existing knowledge to prepare for future actions.

Developing Knowledge Sharing Practices in Different Learning Environments

Classical academic lectures do not assume multidirectional knowledge sharing. The main knowledge flow is from the lecturer to the listeners. The role of questions from the audience is to clarify concepts and confirm if the message of the lecturer was understood in the right way. In the field of business studies pure academic lectures are quite rare. Many lecturers conduct lectures that include the element of conversation with the audience. The lecturer might present a practical example or a rhetorical question and ask the audience to respond. Such interaction brings some reflection upon how theory works in practice if the listeners representing relevant practical experience would like to engage in conversation.

The discourse tends to be quite episodic and fragmented. Its didactic impact largely depends on the personal charisma of the lecturer and his dialogue partners. Added value from the knowledge-sharing point of view is mainly limited to a few individuals, who are trained in how to present their viewpoint and possibly challenge lecturers as role models of authority.

Group work is widely used in classroom training as a tool for analysing cases, for competing in business games or for preparing and presenting homework assignments. In the knowledge management context the group work exercise has different meanings in different settings.

In an in-house management training session the group work task could bring together representatives of different departments to define joint strategic priorities or assess core competencies of the organisation. The success of group work in such a situation will depend, among other factors, on the readiness of group members to present their tacit preferences as explicit priorities and to be responsive to and tolerant of conflicting views. An external facilitator is helpful for knowledge sharing between members of different units of an organisation, especially if the aim is to develop new cognitive maps (Johnson and Johnson 2002).

Group work efficiency in the academic classroom setting is often inhibited by the limited time available for group interaction and by the unequal preparation of group members. Sometimes the total

number of students in one classroom is so large that there are too many members in each group to involve everybody in the discussion or conversely, too long a time has to be allocated to the numerous group presentations if smaller groups are used. In such a situation participants may also interpret the group work as some kind of relaxation pause and socialization opportunity between intensive lectures. It might be a serious challenge for the lecturer to position group work assignments as phases in the knowledge sharing process, where ideas presented by peer group members and by other groups should be documented for further re-use even more vigorously than the content of the lecture.

Distance learning does not use classroom-based face-to-face group work as the central tool for knowledge sharing between trainees. One could however, ask if this missing knowledge sharing setting could be compensated for by extensive use of other tools, namely virtual forums and other information technology solutions that enable us to overcome the space barrier.

Lack of collaborative work with fellow students, delays in receiving feedback from tutors and little sense in belonging to a team are drawbacks of traditional distance learning that can be overcome in the online learning environment (Siddigi et al. 2002, 654). In the knowledge management context trainees have to learn how to use electronically mediated discussion forums and tools for real time virtual discussions. Their knowledge sharing skills in a modern organisation should not be limited to traditional face-to-face group work situations.

What are the prerequisites for efficient knowledge sharing between participants in the distance learning setting and what is the potential of distance learning for developing knowledge management practices? Maybe even classroom-based courses should incorporate some features of distance learning such as virtual discussion forums in order to overcome limitations of the classroom setting and to develop competencies that are essential in the knowledge management context?

Experiences in Distance Learning in Estonian Banking Sector

Distance learning has already been a priority in the US financial intermediary sector for years and distance learning programs dealing with counselling

services – insurance, pension plans and loans are widely used (Pritchard-Becker 2001, 32-33).

In its development, the Estonian financial sector has reached a certain qualitative and quantitative limit beyond which further growth is no longer substantiated. The number of bank offices is on the decline, but the requirements set for IT staff and customer service consultants are becoming more and more demanding. The labour market in the financial intermediary sector is restructuring. There are less and less opportunities for young people to compete successfully in these sectors that have developed rapidly and offer above average self-realisation and salary opportunities.

This is simply because there are too many competitors and those from the older generation already engaged are not even thinking of voluntarily giving up their positions. Entering the labour market and realising the fact that what one learned at school does not correspond to what the employer requires makes one wonder whether one should go back to school or opt for another mode of training under a busy schedule. One of the options is ongoing training along with 100% dedication to one's work assignments. Distance learning presents a possible combination of these two.

Effective training and its compatibility with contemporary requirements are the most important conditions for staying competitive. This competition, however, can also be looked at from a different point of view, that of the training provider. Two of the authors of this article - Ly Hõbe and Karin Liikane – had the opportunity to follow (as well as shape) the development of distance learning in banking in Estonia. A project was commenced in 1995 within the framework of the EC Phare programme and from that time on the experiences of banking institutions from Belgium, UK, Portugal, Spain and Denmark have all contributed to the project. The project, at first operating under the auspices of the Estonian Banking Association, was handed over to the University of Tartu in the autumn of 2002.

All in all, 16 courses have been designed and over four thousand course attendants have completed the training. The trainee can choose the number of courses to be taken, in other words make his or her own course portfolio. The training lasts for six months and each course ends with an examination.

Teaching materials include a student book (hard copy), web-based tests, case analyses, and a glossary. The entire information exchange – course enrolment and dissemination of results, takes place online. Before the examination, each course has a classroom consultation up to three hours long. Examinations also take place in a classroom.

Now we are going to analyse the distance learning experience acquired from two perspectives:

- 1) What are the advantages and disadvantages of distance learning for carrying out in-service training?
- 2) According to which criteria and how important is the effectiveness of distance learning in the development of necessary knowledge management and knowledge sharing competencies?

The Advantages and Disadvantages of Distance Learning for Conducting In-Service Training

First we will highlight the problems that distance learning organisers, on the one hand, and the learner, on the other, have had to face, and then we will see how different authors present arguments about solutions to these problems:

1) How to optimise target group expansion and learning quality?

The supporters of distance learning believe that universities offering e-learning based curricula and academic degrees are facing a promising future. They experience growth in place of traditional training providers primarily because traditional competitors require students to spend too much time on class activities and money on travelling, accommodation and overblown lecturing fees.

The critics of distance learning claim that this method undermines the value of the education offered. They stress that such a random on-off, primarily business-oriented and therefore shallow education offered by commercial colleges and universities that have turned into “diploma-factories”, software vendors and product developers could quickly supplant the traditional well-balanced education. (Rosenbaum 2001, 38-42). The critics of distance learning do not criticise separate aspects of this approach (e.g. exchanging mails), but the

entire concept, which forces the teacher to spend more time working with less learners.

The Estonian banking-related distance learning experience confirms the above statement that learning can only be effective if the members of the organisation have phrased their training goal based on the main competencies of the organisation as a whole. The great number of people who completed the Estonian Banking Association distance-learning program – almost five thousand course attendants within a seven year period of rapid restructuring in the Estonian financial sector – indicates that this kind of study format can be the key to success in such changing conditions.

2) Does discharge from mandatory attendance make the learning more efficient?

Distance learning requires more independent work from learners and forces them to use more e-communication possibilities. According to D.B. Rosenbaum, distance learning democratises education by making resources in top universities available to practitioners (Rosenbaum 2001, 38-42).

Learners have an opportunity to divide the learning process according to the demands of their work and private life. The provider of the education supplies them with all the necessary information as well as offering communication tools for group work through the training environment. On the other hand, in distance learning learners miss the teacher more and place even greater value on contact. If the Estonian learner has not quite got used to having the right to ask questions (distance learning experience shows that answers are first sought from a colleague-specialist), elsewhere in the world this is already well established. The learner does his job and if there are any questions he turns to the course consultant (instructor). Therefore contacts in distance learning should in fact bring people closer because the consultant can answer specific questions from a specific learner.

Rosenbaum takes the position that learners feel rather neglected in distance learning. This may be true, for instance, if there are only a few learners from one organisation (or from a department or subsidiary of a major bank) who are themselves passive in obtaining information. We have learned from the theory that knowledge-based management competency also involves, in addition to technical

skills, a social dimension. This, however, differs somewhat from the communicative skills acquired in the classroom.

3) Do contemporary IT solutions motivate students to learn better?

Compared to traditional education, distance learning affects student activity and encourages lifelong learning.

The choice of distance learning as a learning format requires strong motivation from course attendants (Mariani 2001, 4-9). Rosenbaum finds that even in the case of distance learning with moderate IT solutions, the learners enjoy the freedom to set their own pace of learning and are willing to familiarise themselves with the materials they already know (Rosenbaum 2001, 38-42). Simple IT solutions at the beginning of studies ease the frustration of those computer users who do not have fast access to the Internet. It goes without saying that all IT environment providers attempt to design their products to be as customer friendly as possible.

The organisation of education to suit distance learning requirements results in two main problems: incorrect focus and weak study materials. (Cone, Robinson 2001, 33; Harrison 2001, 10) It is clear that if the study materials overestimate or underestimate the level of the students, the students will not find the motivation in themselves for independent work. Distance learning does not simply mean “placing the study book on the Internet”, and the learned student with high technical expectations clearly expect more from a course than just a text in htm-format. On the other hand, if developers offer educational software solutions that are too attractive, they may not be technically accessible to everyone. The experience of the authors of the article suggests that the aim of distance learning is not a simple printout of interactive materials on paper but a maximum use of the available multimedia possibilities.

Two other questions arise in connection with materials. First, if a continual updating of the materials is an advantage of distance learning, then how should the learners be informed about changes to the materials? It would not be reasonable for those compiling examinations to rely unequally on updated and “old” material, but such inequality is actually due to their continual and systematic

learning. In other words, the learner who, within the short period of time before the examination, learns the updated materials gets the most complete course set. Another important problem is the copyright of material used in distance learning. When the study material is internet-based, does it then belong to everyone? Can it be freely copied and used?

4) How does the freedom to choose the time, place and pace of learning foster learning?

According to D. E. Hartley, only two-and-a-half hours of a four-hour classroom lecture are spent on performing substantial work, the rest of the time is spent on organisational issues and general breaks (Hartley 2001, 26). The latter are not necessary in distance learning. Also the breaks are shorter because the learner has to consider only his or her own needs. He has already assessed his level before the course (in the case of distance learning in the banking industry: web-based tests), hence he can focus on acquiring knowledge. In the case of the classroom learning format it is inevitable that one has to follow the pace of the instructor.

While the classroom learning method entails "mandatory attendance" the distance learning requires stronger self-discipline. Rosenbaum refers to a survey, which indicates that 80% of distance learners do not complete the course (Rosenbaum 2001, 38-42). On the one hand, they focus too much on detail and the course build-up. Acquiring actual content remains in the background. On the other hand, there are no peers to support the continuity and systematic nature of the learning. This is also confirmed the distance learning experience in the banking industry.

There are also two risk factors that need to be considered when using IT solutions: the availability and quality of information cannot always be guaranteed. If a learner prefers to work at home, for instance, they could fail to open even a well designed IT solution due to, for example, outdated software. Also the connection speed could be too slow to replace synchronised communication.

Another problem may arise concerning the mandatory attendance if saving costs is a priority for the organisation. Every organisation is interested in the development of as many of its members as

possible, as this would provide them with a competitive edge. At a certain moment, however, there may arise the question of the expediency of sending new learners to study and financing their studies, because the (former) course attendants "have got the majority of the materials anyway and these can be borrowed". In such a case, an additional informal circle of learners comes into being who do not have access to all the study materials, but who nevertheless participate in the training. And now the question arises to what extent does such a solution foster (or prevent) the sharing of knowledge between learners and the functioning of the learning community.

5) Is distance learning cheap?

According to Hartley it is not the supply but the demand that should be used as the basis for calculating the price of distance learning (Hartley 2001, 26). Here two questions arise: if distance learning is popular, should the price be high? Is classroom learning and distance learning equal? When taking travel, accommodation and classroom rental costs into consideration, the author firmly believes that they are not equal.

Eventually, Hartley reaches the conclusion that we cannot compare these two study formats. However, he does think that classroom instruction will "go the way of the dinosaurs". People will start taking micro-sessions that exactly correspond to their interests. Hartley believes that the most suitable price-per-time model should be developed.

N. Harrison raises the question: Is distance learning a "poor relative" of the "right" education? (Harrison 2001, 10). One has to agree with him when his conclusion results in an answer in the negative: distance learning is a "great opportunity" for both the learner and the organisation. Why not also include the consultant (instructor), the one who compiles the materials and conducts the training, into this list. Distance learning is a format for the distribution of knowledge, a method of seminars, discussions and research supervision. According to Harrison, this will become the predominant method of studies in the near future due to its greater flexibility and financial saving compared to the traditional methods.

Several authors are discussing the issue of whether distance learning reduces training expenses. It

is hard to calculate how much an electron costs (Hartley 2001, 24-27). Can a four-hour classroom lecture be compared to a four-hour-long distance learning session? What model should be used for calculating the price of distance learning? Where is the break-even point and what does it mean for distance learning? D.E. Hartley claims to be worried about an advertisement that offers a course for 12.5 cents. How much does the course cost to the learner? Can everyone be willing to buy a course at that price and not doubt its quality? On the other hand, the experience of the authors of this article suggests that in order to achieve the best result it is often expedient to combine the roles of the consultant (instructor) and the training technologist. This would, in addition to optimising the costs, also open up opportunities for developing the content of the course.

At the end of 2001 we conducted a survey based on questionnaires involving 389 learners who took exams as part of the Banking Association distance learning between March 1999 and June 2001. The following conclusions could be made based on the survey:

1. Distance learning as a way of learning is highly appreciated because the desire among learners to continue in distance learning is great;
2. The main reason for the popularity of distance learning is the fact that the courses provide new knowledge that can easily be applied in everyday work situations;
3. The level of education among course attendants does not affect their assessment of the suitability of distance learning;
4. Participation in distance learning is recommended to other colleagues primarily if the learner's own examination results were good.

Based on the above it can be concluded that the practice of distance learning fulfils several prerequisites that are important for the development of knowledge management. Motivated participants who are used to searching for information independently are able to relate the information communicated in the training process to their own practical experiences. Assessments of the advantages of distance learning have, however, always highlighted the expenses saved and time-manage-

ment flexibility afforded each learner as well as the freedom of choice.

The potential of distance learning from the point of view of developing the learning community, based on the principles of knowledge management, and developing the common knowledge of learners has been studied and evaluated to a lesser degree. In the context of knowledge management, distance learning that values the contributions made by all learners towards finding new solutions and combining the sum total of knowledge in the process is of the highest value. Ideally, the outcome of the process should yield new knowledge for the learners, instructors and the developers of the distance learning programme and also contribute to the methodology that connects the theory and practice.

The Relationship between Efficiency and Distance Learning Methodology

Finding the best training methodology is indisputably one of the most complicated problems for any training programme. If the course ends with an exam, one possibility is an analysis of the examination results. This will answer the question of to what extent the subject content has been acquired, but it does not highlight how the process could be made even more effective. One thing is for sure, if e-learning is not efficient, it will disappear (Bersch 2001, 36). How can we assess that efficiency?

In the above-mentioned survey of the Estonian Banking Association experience we also analysed how the examination results of the distance learning program were affected by three factors: learner preparation, study materials and the questions in the specific examination.

1) Learner preparation

The choice of distance learning as a learning format requires strong motivation from the learner (Mariani 2001, 4-9). If classroom-based training involves a mandatory attendance requirement then participating in distance learning requires even greater self-discipline. Not everyone is able to focus all the time on studies along with all the requirements of their work and personal life when the control moment (examination) is rather far away. In addition to motivation, the question of whether employees are satisfied with the specific learning method and cooperation also needs to be

studied. For instance, IT specialists are likely to be more open to distance learning, but other target groups should also find a suitable format (Mitchell 2001, 84).

2) Level of study materials

The organisation of learning in compliance with distance learning requirements highlights two main problems (Cone and Robinson 2001, 33; Harrison 2001, 10): incorrect focus and weak study materials (Cone and Robinson 2001, 33; Harrison 2001, 10). It is clear that e-learning does not simply mean placing study books on the Internet. From the point of view of the trainer this can be one solution, but a course participant who cannot follow a long text, will print it out. The result is study material that does not meet the requirements of either learning format – it is not a proper study book, nor is it virtual material. It is equally clear that publishers will not invest in such web-based study books that are based on source material so similar to a “traditional-text”. So we can agree with the following statement “...we are not rushing to adapt the old content to a new form” (Lichtenberg 2001, 40).

The compilation of material suitable for individual learning is determined by the subject being taught – is it a new behavioural model or some facts that are being acquired, or the ability to set up or assemble something (Mitchell 2001, 84).

3) The questions in the specific examination

Empirically it can be inferred that certain factors have an impact on examination results. Examples can be drawn from formal adult education where the examination questions known beforehand guaranteed good examination results. For distance learning, the fact that examination questions need to be understandable also needs to be taken into account. Methodology requires that the learners need to be already familiar with the question types from previous tests.

Having explained the impact of these kinds of factors on examination results, we observed how new knowledge and examination results affect the desire to continue in distance learning. For this analysis we used the correlation and regression method and highlighted three conclusions:

1. There is a 95% probability that learner preparation and understanding examination

questions can be described as linear, but as relatively weak;

2. Examination results depend more on understanding the question than on previous learning;
3. An assessment of the suitability of study materials does not affect examination results among course attendants.

In conclusion, we can state that distance learning is a method for knowledge distribution, seminars, discussions and research supervision for the learner, consultant (instructor) as well as for the organisation. It does not replace classroom-based learning; instead, it supplements and expands the already existing experience. In planning distance learning courses the number and structure of learners, as well as their goals and motivation have to be taken into account. Also, the trainer of the course has to consider the content, structure and media tools for the course very carefully. The latter need to be technically accessible. In preparing materials for the course the following keywords need to be taken as a point of departure: *functionality*, *design* and *content*. Even though the role of the consultant (instructor) has changed in distance learning, it still remains very important in supporting the success of the learners. It is not possible to guarantee efficient learning even in the best learning environment without proper supervision.

The Potential of Formal Adult Education Directed towards Knowledge-Sharing in the Classroom and WebCT Environment

Therefore it can be concluded that the use of distance learning as one of the learning methods supporting the development of knowledge management requires, in addition to suitable IT solutions, also a readiness from both parties. Both the conductors of the training and the learners need to know the solutions being offered and have a positive attitude towards using them.

We have now subsequently researched the attitudes and preferences of EBS graduate students majoring in International Business Administration with regard to different forms and methods of knowledge sharing. The aim of the research was to highlight:

1. Preferences in distance learning as a study format, as well as important negative aspects;

Table 1. Main indicators among EBS graduate students who assessed knowledge sharing forms and methods

| | Number of respondents | Structure of respondents, % |
|---|-----------------------|-----------------------------|
| Division according to gender: | | |
| Female | 20 | 45 |
| Male | 24 | 55 |
| Division according to age: | | |
| 22-25 | 4 | 9 |
| 26-30 | 10 | 23 |
| 31-35 | 18 | 40 |
| 36-40 | 6 | 14 |
| 40+ | 6 | 14 |
| Division according to education: | | |
| Higher (economics) | 17 | 38 |
| Higher (non-economics) | 27 | 62 |
| Division according to previous web-based learning experience (distance learning, intranet): | | |
| Yes | 6 | 13.6 |
| No | 38 | 86.4 |

2. The extent to which the WebCT virtual learning environment is known and used;
3. Is the knowledge acquired via WebCT valued more than that obtained in classroom-based learning .

Forty-four graduate students who had just completed Prof. Tiit Elenurme's course „Knowledge Management and Intellectual Capital“ completed a questionnaire (Table 1).

The table shows that even though the average age and level of education among respondents is relatively high, the share of those who have been in touch with web-based learning is unexpectedly small.

The Advantages and Disadvantages of Distance Learning in Carrying out Formal Adult Education

Table 2 gives an overview of the evaluation of distance learning as a knowledge management method.

Table 2 . The advantages of the distance learning methodology according to their relevance (based on evaluations submitted by EBS graduate students, 2002)

| Statement | Relevance |
|--|-----------|
| The student can choose a suitable learning time, place and pace | 1. |
| There is no mandatory attendance in distance learning | 2. |
| Distance learning is cheaper | 3. |
| The university has better opportunities for providing education | 4. |
| The distance learning IT solutions motivate students better to learn | 5. |

It is interesting to note that the organisational aspects are more important for graduate students. Other positive sides mentioned included the lack of a time constraint for studies (21 respondents), independence and individuality, but also the availability of information of all kinds. Also, highlighting the negative sides, the respondents took the learning arrangement as their point of departure. Distance learning requires discipline and there is no direct communication, no personal contact. Because of that the “material is dead” and the environment is emotionless.

The results of the research confirm the principal comments by both the advocates and critics of distance learning. The investigation conducted in the graduate program of EBS also proved that such a knowledge-based management format:

1. Offers continual self-improvement for the person with a busy schedule. The time, place, and pace of the studies can be chosen,

but strong self-discipline and high motivation are prerequisites.

2. Makes information available without the need to be physically present, but there is no direct pressure from peers or school.
3. Saves travel and accommodation expenses, but may inhibit academic relationships, direct personal contact and the development of leadership and communication skills.
4. Requires IT solutions. These can, on the one hand, motivate students, but on the other hand, frustrate students with poor technical skills, slow Internet connection or a lack of user-friendliness.

But when evaluating the importance of using distance learning opportunities (on a scale from "1" (irrelevant) to "5" (very important)) most respondents responded with a "4". It is interesting to note that there was not a single graduate student who had wished to pursue their degree using the distance learning format exclusively.

As a result of the research the assertion that a combined learning format is preferred, proceeding from the theory as well as from the previous experience of the authors, was confirmed. Even though there were five people who wished to acquire education through classroom-based learning only, 88% of all respondents considered a balanced use of both classroom-based and distance learning methods important for acquiring education. Hence the above-mentioned arguments were confirmed. Classroom-based learning enables communication with fellow students and provides direct contact and an actual example in the person of the instructor. Classroom-based learning should present the

theoretical part and this material should then be fixed using the distance learning tools.

The Evaluation of WebCT as an Environment Supporting Knowledge Management

The course, *Knowledge Management and Intellectual Capital*, dealt with knowledge management theory and practice. A web-based learning environment, WebCT (Web Course Tools), where the learners had access to lecture and home assignment materials supported classroom-based lectures. Graduate students had the opportunity to add their home assignments independently onto the web, respond to a discussion topic in the WebCT Forum and comment on the works of other graduate students.

One of the aims in using the WebCT environment was to demonstrate to graduate students what possibilities are offered by virtual environments as tools for a learning community, which can, if necessary, be adapted for intra-organisational knowledge management needs. It appeared from the research that this course, for 86.4 % of all respondents, was their first experience of the WebCT environment.

It appears from Table 3 that the most widely used options in the WebCT environment were the Homework Guidelines, Study Materials and the Forum (where homework had to be uploaded).

From the point of view of knowledge management the respondents considered Study Materials, Grades and Forum to be most important.

On the other hand, such didactic opportunities as Guidelines, Tools, Links and Calendar which in

Table 3. WebCT user options, number of users and relevance to users

| WebCT Option | Number of users | Relevance |
|---------------------|-----------------|-----------|
| Homework Guidelines | 41 | 6. |
| Study Materials | 38 | 1. |
| Forum | 33 | 3. |
| Course Program | 23 | 4. |
| Grades | 23 | 2. |
| Useful Articles | 23 | 5. |
| Useful Links | 22 | 8. |
| Tools | 14 | 7. |
| Mailbox | 8 | 10. |
| Glossaries | 4 | 9. |
| Calendar | 2 | 11. |

fact make distance learning so unique and give it its depth and potential for continual updating were left somewhat in the background according to EBS graduate student evaluations. This could be due to their limited distance learning experience, which in turn confirms the statement that beginning learners tend to focus more on the form of the course and cannot substantially grasp all the opportunities offered.

Knowledge Management and Intellectual Capital required two home assignments on the applicability of knowledge management ideas from the students:

1. Homework #1: To present a short overview/analysis of literature and/or an online source and an analysis of the prerequisites for knowledge management in a specific organisation. The homework had to be sent to the WebCT Forum, which enabled other course participants to review the work and comment on the novelty of the information. One of the aims of the first homework was to help students get a better overview of the literature and online sources on knowledge management. Another aim was to help the graduate students realise, through a practical assignment, what structures and styles to follow for composing overviews that are suitable for sharing knowledge and relating theory to practice in a learning community. Also, the need to train participants in order to improve their skills in presenting new information relevant for application and analysis within an intra-organisational knowledge management system was considered.
2. The aim of homework #2 was to put into words a knowledge-management development task that was based on the type of company and its vision. The homework had

to be submitted on paper and it was followed by a presentation summarising the main ideas of the paper on the basis of classroom group work.

Also, for this homework, knowledge sharing between master students based on their previous experience in applying knowledge management and the important prerequisites for knowledge management and a comparison of the development tasks that the students presented was taken into account.

In response to being asked which homework was more productive, 56.1% of graduate students responded that the web-based one had been. This response is justified by what advocates of distance-learning have maintained, that it was possible to study the materials thoroughly, there was no time limit, and the materials “remained”, that is, they were more easily accessed. Those who preferred the homework on paper (43.9% of respondents) and the presentation that followed it, to a large extent re-iterated the corresponding comments made by the critics of distance learning. In other words, the advantages of classroom-based learning, such as: direct contact and face-to-face communication, inspiration from fellow students, higher motivation, the possibility to argue thoroughly and immediate answers to questions arising.

By assessing the advantages of the online knowledge management tool, the respondents ranked the factors affecting the efficiency of home assignments sent to the WebCT Forum (Table 4):

The homework source task stressed the need to explain comprehensively and concisely the novelty and applicability of the source analysed. Nevertheless, the two-page limit was exceeded in many cases and the central ideas, student’s assessments and reasons were not structured clearly. One of the training priorities from the point of view of

Table 4. Factors affecting the efficiency of home assignments sent to the WebCT Forum

| Statement | Relevance |
|---|-----------|
| Home assignments were presented comprehensively | 1. |
| Graduate students have previous practical experience in the homework area | 2. |
| A sufficient theoretical basis had been achieved for doing the homework | 3. |
| Home assignments could be commented upon in WebCT | 4. |
| Graduate students had previous experience in using virtual forums | 5. |
| Home assignments could be commented upon in the classroom | 6. |
| Home assignments could be discussed in classroom group work | 7. |

knowledge management is to train members of a learning community to present new information to one another comprehensively and to analyse the information received. Traditional training does not sufficiently value this priority but expects the learners instead to come up with a lengthy text.

In the case of the preferences given, parallels can be drawn with the distance learning experience in the banking industry. Both research programmes conclude that course participant preparation and their previous experience in the given field positively affect web-based learning. The more practical experience participants have with the content being studied the better the results. Practical experience increases interest in the subject and that in turn motivates participants to acquire new knowledge. The aim of knowledge management is to combine theoretical treatments and lessons learned that are significant to the organisation or the learning community by reflecting different experiences and ideas. The graduate group as a temporary association cannot go very deep in reflecting experiences in the course of a single subject, but the home assignments still provide an opportunity to compare one's knowledge management experiences and priorities with those of others.

The WebCT Forum adds value to the intra-group knowledge-sharing process, which is based on experiences and new ideas, by allowing members to get to know the assignments completed by the rest of the group, comment on them and ask the authors questions and compare the answers. Despite the direct contact advantage, it is not possible to fully achieve the targeted information exchange involving all group members through face-to-face communication in a group of 40-50 graduate students due to time constraints. Discussions in the virtual forum and the classroom group work complement each other. If those members who respond quickly to questions and have active verbal skills of self-expression prevail in classroom group-work, then the WebCT Forum provides an opportunity for those whose strengths lie in analysing the thoughts of others and phrasing their own thoughts logically in writing, but who remain in the background in an immediate group discussion.

For the learning community the WebCT Forum is an environment that enables one, through combining knowledge and the preliminary assessment of each-other's ideas and applications, to conduct the

groundwork for determining the actual necessity for face-to-face group work and task setting.

The level of study materials is also a very important prerequisite for the efficiency of the group-work taking place in a virtual environment. If the learners have had a chance to get to know the materials in advance, become convinced of the suitability of the materials and understand the real content of tasks, the results will be considerably better. In case of class group-work, sometimes paradox may occur whereby group members who had argued fiercely after a while cannot remember the results of the group work and cannot use them to complement theoretical materials. They are not used to taking notes on the course or the results of the group work. When the discussion takes place on the WebCT Forum the logical connections between messages are better accessible as a later reminder.

In conclusion, it can be said that the statements made in the theory were confirmed by the study conducted at EBS. Even though distance learning is highly appreciated in formal adult education, it is viewed as a good alternative in combination with rather than as a strong rival of the classroom format.

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Using Case Studies in Class¹

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Abstract

The case study is an effective tool for bringing actual experience into the classroom. A case study for teaching is a description of a genuine business situation and it is usually in written form containing relevant information for decision-making. In solving the case, the student is expected to take the role of the decision-maker. The cases may deal with decisions in all of the functional business areas, for example, there are strategy cases, financial cases, operational cases, social problems, etc. Cases are used in the teaching of various subjects – law, medicine, public administration etc., but they are especially valuable in teaching business and management.

The purpose of this paper is to explore the case study method and the differences of this approach compared with other teaching methods. An introductory description of the method and its use in class is provided for background purposes followed by a more thorough introduction to using case studies for the purpose of teaching business ethics. The author presents her own experience of teaching business ethics and using case studies at the Estonian Business School. She also gives some practical tips that have helped her in the teaching process. Special attention is paid to role-plays and their use in case discussions.

Key words: business ethics, case study, class discussion, role-play

Introduction

A case study is a teaching tool, which can help people learn how to find a solution to a situation where there is more than one possible solution. Using cases encourages learning and can help people to identify problems and find an appropriate solution. Cases encourage and facilitate learning. Other methods for teaching include learning through direct experience (as we all do day by day), reading books, having lectures, writing

assignments, etc. In teaching practice, a case study is a story almost always taken from the real world to illustrate a specific situation in a specific time period. Cases are used in the teaching of various subjects – law, medicine, public administration etc., but they are especially valuable in teaching business and management.

The case is an effective tool for bringing actual experience into the classroom. A teaching case is a description of a genuine business situation and it is usually in written form containing relevant information for decision-making. In solving the case, the student is expected to take the role of the decision-maker. Cases may deal with decisions from all of the functional business areas such as strategy, finance, operations, social problems, etc.

A good case achieves its learning objectives by being both a good story as well as requiring that students perform some analysis after they have read it. A good case must pose an action question – a decision – and then permit the student to perform some piece of analysis that will shed light on the issues raised by this decision or problem (Roberts 1999).

Using cases for the purpose of teaching business ethics may, in essence, be slightly different. There may be several instances where a certain kind of case is suitable in a business ethics course. The process of revealing different problems in an organisation usually highlights problems of ethics and ethical decision-making as well. Ethics is a part of every field of business activity. Business ethics means how we – people – make everyday decisions in our organisations. Every day and in every situation we may face ethical dilemmas – situations, where we have to choose the difference between right and wrong and where our values may conflict.

Although, we can use almost every case when teaching business ethics, we can also write special business ethics cases. In the last five years the

business ethics working group at Estonian Business School has gathered and analysed over 3000 conflict case descriptions. Our collection of these cases reveals quite a wide range of ethical problems in our organisations and society. We think that almost every one of these descriptions could be developed into a real case study for use in class and this work is actually already in progress. We have chosen the most significant and characteristic situations and started to write case studies from these descriptions, and at the same time we are experiencing in using these in class for teaching purposes.

Case Studies Classes Are Different from Normal Lectures

Using the case study method is quite different from a normal lecture or class. It requires the teacher to have more skills and greater competence in the specific field as well as particular personal abilities and experiences. Using cases in the class can help the professor a lot but may also make him feel uncomfortable. It depends upon the person, their personality, how they manage in class, their competence in the field and their communication and coaching skills.

Studying by the case study method is different from the ordinary study process. The students have to be prepared and ready to contribute to an active discussion, to find connections between different issues and take actions as well as foresee the consequences. It is important that the students have some general knowledge, some specific knowledge and also the necessary skills for using that knowledge.

There are important assumptions that lie behind the case study method as a teaching approach, and which in turn, lie behind the development of each case. There is such a thing as general business knowledge. If all business knowledge was situation-specific, students would have to analyse an infinite number of cases in order to be prepared for a career in business. In fact there are many general principles, from pricing to evaluating companies to dividing tasks among individual positions and then putting these jobs into organisational units (Roberts 1999).

Even though general knowledge exists, its successful application depends on the specifics of the

situation. If business were truly a science, we might just teach the "laws" and principles. But, the effectiveness of much managerial action is dependent upon a whole range of situation-specific variables. By attempting to apply these general principles to the specific situation presented in the case, the student learns what matters, and how to think through these aspects of each situation.

A key premise of the case method is that the skill required to apply principles and analytical techniques can best be learned by practising these skills in the simulated context of a case. An assumption behind the use of the case method is that by framing and structuring the problem, and by applying discussion techniques to a specific situation with which the student can identify, a more powerful learning experience takes place.

A case method helps develop the students' abilities to articulate a point of view, defend it, and inform their own views with the opinions of others. These discussion skills are an important component of case method learning, and of success in the "real world".

Attitudinal objectives are another important component of the case method. By placing students in situations where they are required to step into the role of the protagonist, reach a point of view and take action, students develop an attitude about their responsibility and ability to contribute to the situations in which they find themselves. In addition, students learn to analyse situations from the point of view of top managers, considering all aspects of a situation, rather than from the point of view of a lower organisational level.

A case discussion can achieve these learning objectives better than a lecture on similar material, because it puts the students in the position of identifying with the protagonist.

Choosing the Right Case

Using cases successfully in the class depends on choosing the right case for each specific audience. Each case and how to use them must be carefully considered before going in front of the class. Cases differ as well as audiences and sometimes it may be quite difficult to find the right case to suit the audience.

The correct choice for each class may differ according to the length and complexity of the cases. Some cases are long and complicated and can be used several times during one course or even in different management subjects. While those that are slightly shorter and not so complicated, are suitable for using in the course to teach one special subject or topic. There are also those cases that can only be used to provide some real life example, to make students think about one specific subject.

Teachers usually feel better and more confident when they can teach using a case they have prepared themselves. Then they are the ones who know the background and the situation and problems best and are aware of the best ways of using the case successfully. Of course deciding to write the case by yourself is not always the easiest option. There are both pros and cons in writing a case suitable for teaching purposes.

Choosing the right case is not enough, one has to know how to use the case in class and how to make it work for the teaching purpose. We have to consider that teaching with the use of case studies is not a monologue, it is more a dialogue or discussion, where everybody has to reveal their thoughts and opinions. Sometimes it is easy to make the class speak, sometimes it may be almost impossible. The teacher always has to carefully consider the audience, its structure, knowledge base, developmental level and skills.

These always vary, and can never be known before in order to effect the actual outcome.

The teacher has to provoke the audience to active discussion. Sometimes it is better to use a role-play, sometimes group assignments, sometimes individual presentations or written tasks. With some groups role-plays can be successful while in others trying to make the students "act" may only be a waste of time. Using role-plays requires the ability to perceive and understand the audience in general and recognise and consider the diversity of people. It needs an awareness of the use of tact and accountable behaviour. Problems may also arise as a result of the students' personal relationships, mutual empathy and ability to get along with each other, which can easily reveal itself during role-plays and group assignments. The teacher has to be ready to act as a calming agent for the group when necessary and keep the process on track.

The instructor has to know "the territory" sufficiently well to select case studies that highlight relevant dimensions of a problem. So, in order for the case method to work, the instructor must be sufficiently knowledgeable about the principles the case is intended to illustrate in order to select a case that brings out these general principles.

Using Cases to Teach Business Ethics

Using cases for the purpose of teaching business ethics may, in essence, be slightly different. There may be several instances where a certain kind of case is suitable in a business ethics course. The process of revealing different problems in an organisation usually highlights problems of ethics and ethical decision-making as well. Ethics is a part of every field of business activity.

Ethical issues have been the subject of numerous discussions. More and more attention and efforts are directed to these matters, various research and study programs and publications and seminars are organised in order to create awareness of the problem in people's minds and break the pattern of unethical behaviour.

Lessons in ethics are often learned only after something has gone wrong. Using cases in teaching ethics is one way to consider ethical issues, which may arise in students own management practice, before they actually arise and something goes wrong. Cases used to focus attention on ethical issues can be considered as preventative tools, which can illustrate the possible consequences of actions so that more serious problems can be avoided.

According to IESE Prof. Juan Carlos Vazquez-Dodero (2002), analysing cases comprises three main levels: economic – including topics about business, strategy and technical skills; psychological/sociological – including leadership and interpersonal skills; and ethical – including personal values and attitudes. The first level could be referred to as the world of action and the second and third as the world of people. So, we can use almost every case when teaching business ethics, but it is also possible to write special business ethics cases.

Business ethics means how we – people – make our everyday decisions in our organisations. Every day and in every situation we may face ethical dilemmas – situations, where we have to choose the difference between right and wrong and where our values may conflict.

Ethics refers to standards of conduct, standards that indicate how one should behave based on moral duties and virtues, which themselves are derived from principles of right and wrong. The essence of ethical thinking and being ethical means doing the right thing, at the right time to the right people. According to the main theories of ethics the right thing could be viewed from the viewpoint of the consequences of actions (teleological theories) or duties, obligations, and the will of actions (deontological theories).

The development of a person's ethical behaviour is influenced by the environment in which the person grows and matures, this includes aspects of culture, family and school. So it is essential to start gaining knowledge of moral principles and values already at an early age and ethics as a subject should be included on the programmes of business schools in order to develop ethical business people. Corporate social responsibilities towards different parties are often reverse, for example, a company must maximise its profits for investors, but for customers it has to produce high quality goods. From a thorough study of different approaches to social responsibility we may conclude that social responsibility should mean the middle way – to maximise the positive effects for the investor and the customer while minimising the negative effects on society.

Ethical issues in business typically arise because of conflicts between personal moral values held by individuals, the values and attitudes of the company in which they work, and those of the society they live in. Ethical issues in business may be divided into four classifications: a conflict of interest; the honesty and fairness of decision makers; truthfulness in communications; and organisational relationships.

Using Business Ethics Cases at EBS

During the last 5 years the business ethics working group at the Estonian Business School has gathered actual conflict cases from organisations and society in Estonia. Our collection of these case descriptions is already rather significant. There are over 3000 conflict cases, which reveal quite a wide range of ethical problems drawn from our organisations and society at large. The majority of these conflict descriptions have been collected by our own students, who in most cases also work as managers or executives in Estonia. The remaining conflict descriptions were gathered from mass-media channels and are mostly cases from society at large.

All of these cases are examples of real conflicts – ones our people have faced in real-life situations. Every one of these descriptions could be developed into a case study for use in class. This work is already in progress. We have chosen the most significant and characteristic situations and started to write case studies from these. In order to format these conflict descriptions into cases we have to slightly modify the stories, change the names of the persons and companies involved. We have to do this (especially with the cases gathered by our students) because conflict is a very delicate issue and Estonian (business) society is so small that almost everybody knows everybody else either personally or through somebody else.

At the same time while writing these descriptions into case studies we have already started to use some of them in our classes. All these cases are real and since they are local, they characterise the most common ethical dilemmas our people face in their work. The majority of the students at our university are working and often they are working as managers in local (as well as well-known) organisations in Estonian society. These students are rather interested in practical experience and agree that in discussing cases and analysing problems during class that they may face at work will in turn help them at work. And they (will) have these situations quite often at work, because all decision-makers in Estonia are faced with quite a number of ethical conflicts due to the fact that the main goal of most entrepreneurs is still self-interest and profit maximisation. We could even say that the basis for all conflict basically is the avoidance of social responsibility.

Decisions are the results of managerial work, managers are paid for making decisions.

‘Inability to make decisions is an unforgivable sin for a manager, a decision that was not made when it was necessary often results in a lost opportunity. A manager remains personally responsible for the decisions even if he relied on others to make them’ (Nurmi and Darling 1997, 90).

Good general character does not prepare an individual to deal with the special ethical problems that are likely to arise in one’s career. Individuals must be trained to recognise and solve the ethical problems of their particular occupation. Special training can prepare them to anticipate these problems, recognise ethical dilemmas when they see them, and provide them with the framework for thinking ethical issues through in the context of concrete situations and organisations (Trevino and Nelson 1999, 10).

Each decision we make is on the basis of different alternatives, and our final choice is dependent upon our ability to foresee the eventual results. When making decisions and processing information we use four different channels (Ludlow and Pochton 1992):

1. Facts (or what we perceive to be facts, based on our own experience);
2. Feelings: our reactions on our emotional plane in a specific situation;
3. Values: fairly unchanging beliefs about ourselves, our society and culture;
4. Opinions: attitudes we take about our own position in a given situation; views that are subjective, not objective.

As all these factors affect decision-making and must be paid close attention to, when solving an ethical dilemma and making important decisions, people consider the facts they know about the specific situation; are influenced by their feelings and emotions, their personal and/or corporate values, and count on their opinions and attitudes.

Every decision has its own consequences and every decision gives us new choices. We have to make decisions carefully otherwise we will not know where we will end up. By using case studies we can think about these things without having to carry through a real action in the real world, ‘without visual [actual] aids’.

By using cases we can play out the different scenarios. What would happen, if we make this kind of decision, if we act in that way. We can also think about the possibilities of what would happen if we did it the other way, what would be the follow through, and what would be our next move. Deciding and acting is often done instinctively, relying on our gut feelings, but sometimes in thinking more about the action and its consequences, analysing it more carefully, we find out that our action was not the best solution at all.

With the help of cases we can think about these situations without the pressure to act quickly and in a way prepare ourselves to cope with similar situations in real life. Although the real situations are not / may not be alike, we have already had some kind of practice in analysing the consequences of these decisions and actions.

We can write and present cases in phases, which makes using them easier and can give the students a better understanding about the issues reflected in each case, and better opportunities to realise real problems. It is also better to make decisions and propose actions and from there to see the possible outcomes of these decisions.

The same situation can also be viewed from several other perspectives. Using cases in teaching business ethics we can enable the students to consider a situation from different sides – through the eyes of different people. For example, in management cases we can ask the students to look at one problem as a manager, as an employee, as an owner of the company, as a client, etc. It is important that the students learn how to consider the consequences of decisions and actions from all perspectives and the influence on different people involved in the situation. Foreseeing possible actions and the feedback and responses from other sides could be useful in the future, in real life situations.

After a two-year study of ethics programs in higher education, an interdisciplinary group of educators agreed on five main goals (Pritchard 1992):

1. Stimulate students’ ethical imagination;
2. Help students recognise ethical issues;
3. Foster the development of analytical skills in ethics;
4. Promote a sense of responsibility;
5. Help students deal effectively with ambiguity and disagreement about ethical matters.

Students need to see that virtually any situation can be seen from a moral point of view. It is quite likely that without some prior assistance in thinking through moral challenges, young professionals may find the consequences of their actions taking them by surprise. People, who have not thought about the possible consequences beforehand, may not see the affects of their decisions and actions on others.

We are talking about ethics and business ethics not only in the context of the business world. Ethical problems affect every institution of our society. Besides business people and business life we are talking more and more about ethics and ethical behaviour in the context of our politicians, public officers and government. We face ethical problems everywhere, because all human activities in all areas are closely affected by ethics. Ethics in business is not only about personal choice, nor about organisational or corporate habits and behaviour or even about global developments. Institutions of various kinds – social, economic and political – are increasingly confronted by ethical issues and therefore, either negatively or positively, the issue of ethics in business is also influenced.

Problems when Using Cases to Teach Ethics

The author has faced several problems when using cases to teach business ethics. The learning process and using case studies needs at least two parties, both of them must be active, work together, ask questions, explain opinions and discuss the topics, be interested and motivated. In using case studies the ethical dimensions of situations are not always apparent. Often the students may ask: “What has this problem got to do with ethics?” And they may not be willing to discuss the subject any further. But if the instructor has been able to highlight the core of the moral problem and got the students’ interest then after thinking things over more carefully and analysing the situation from different viewpoints the students discover that the solutions they have proposed may lead to serious violations of the ethical principles held others.

Analysing moral issues is different from analysing other issues. Moral analysis requires clear thinking about such concepts as utility, justice, rights, duties, and respect for others. People in management and

management students too often tend to think about problems only in financial or utility terms, sometimes they also add the juridical aspect (this side is becoming more and more important), but unfortunately the consideration of justice, rights, responsibilities and more importantly, respect for others is not gaining significant attention. But when we add considerations of fairness and respect for the rights of the individual to a case study scenario, it often results in a vastly different outcome.

Our organisational behaviour and business ethics classes are taught during the last study years at our university. Until that time they have been taught for several years that business is about becoming and being successful, meaning, earning a lot of money and being able to afford oneself a ‘dream’ life-style. And that creates problems, as some students say: “All the things you talk about are nice, but they are far away from real life, because if we want to be successful in business right now, today, we better forget ethics in order to survive in that hard competing world situation”.

In our business ethics classes we want to show students that there is another aspect in business as well, that business is not only about making profit and gaining financial wealth (as they have been taught in business school for several years already). We want them to realise that there is another and even more important aspect in business – the human aspect.

An organisation means people who are working together to achieve a common goal, in order to make the activity successful all the people involved have to act according to ethical principles. But doing that and convincing the students that they must do it also is not such an easy job.

Using cases of actual conflicts from our own organisations and society, we can show the students that most of them resulted from a violation of ethics and ethical principles and a rejection of the importance of other people. With these concrete cases we can show what can happen when ethical principles are neglected. Living lives and making business without considering ethics leaves us with none of the benefits of a moral life – friendship, mutual love, inner peace, moral pride or satisfaction, and freedom from moral guilt (Pojman 2001, 189).

But there is another problem that has arisen from these real-life cases. As our community is so small and almost everybody knows each other it is very easy to track the real people, organisations and situations. The majority of these case descriptions are written or told by people very closely connected to these situations and they would prefer to stay anonymous. In order to use these cases, which are really good for teaching purposes, we have to slightly modify the situations, change the names of the characters, not tell the real name of the company and thus withhold some information. These changes make the cases different from the real situations and some important aspects may have even been lost. But as some of these cases have been reflected in the media, we use these with real names and persons.

A key concept in business and management ethics is responsibility. People in organisations, especially managers, have moral responsibilities. These responsibilities go beyond the narrow, formal definitions found in the job specification or organisational rulebook. They encompass a moral demand to exercise imagination and empathy and the anticipation that things might go wrong.

People in organisations have a duty to be aware of the potential implications of their actions and those of the organisations, and to take appropriate action. But what that action should be will depend on the circumstances that lend shape to the dilemma faced by the individual – whether to remain loyal, to voice a dissenting opinion, to sink into apathetic unconcern, to blow a whistle, or to resign (Maclagan 1998).

During these case discussions we can bring out and highlight the ethical / moral principles and show students that making business, managing organisations and making decisions is all about people and the relationships with them. Through cases we can illustrate the need for us all to be responsible for our actions and highlight the possible consequences of taking a certain course of action.

All stakeholders are human and we just cannot leave ethics out of our activities, unless we are satisfied with staying and living in isolation, with a restless mind and so on. Using actual cases to highlight this is much more realistic and students can understand these things better.

Teaching business ethics is not easy, since the students are very critical and can not believe that being ethical and behaving ethically can help them to be successful in business.

Practical Experiences from Using Cases in Class

We can identify three main stages in a case study discussion:

1. Individual preparation – where every student has to prepare the case and find possible answers to given questions.
2. Team discussion – where 4-8 students discuss the case among themselves. At this stage the goal is not to reach a consensus, but to discuss the topic from various points.
3. Full class discussion – this stage is led by the instructor and the questions he / she asks of the class. The goal is to discover what kind of conclusions people have come to and to explain why they have reached them.

When using these cases for teaching, at first the instructor must give every student a case he or she can read and get acquainted with before the class. Students have to read that through thoroughly, identify the problems and prepare their response to the case beforehand. To this end the instructor gives them a technical note with some questions he or she wants to highlight. All these cases are quite complicated and it is not really possible to participate in the case discussion without having read the case before.

In the class the teacher makes a short introduction to the case and gives some background information. Then he or she divides the class into groups. The size of the group depends on the number of students in the class. Usually there are 4-6 students in one group. At first the students have to answer the questions the instructor has given them and they have to reach agreement between themselves. This stage can also be viewed as an exercise for practising the skills involved in team-work. The groups have to put down the answers on paper in written form and they have to prepare to make a presentation in front of the others and be ready to discuss the subject with all participants. It is impor-

tant to highlight the real problems and be ready to analyse all the aspects of the situation.

All groups must arrive at a concrete action plan and they have to foresee how they will implement it in practice. They have to explain what are they going to do and why they have decided to act in this way and also what kind of consequences their decisions will lead to as well as any possible drawbacks. Groups have to be ready to defend their opinions and discuss all important aspects of the case.

During case discussions it is necessary to follow a definite discussion pattern:

1. Make observations, what are the facts and symptoms of the concrete situation.
2. Reflect, what is most important – set the priorities.
3. Discover the real problems, the so-called “illness”.
4. Think about the options, multiply the options, what could we do and also what criteria should we use.
5. Make a decision, what are we going to do, form an action plan, also explain why this option is chosen and not any of the other options.
6. Think about the actual implementation and the constant monitoring of that process.

When analysing ethical cases and resolving conflicts we use the same pattern, but besides that we also have to apply ethical approaches and find a resolution by considering the situation using a framework for resolving an ethical problem. According to Mari Meel (Meel 2000, 24-25) that consists of four stages:

- 1) Determination of the legal side;
- 2) Evaluation of possible measures;
- 3) Analysis of the case according to ethical principles;
- 4) Possible ethical solution.

But the guide to an analysis of the whole conflict situation also includes a determination of the facts, stakeholders, and the main problem.

The guide for a practical resolution of an ethical conflict involves:

1. Conflict description, important facts- determine most important aspects;
2. Stakeholders- determine the parties involved / affected by the conflict;

3. Problem determination- separate the basic problem from the sub-problems;
4. Legal analysis.

From the legal aspect the case can be:

- a) Ethical and legal;
 - b) Ethical, but illegal;
 - c) Unethical, but legal;
 - d) Unethical and illegal.
5. Possible measures:
 - a) Formal- corporate policy, codes of ethics. Is the case in accordance with the corporate policy, is it violating a corporation’s or profession’s code of ethics; is the case in conflict with the Golden Rule; is the case profitable to a minority or the majority; etc.
 - b) Informal (intuitive) tests. Ethical considerations according to which a person intuitively judges his or her behaviour regardless of ever having studied ethics or thought about morality issues.

The following tests are known:

Mother-test: would you reveal your decision to your closest person;

TV-test: would you dare to reveal your decision to the public;

Smell-test: does your decision “smell” good, i.e. feels right and good;

Being-in-others’-shoes-test: would you like the solution if you placed yourself in the other (opposite) party’s shoes;

Market-test: will your decision give you market advantage (favour).

6. Suitable ethical principles:
 - a) Utilitarian principle of harm minimisation- choose the action that minimises both actual and potential harm;
 - b) Deontological principle of rights and obligations, i.e.
 - The right to know (be informed);
 - The right for privacy (secrecy);
 - The right for ownership;
 - The right for security;
 - The right for personal freedom;
 - Personal obligations (trustworthiness, honesty, fairness, non-violence, self-criticism, self-fulfilment);
 - Professional obligations (professional relations, professional efficiency etc.).

- c) Evaluation according to the consequences, i.e. after the teleological principle:
 - Egoism;
 - Utilitarianism.
- d) Evaluation according to Kant's categorical imperative:
 - Universalising principle- would we want (allow) all other people to act this way;
 - Rightfulness (honesty) principle- was the person honoured by himself or used as a means.
- 7. Ethical choice (decision):
 - a) On the basis of previous steps reach a final decision (also resolve the conflict);
 - b) Find out if it is possible to avoid such a conflict in the future.

The best thing is to arrive at a solution that can be said to be a win-win solution, where all parties leave the situation feeling that they have won and come to a practical and workable solution.

In discussing ethics cases and before implementing the decisions that have been made, we can ask further questions that help to reveal the essence of the topic and show its importance to the class. These may include such questions as (MacDonald 1995):

- If I carry out this decision, would I be comfortable telling my family about it? My clergyman? My mentors?
- Would I want children to take my behaviour as an example?
- Is this decision one, which a wise, informed, virtuous person would make?
- Can I live with this decision?

Using Role-Plays in Case Discussions

Sometimes it is reasonable to use a role-play during case discussions in class. As cases provide an opportunity to see and analyse one concrete situation from different sides, it is quite good to add role-playing to the process. It makes the class more lively and student participation more active, but also enables them to step into the shoes of another person and see things differently.

But using role-plays is quite complicated and the instructor cannot ever know for sure if it is going to work out well or not. The instructor has to be prepared for almost every possible reaction and has to know the case in detail.

From the experience of using role-plays in business ethics classes the author can point out some important aspects. Role-plays are more likely to be successful under the following conditions:

- The group has to be relatively small;
- Students have to know each other rather well;
- The overall atmosphere in the class has to be positive, students should be active (not too tired) and ready to discuss the topic;
- The topic and the characters of the case have to be interesting, familiar and easy to identify by the members of the group;
- The relationship between the students and the instructor has to be rather good and have successfully passed a mutual 'testing' period;
- It is easier to involve students who are more mature and have experienced similar dilemmas in their work.

The author has used role-playing in classes several times and the best results have been with small groups, where active people discuss a case from a real-life situation and the characteristics of the situation and the roles are easy for the participants to identify with. It has also been shown to be useful if the whole discussion is video-taped and students can see themselves afterwards so as to help them make their own final conclusions.

When trying to use role-plays in big groups the author has faced some difficulties. Students have not felt so free to 'act' and take on the roles of the situation in front of others that they do not know so well. It has also been more difficult to get role-plays working with younger students who have not faced these kinds of situations before.

Practical Tips for Case Discussions

During a case discussion one of the most important things is how the white-board is used. Ideally the instructor should be able to show the entire discussion process, the dynamics of the case and the most important points-of-view on the board. So the board must be big enough so that all significant aspects can be put there.

Quite often we only have small boards and the instructor can only put down the most significant opinions and results and maybe, certain things of

particular interest or that were unexpected in the situation.

One of the most difficult tasks for the instructor is to evaluate the students and give grades in case discussions. We cannot put grades based on our own attitudes towards the topic and the answers we think are right or wrong in each concrete situation. Too often there are no clear right or wrong answers or clear solutions.

The instructor can evaluate the course of the discussion, the involvement of students, the possibility of implementing their decisions and action plans in reality, and also how well they manage to foresee the possible consequences and drawbacks of that action. They have to foresee how their actions will influence others and who may be the most affected.

The author has sometimes used the assistance of students from the same group in evaluating their classmates, because it is too difficult for the instructor to notice everything and to observe every group and every student all the time. These randomly selected students follow the whole process of the discussion in one particular group, they observe the activity in the classroom, the case preparation in the group, the arguments and also the participation and contribution of each student in that group.

These 'observers' are also obliged to analyse the process and give 'grades' to each student according to the participation and active contribution of the students. Sometimes the author has asked them to assess the process according to the various theories (ethical decision-making, solving an ethical dilemma, working in teams, ethical leadership). These students, who are chosen to act as 'evaluators', are graded by the instructor according to their skill in finding the most important aspects of the discussion and their assessment of the whole process based on the specific theories.

The author finds it as a good opportunity to get to know more about each student's contribution (because there is always a danger that the instructor does not see and understand exactly how students are contributing to the process). And as our classes are rather big, about 50-70 students, and there are many different groups studying the same subject at the same time, it is not so easy to know everybody

personally and put the faces and names together. But students know their group mates better and can give more useful information about each student.

Conclusion

Every day society pays a heavy price for the unethical decisions made by its members. Making an ethical choice is rarely easy. In many situations there are a multitude of competing interests and values. Most decisions have to be made in the context of economic, professional and social pressures, which often clash with our personal ethical values and conceal or confuse the moral issues. But still we need to come to our ethical senses and make decisions according to such basic, non-discriminatory principles as trustworthiness, respect, responsibility, fairness, care and citizenship - values that should make up the pillars of every character.

Using cases in teaching business ethics is one way we can learn about the role of ethics in concrete situations and hopefully prevent or minimise mistakes in the real world. Case studies also provide students with a unique and practical opportunity to think through, from a variety of viewpoints, all aspects that may accompany a decision in a concrete business situation.

Notes

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Some Aspects of Case Teaching: How to Improve the Educational Process

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Introduction

Case teaching is amply used as a teaching tool at Harvard Business School, IESE Business School of University of Navarra and other Universities of a similar type. By putting emphasis on a case study and showing its relevance for educating the top managers of the future, those business schools consider cases to be the “first and foremost teaching vehicles” (Roberts 2001, 2).

This article analyses case teaching in the following way. At first, the paper strives to present arguments allowing us to identify a business situation, which could be considered a “case” for teaching purposes.

Secondly, the article aims to outline the methodology of using cases, which ultimately enables us to increase the efficiency of teaching business management students and professional business executives so they can develop or improve their skills involved in dealing with business decisions and predicting plausible outcomes. In this way we can increase the percentage of successful responses to business issues which students encounter in their daily activities.

What Kinds of Business Situations Could Be Considered For Use as a “Case Study”

In the literature about “case writing” various definitions of a proper or “good” case (Roberts 2001, 3) can be found. The simplest, but the most felicitous description of a case could be, for example, as follows: a case is a good story told by a protagonist about a business where a crucial decision has to be made.

Naturally the question arises of whether a “good” case has always to be a true story. What about the invention or simulation of a situation that contains a previously programmed issue to be solved in class? The simulation of a situation could be justified by the claim that a real situation is not always sufficiently related to the theoretical framework a lecturer would like to deliver within a particular syllabus.

Should the case be a real situation or a simulation depends on the objectives of its application. If we aim to illustrate theory, of course, a simulation as a practical exercise could serve us perfectly.

If we are aiming to teach students or professionals to cope efficiently with real problems, we are naturally forced to change the target of the teaching process. We need then to put emphasis not on the illustration of marketing concepts, which by themselves are inductive, but concentrate “on how the same set of relationships will play out in a different context” (Rangan 1996, 2).

Considering our objectives in teaching, we stress that we support the opinion that “good” cases for teaching are real situations and not simulations of problematic circumstances. We believe that simulations, in principle, despite the abilities and experience of the simulator, are hardly capable of reflecting the complexity of reality.

Furthermore, the more complex a simulated situation is, the more it deviates from reality and eliminates key opportunities for studying people and learning through experience. Simulating simply doesn’t perform the role of sharing experience. It reduces the credibility of the situation and diminishes the excitement, which usually exists when

real situations are analysed and alternative decisions are discussed.

Another facet of the same question is that a simulation can hardly enforce the pain of decision-making, which is an indivisible part of a manager's performance and often leaves the decision maker with no clear indication of whether the alternative that was chosen was indeed the best. A simulation, on the contrary, usually lacks uncertainty, which is an unavoidable part of any business.

Hence, the first and the most important feature of a proper case for teaching or "coaching" (Vazquez-Dodero 2001, 1) purposes is that the business situation should be taken from real life. This delivers complexity of choices and decisions, which could theoretically be sometimes treated as obvious or even non-existent.

The next requirement, which should be met in order to have a good case, is that the management of the particular firm in the described situation should be forced to take action at a particular point in time. A proper case should provide a coherent description of the relevant circumstances and internal or/and external environment of the business. A real situation delivered as a case should give a clear enough understanding of the position of the firm and the difficulties it encounters from the perspective of a case protagonist. To put it another way, only a rich context from the point of view of the protagonist allows another person to identify himself or herself with the manager and simulate action. Only the provision of sufficient details can allow the third person to perceive as fully as possible the real situation, and then, not unlike in their daily operations, choose from several possible alternatives or even invented alternatives.

Another essential question for those of us who have previously taught using conventional lecturing is what exact information, what content should a good case deliver to a reader. That delivered information has to be realistic and rich, as we have already discussed above.

A proper case can contain a wide range of information starting with human relationships, such as how to treat a good worker who is ignoring their work schedule and finishing with marketing or financial issues. A good case can contain any information, which might be encountered in real business life

and where a crucial decision has to be made. Hence a lecturer, who is going to use a case method for teaching, must choose a case or series of cases, which highlight relevant dimensions of the course he or she is teaching.

For instance, the course being taught might include the concept of a "break-even" point – the lowest volume of a product that a firm can achieve and not lose money. A proper case might present the issue of whether to build a new plant in order to introduce a new product to the market. Such a case enables a student to apply an analytical tool such as, analysis based upon fixed costs, revenues and variable costs – forcing him to grapple with the issue/s presented.

Nevertheless, break-even analysis in our example doesn't provide one "right" answer to the issue presented in the case because it principally differs from a practical exercise. The presented case describes a complex situation in business – all the questions of marketing a new product in this case – hence the break-even analysis, as in real life, only serves as one of techniques and arguments in the decision making process.

The distinction, which is important, and refers to the differences between a case and an economic exercise used for teaching purposes, involves the complexity of the decision conditioned by the scale of interrelated uncertain factors. In our example – the building of a new plant and introduction of a new product – there are a series of uncertain factors such as the plausible sales of a new product, which are partly dependant on the plausible reactions of customers, competitors, the sales campaign, etc. On those uncertain sales we build our break-even analysis. That's the way business managers make vital decisions.

Considering the specific character of a case as a realistic and complex reflection of a concrete business position from the perspective of its protagonist, the natural question arises of how to teach the case if the application of a specific technique doesn't guarantee arriving at the right decision. What is the sense of teaching without providing precise recommendations for problems, which a certain business firm has encountered in a case study.

The Case Study as the Shortest Way to a Successful Business Decision

The key to accepting the case study method as a teaching method among other conventional methods, such as lectures, reading books, direct experience etc., is understanding what particular role it plays in the process of learning.

It is ironic, that the function of conventional methods of teaching is to deliver information to students, to make professional comments on it, to lead and structure a process of learning. The professional and pedagogical features of a lecturer in these activities are extremely important and the necessity of such a process itself could hardly be questioned.

Nevertheless, the application of theoretical models and theories in the business field has its specific character and differs from the application of laws and theorems in the sciences. In learning business management the mere act of learning wise statements and sound advice does little for the preparation of a good manager. Business management is a field, in which the learner's dynamic cooperation is required. Such cooperation does not arise automatically; it has to be provided and continually encouraged (Gragg 1982, 1).

The method is exactly the tool, which enables a student to put himself into the place of the business protagonist and to actively generate decisions applying previously obtained theoretical knowledge. Considering the active role of the student we can treat the case study method not only as a teaching method but also as the method, which encourages learning or/and facilitates learning (Renart 2002, 2).

Having agreed on the place and mission of the case method in the process of learning we need to clearly outline the strategic behaviour of the lecturer, whose function is to professionally manage the process of learning.

Under the case system the instructor has to choose a case he wants to teach. Despite all the complexity of real situations reflected in cases, each lecturer has his or her own specific field of interest, in which s/he has particular expertise. Hence, naturally s/he has to manage a class discussion in such a way that, on the one hand, it "facilitates the acquisition of

habits of synthesis" (Vazquez-Dodero, Ortiz 2001, 2) but, on the other hand, facilitates the learning of the particular subject s/he is teaching.

Putting emphasis on a particular subject – i.e. break-even analysis – as in our example presented above, in some cases requires some "push" from side of an instructor. That is especially important in complex cases, which can be taught in different classes, in which other aspects of issue or even different issues can be stressed and analysed more thoroughly.

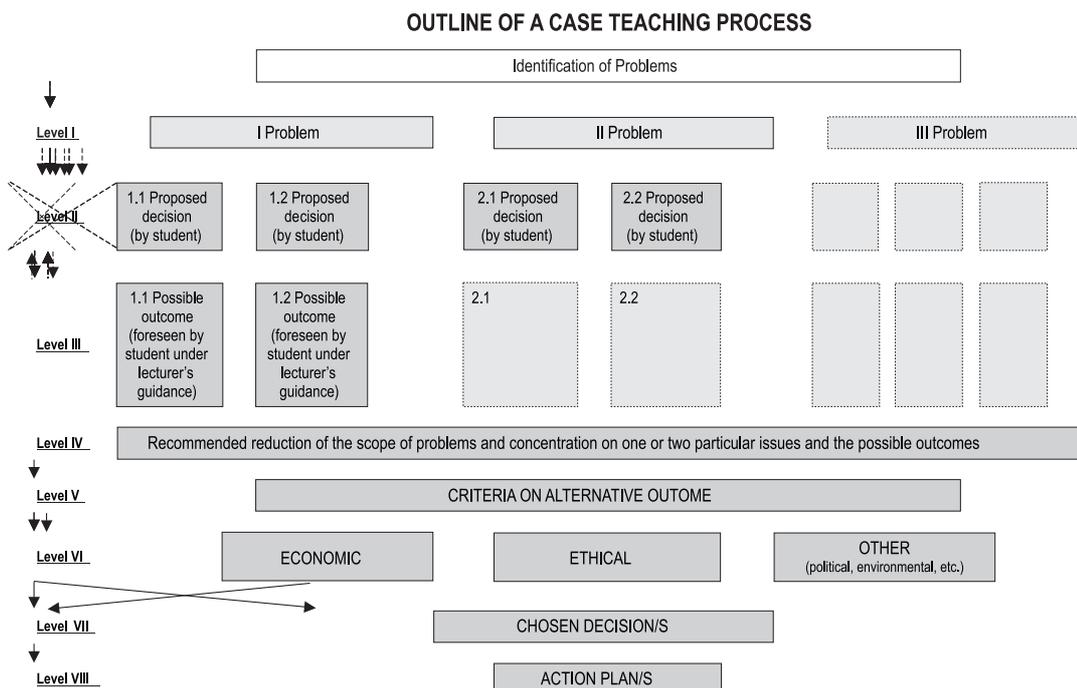
Only a successful pursuit of this dual task – developing the ability to synthesise and apply the concrete knowledge of a particular field – could lead to learning how to analyse various decisions and finally lay ground for successful business decision making in real life.

The outline of the process of teaching a case plays a major role in achieving the most efficient learning results. The general approach to defining case teaching aims to encourage students to become active participants in the process of generating business decisions. The lecturer's task is to lead a discussion and to teach the students to analyse business solutions being proposed.

Hence, the first step in the teaching process is the identification of a problem or problems. (Level I of the Chart 1). Students are given freedom and stimulated to express their opinions about the problems the firm has encountered. A lecturer in the very beginning of an analysis of a case has to accept all judgement expressed by the students about the possible "illness" of the organisation based on the symptoms defined in the case. The aim of initiating the expression of various opinions is to develop those qualities needed by business people, such as "the ability to see vividly the potential meanings and relationships of facts, both those facts having to do with persons and those having to do with things; the capacity to make sound judgements on the basis of these perceptions and skill in communicating their judgements to others" (Gragg 1982, 3).

After the possible problems have been defined, students are urged to propose decisions or, to express them another way as a practical action scheme for solving the problems. These proposals should be followed by an attempt to predict the most plausible results (as pointed out in levels II and III of the Chart 1).

Chart 1.



The function of the lecturer in this process is to inject appropriate questions and comments, assign role plays if the problem is connected with human relationships, lead a student to see more clearly the possible outcome of the proposal by himself. The clearest possible view of plausible outcomes of the proposed action plan is an extremely important part of situation analysis and a prerequisite of efficient business decision-making.

Students are encouraged to participate in the re-evaluation of the proposed decision. That is the way a business executive thinks: at first he or she generates a decision and then he analyses to discover whether the plausible results are satisfactory from his or her point of view.

A clearer view of the possible outcomes has its own effect – some proposals are seen as unacceptable and the number of proposed decisions is diminished to a minimum. Hence, the task of a lecturer in this process is to guide students through levels of decisions (level II in the Chart 1) and outcomes (level III in the Chart 1) and back to the revision of the proposed decisions. Feedback sent via the third level allows the students to concentrate on a smaller number of issues and decisions.

At this particular point prudent course would be to emphasise one main issue and the correspond-

ing action plans (level IV in the Chart 1). Putting emphasis on a certain problem enables the lecturer to employ his expertise and the students' knowledge of the particular field. In this approach students have to be shown how general knowledge could be applied in a specific situation.

Having decided on which particular issues, action plans and outcomes to concentrate on we need to turn to the criteria. How to set criteria, then range them according to importance and relevance to the general strategy and values of the firm that is the crux of the next stage of a case analysis (level VI of the Chart 1).

At this stage of a case analysis, as a rule, a question arises: which criterion should be accepted as the main one and exactly which action plan from the suggested set should be accepted. To put it another way – which decision is "right" (level VII of the Chart 1) considering all the other decisions will be "wrong".

A case discussion itself has the task of teaching students to analyse business situations, identify problems, foresee possible action plans and to detect the most plausible outcomes based on their proposals. This process repeated many times on the basis of a vast array of different cases allows students to practice analysing situation-specific decisions, to group them and to trace their common features. With regard to "recipes" for action, it should be

stressed, that they are not and cannot be, in principle, the purpose of a case study.

There are many reasons why a lecturer should avoid giving categorical advice on action plans. First, despite a case being the reflection of a real situation there could always be some confidential information, which a company wanted to disguise.

Next – and this is something we really need to keep in mind – a real situation could be much more complicated than a case explored during a lecture.

The third reason is based on the consideration that business deals with human behaviour where laws or predetermined rules cannot be blindly followed. Even good advice could trigger an implausible outcome, from the point of view of the analyst.

Finally, we need to realise that “in every business situation, there is always a reasonable possibility that the best answer has not been found – even by the teachers (Applegate 1995, 1).

One more notion to keep in mind, which could prevent teachers from the temptation of giving explicit advice, is the difference between a case and a piece of research. Firstly, in a piece of scientific research, the “truth” is paramount. A case study tackles a different aim: the main objective in the case study method is learning to analyse and make grounded decisions.

Conclusions

A close look at the practice of using the case study method at IESE Business School of Navarra University in Barcelona as well as the study of related materials have led to the following conclusions. Conventional teaching aimed at providing general business knowledge doesn't generate the skills necessary for the practical application of this knowledge. Hence, after graduation from university, students actually need to obtain some practical experience to really be able to make efficient business decisions.

A case study method allows us to intensify the process of gaining experience in analysing a series of real business situations from the perspective of a business protagonist. This approach to the teaching process makes the case study method a powerful

teaching tool that should be adopted in contemporary business schools. It should be used not instead of but together with conventional methods of teaching.

The process of teaching a case also requires specific management of the teaching process. The proposed scheme of teaching would condition the effective training of students through contact with real business problems, accelerating the process of gaining experience and hence, coaching them in the making of efficient business decisions in real life.

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Value-Based Marketing: Improving the Effectiveness of Marketing through Integrated Marketing Management by Creating Value for Customers and Shareholders

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Introduction

Effective marketing companies and organisations are those who plan and evaluate marketing based on carefully worked-out marketing evaluation tools.

The increasingly global business environment is creating new challenges for companies in developed and developing countries. When evaluating a company's value and growth, shareholders have not really been satisfied with the results over the last decade with stagnating development and barriers to discovering new opportunities. This puts great pressure upon the top management. Companies must find new marketing strategies that create value for the shareholders. Part of this task involves a company's internal market orientation – employee orientation towards meeting the customer's needs and doing it better than the competitors.

Therefore, managers have to start by defining marketing and its role in the company's activities. Secondly, they have to define the marketing management process and the relevant links with other processes in the company. The different marketing processes must create value for shareholders and returns on investments. The extent to which marketing creates value for shareholders and gives return on investment is still unclear for many companies in the world.

The Objective

Based on the aforementioned evaluation, the author will explore value-based marketing as a topical world issue from the theoretical perspective. Value-based marketing presumes that a company must build up its marketing based on the environment in which the company operates and where it is heading according to its mission statement. The main idea behind the new marketing concept is to measure all activities along with the marketing process and the strategies that create and increase value for shareholders. This paper, which is an introduction to a research topic, will focus on the role of marketing in an integrated marketing management approach. Besides this, value creation issues based on value-based and market-based marketing approaches will be explored as a basis for further empirical research.

The Role of Marketing in a Successful Organisation is Increasing

"I argue that the purpose of marketing is to contribute to maximising shareholder value and that marketing strategies must be evaluated in terms of how much value they create for investors (Doyle)".

The role of marketing in today's successful organisation is far more strategic than we imagine. Marketing is isolated, it has too little impact on business effectiveness, it is narrowly seen as advertising and promotion, and its professional status is not recognised. Marketing is seen as being tactical by 84% of marketing managers and 74% of general managers. The main reason behind this is the lack of time and authority dedicated to strategic planning (Shaw).

In evaluating the financial results of stock-listed companies, we often encounter the confession that the sales of the last quarter were not as high as expected, and, as a result, the share price and with it the owners' wealth decreased. The value of a company either increases or decreases, depending on its financial results. The results may be influenced by knowing the market and providing solutions accordingly.

In assessing the value and growth of companies, we are justified in claiming that shareholders have not exactly been satisfied over the last five years – stagnating growth, narrowing profit margins and limitations in finding new possibilities put top executives and marketing people under a great deal of pressure.

The executives and marketing managers of successful international corporations see the role of marketing as growing in the future (from the 350 FTSE enterprises, 25 companies with the largest value growth were chosen for the survey). In their opinion, marketing will play an important and increasing role: *a) in achieving a company's growth by finding differential advantage; b) by building up a client database and understanding their behaviour in order to meet customer needs and desires; c) by developing personalised solutions for each defined target group with the aim of building long-term relations and loyalty; d) by integrating the company's different business functions into the value creation process, e) by putting more emphasis on R&D and customer service processes, and f) by taking part of the top level decision making process in a company with other executives (KPMG 1997).*

Marketing is a Business Process Embracing the Whole Company

"There is only one source of positive cash flow. That is the customer. Everything else is expense." (Roger Best).

Yesterday it was possible to talk about marketing that relies mostly on qualitative arguments (erratic arguments about the consumer being satisfied, the growing market share and a soaring company value). Today, however, the market and the expectations of the owners insist on rational, value creating marketing plans. The question arises of how to provide value for customers and shareholders.

It should be possible to evaluate a marketing strategy by considering both the customers and the shareholders. Regarding the clients, it is satisfaction with the product or the service and willingness for repeat business that could be considered as the measure. As to the shareholders, on the other hand, the decisions that will increase the value of cash flow are of utmost importance.

The cornerstone for setting up a competitive company is to get as close as possible to the customer and to meet his needs in the best possible way. By the year 2000 *Amazon.com* had already been running its business for five years but still had not made a profit. The value of the company was \$20 billion – more than all the other American bookstores together. In the fourth quarter of the year 2001 *Amazon.com* made its first profit on record turnover and its share price rose by 21.85%.

The value of shares reflects the long-term concept – expanding the company infinitely. Record turnover is a sign of customer satisfaction – new clients keep coming and the already existing ones come back for repeat purchases.

Marketing management is one of the core business processes that is linked to all other activities in order to create possibilities to meet and surpass customer needs. The possibilities will appear only in co-operation with other areas of business. (e.g. purchasing, production, marketing, sales, service, etc. (Figure 1)). The basics of successful enterprises and organisations are not simply the products or services that meet customer expectations or the good work of the marketing team, but also, and foremostly, the market orientation of the company

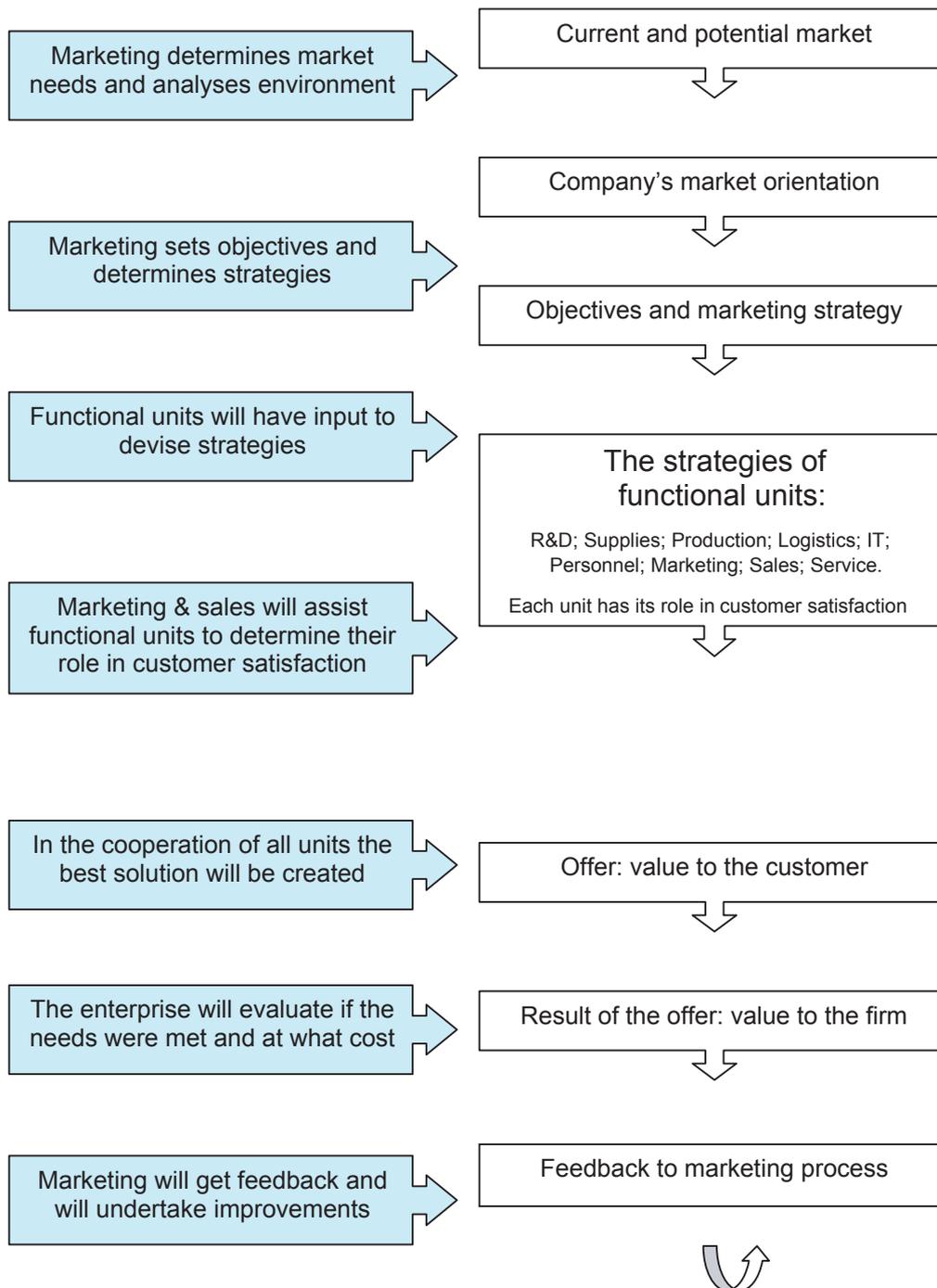


Figure 1. The role of marketing in defining and meeting customer needs. Author: Toomas Danneberg

– this might become even a competitive advantage, which is very difficult for competitors to copy.

All the different units within an organisation create value, the highest goal of which is to provide the customers with better solutions and to do it better

than the competitors. An enterprise must pursue the satisfaction of both, the consumer and the enterprise.

The role of marketing is changing. The new direction assumes that marketing will help define the

role of other units and activities in order to meet customer needs. Regardless of the characteristics of a unit, they all have a specific role within the process. The core questions will be:

- Are the activities of the enterprise market-oriented?
- Are all the employees aware of company goals to meet market demand, and do they know their role in the process?
- Do our current activities create value and satisfaction for the consumer and the enterprise?
- Is the enterprise able to perform the aforementioned tasks better than the competitors?

A modern and successful enterprise can solve these questions, provided that the task of marketing management is to build a bridge between the enterprise and the consumer. In other words, marketing management is an integrated process to better cater to the customer and to raise company value. Marketing management is relating the interests of each and every unit so that the activities aim at corporate goals.

The successful marketing team of tomorrow must establish a unique market-oriented company that contains:

- customer-orientation: the staff understand customer needs;
- competitor-orientation: the staff is aware of the competitors' activities and changes;
- teamwork approach: interdepartmental teams co-operate, creating value for clients and shareholders.

Marketing is the unit that, relying on market and financial indicators, should be able to determine needs and set feasible objectives. By doing so it is possible to devise scenarios in compliance with the market-environment. Thereafter it is possible for the board to make decisions and to delegate tasks to the organisational units, including marketing and sales.

It is a justified assumption that marketing is a cost unit until it can show real financial value to the enterprise. Unfortunately, marketing people may admit that they too easily accept the objectives and strategic choices coming from higher up the ladder, without being certain whether the objectives are possible to implement in such a way that

every dollar invested in the marketing budget will bring extra dollars in return. At the same time, we are well aware that the general reasons given by a marketing manager may not be sufficient. New approaches and means are needed to set objectives, to review strategies and to evaluate the profitability of marketing. One of the possibilities may be market- and value based marketing management.

Marketing-Based and Value-Based Marketing

Market-based and value-based marketing do not ignore traditional treatment. On the contrary, these add clarity, specify and focus on different issues as well as provide different possibilities for evaluating profitability. Most of the strategic propositions in marketing aim at advertising or at some other costly project, the aim of which is either to raise public awareness, to increase the volume of sales or to raise market share.

However, managers of an enterprise often feel sceptical and are liable to connect the aforementioned activities with long-term growth and profitability. Marketing has to indicate a clearer correlation between the money invested in marketing activities and the financial value of the company. If it is possible to prove that marketing management increases the growth of shareholder assets, acknowledgement from managers and owners is more likely to follow. Otherwise they will continue to allow me to say that the "Marketing Department is like the millstone around the organisation's neck" (Doyle).

For example, in September 2001 Tallinna Kaubamaja implied new strategic changes to lower the average price level. The move could probably be justified by the fact that Kaubamaja had falsely positioned itself in previous years. In scrutinising their data it becomes obvious that the goods carry too high a purchasing price. The fact of the nine months of profit in 2001 having been the lowest ever, speaks for itself.

It seems that the company's marketing activities were neither sufficiently market-based nor market-oriented. Further, no correlation was detected between the profitability of marketing activities and the financial value of the company reflecting the real influence of marketing strategies on the wellbeing of shareholders. The existence and satisfaction of loyal customers brought about

record growth, but shareholder satisfaction was not attained.

One of the main objectives of value-based marketing is to achieve both customer and shareholder satisfaction through profitable marketing activities (Figure 2).

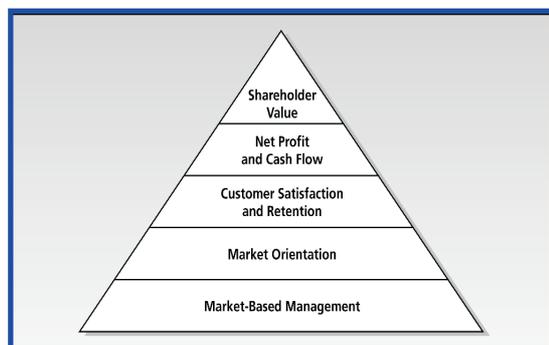


Figure 2. Market-based management and shareholder value
Source: Best, 2002.

How do we create and gauge value so as to satisfy everybody? To the dissatisfaction of marketing people we have to admit that there is no specific recipe. In spite of certain ingredients being the same, changing times and marketing demand innovation even in the kitchen. Preferences, habits and behaviours change. The aforementioned applies also to strategic marketing management.

How do we make a classic dish even more enjoyable and valuable in order to retain the satisfaction and benefit of both parties? It is claimed that the secret of new “spices” lies in redefining the term “marketing.” It also lies in redefining the strategies that increase the profit margin and that have a positive influence on company profit. Last but not least, the secret lies in the possibilities to evaluate the influence of marketing on shareholder value. There are two ways to increase company value: finding new growth opportunities and rationalising current business activities (Doyle 2000).

Peter Doyle and Roger Best, the innovators of value-based and market-centred marketing management, provide marketing people with new means. The essence of value-based marketing lies in the evaluation of the profitability of marketing management and devising value-raising marketing strategies. Value-based marketing is based on shareholder value analysis (SVA), the aim of which is to perfect value analysis and marketing management. According to SVA, the value of an

enterprise increases, provided the executives make decisions that raise the value of cash flow in the future (Doyle 2000).

An SVA at Coca-Cola led to the conclusion that its entertainment business was not contributing positively to shareholder value. As a result, it was spun off to a new firm called Columbia Pictures Entertainment. Coke’s entries into pasta, instant tea, plastic cutlery, desalinisation equipment, and wine all had return on investment of around 8 percent, far below the cost of capital, and were therefore dumped. SVA applied to the existing SBUs (strategic business unit) revealed that the Coca-Cola soda foundation was not contributing to shareholder value because the business was very capital intensive. Its return was only 12.5 percent, whereas the company’s cost of capital was estimated at the time to be 16 percent. Switching from an expensive, 5-gallon, stainless steel container to a disposable bag-in-a-box and to a 50-gallon container for the large customers reduced the assets employed and increased return to 17 percent. The cost of capital was subsequently decreased from 16 to 12 percent by adding debt. As a result, Coke’s earnings on capital greatly increased (Aaker 1998).

What options does SVA offer marketing?

- It enables a clearer definition of the essence of marketing and its role in business enterprises. The aim of marketing is to create and set up immaterial assets that raise shareholder value.
- It clarifies how to evaluate marketing strategies. Marketing strategies are worthwhile only if they increase the net value of low-term cash flow.
- It investigates in detail the influence of marketing activities on shareholder value. This, in its turn, complicates the making of arbitrary decisions concerning cutting marketing costs and budget. Several top executives of successful worldwide enterprises have realised that shareholders value the growth of an enterprise and the realisation of new market potential, rather than cutting costs. Nokia, Dell, GE, Cisco, The Gap, etc., have been market-based, market-oriented enterprises of rapid growth.

The necessity of the market based marketing approach devised by Roger Best is supported by the idea of Jack Welch: “Marketing is not somebody’s

responsibility, marketing is everybody's responsibility."

Market-based marketing management, in essence, is extremely rational and practical. Its cornerstone is the company's market orientation at every stage of the enterprise. Such an approach helps to avoid increasing marketing budgets. The marketing functions meeting customer needs are shared between the different functional units of the organisation, and everybody has the responsibility to cater to clients in the best possible way. Have you ever asked the employees of your department or other units what their role in catering to the clients is? Marketing does not manage other units, it co-ordinates and supervises the creation of value through market-based and market-orientated marketing activities in an organisation (Best 2000).

In addition to knowing the clients and competitors and teamwork approach, it is necessary to devise strategies that raise marketing margins and influence company profit. It is through the marketing margin that we can deduce the business profit expressed in marketing and this can be gauged either from the products, client's or market's point of view: *Net Profit = Marketing Contribution - Operating Expenses*.

The marketing manager is most interested in influencing the margin via different factors. Roger Best has developed six basic strategies. In order to influence profit, marketing has to develop a strategy that would help to achieve the highest possible margin most effectively as seen in Figure 3 (Best 2000).

Aside from the marketing contribution, it is important to foresee the possibilities of making the best out of the budget or to evaluate the efficiency of the budget, which can be viewed by relating the

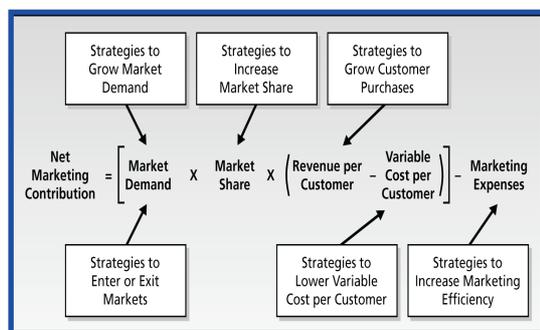


Figure 3. Fundamental market-based strategies
Source: Best, 2002.

marketing margin to the marketing budget. For example, if the calculated marketing margin of an enterprise is 14 million and the marketing budget is 7 million, then as a result each dollar of the budget will yield 2 dollars of marketing contribution. In other words, the marketing activities have been profitable and valuable for a company.

Lastly, market-based marketing management and the marketing margin must be in correlation with business profit and shareholder value (Figure 4). From figure 4 it is possible to demonstrate that marketing management creates value that is measurable from the point of view of shareholder wealth as seen in Figure 4 (Best 2000).

Derived from competitors' pressure, value creation and the importance of its increase are well represented in the competition of the beer industry. By looking at the Estonian beer industry, we can detect competition mainly between two companies, the Saku and Tartu Breweries, which hold 83 percent of the market share. The third market player is Viru Brewery, which launched a nation-wide brand, Frederik in 2001, with the objective of challenging the Saku and Tartu Breweries. All three companies are under the control of foreign ownership, but local leadership provides for successful operation and development.

Looking at the marketing activities of Estonian enterprises, one could be interested in how complicated it would be in the beer market of today to create value for shareholders via either the brand or the price.

For instance, launching the brand name Frederik stands for outstanding marketing communications. However, whether it was worth spending 10 million kroons is another issue. In the short-term perspective, it brought about a 3% growth in market share. It will definitely have an after-effect, but before and during the process it would be advisable to check whether the today's marketing budget will enable the results intended for the client and the shareholder.

On the other hand the leading companies in the Estonian beer industry, Saku and Tartu, which already have established strong brand names, are seeking opportunities to create value through new products and larger production volumes. Saku Brewery (49% market share in 2001) and A.Le Coq

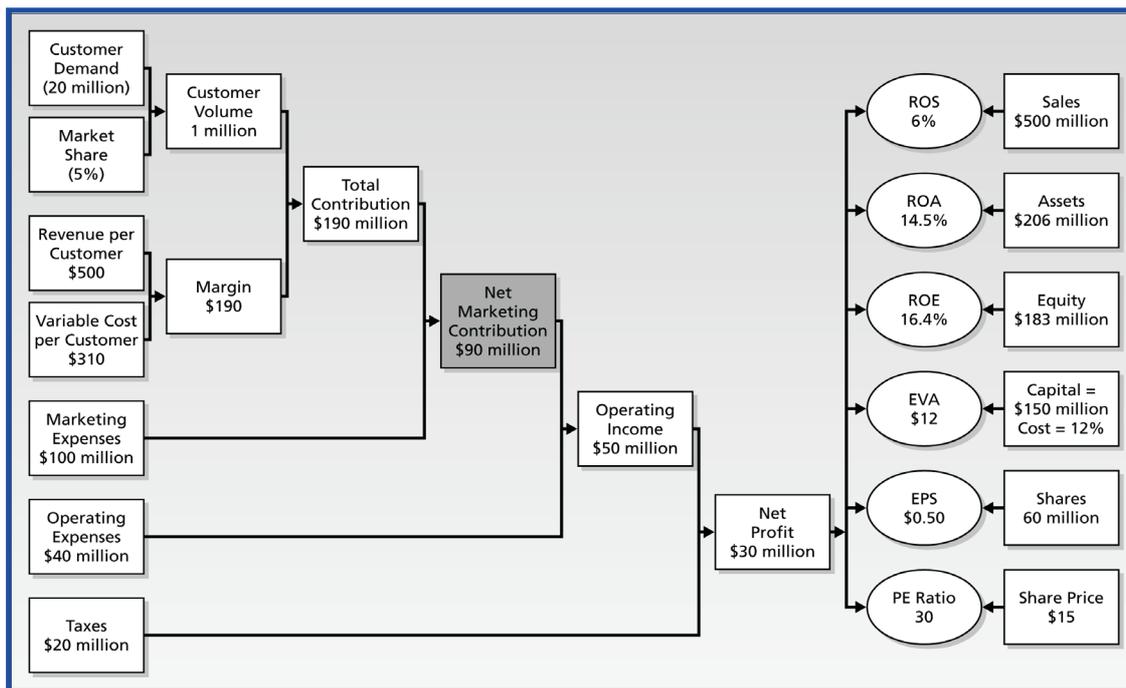


Figure 4. The impact of marketing strategies on shareholder value
Source: Best, 2002.

(34% market share) wish to ensure their positions. Saku sees its success mainly through effectiveness – increases in profitability – which stands for new products, more effective development, production and marketing process, thereby creating value for the customer and the owner. A.Le Coq is pursuing the possibility of increasing their market share.

Such a strategy may mean certain concessions in profitability in the short-term perspective, since gaining a larger market share will undoubtedly create more value for the customer and not the owners. But via new products and an effective marketing process it will also create value for owners in the long-term. Apart from new products, both breweries also invest in new equipment in order for the equipment to comply with demand and to increase volumes. Saku Brewery, whose aim is to retain the market share rather than to raise profitability, has taken certain measures. The product portfolio was reviewed according to product profitability. The aim is to produce and market products that create larger value, and secondly, to decrease operating and administrative costs, as a result of which the wealth of shareholders should rise in the long-term.

In correlating the starting points of market-based and value-based marketing, we will have new

means for marketing to prove its existence, create loyalty and become an essential element of creating value for the company.

Conclusion

In creating and assessing value through marketing activities in an enterprise, it is important to have milestones that help marketing professionals to develop a value-based marketing management process.

- Create a balance between customer and shareholder satisfaction;
- Create value through company growth and efficiency;
- Create an organisation where marketing is the responsibility of everybody;
- Create a unique market-oriented enterprise;
- Create and implement marketing strategies that raise profit;
- Evaluate marketing profitability through marketing contributions;
- Evaluate marketing profitability through the efficiency of the marketing budget;
- Evaluate the influence of marketing strategies on profit;
- Evaluate the influence of marketing strategies on shareholder value.

Summary

The increasingly global business environment is creating new challenges for companies in developed and developing countries. In evaluating a company's value and growth, shareholders have not been really satisfied with the results over the last decade with stagnating development and barriers to the discovery of new opportunities. This all puts a great deal of pressure on top management. It is understandable that a company needs to find new opportunities.

Therefore, managers have to start by defining marketing and its role in a company's activities. Secondly, managers have to define the marketing management process and its links with other processes in the company. The different marketing processes must create value for shareholders and returns on investments. How much marketing creates value for shareholders and gives return on investment is still unclear for many companies in the world. The main idea behind the new marketing concept is to measure all activities along with the marketing process and the strategies that create and increase value for shareholders.

The role of marketing in today's successful organisation is far more strategic than we imagine. Assuming, that both parties must be satisfied, marketing should create strategies that both meet customer needs and increase their loyalty. Marketing people may find it strange to consider the different financial indicators. But in the long-term it provides customer loyalty and more attractive possibilities for the company.

The executives and marketing managers of successful international corporations see the role of marketing growing in the future. Marketing management is one of the core business processes that are linked to all other activities in order to create possibilities to meet and to surpass customer needs. The possibilities will appear only in co-operation with other areas of business (e.g. purchasing, production, marketing, sales, service, etc.). All the different units within an organisation create value, the highest goal of which is to provide the customers with better solutions and to do it better than the competitors. An enterprise must pursue the satisfaction of both, the consumer and the enterprise.

The essence of value based marketing lies in the evaluation of the profitability of marketing management and devising value raising marketing strategies. Value-based marketing is based on shareholder value analysis (SVA), the aim of which is to perfect value analysis and marketing management. According to SVA, the value of an enterprise increases, provided the executives make decisions that raise the value of cash flow in the future.

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Integrated Design for Sustainability: Intelligence for Eco-consistent Products and Services

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Abstract

Sustainable growth/development is a challenging R&D area world-wide. Recent and future eco-consistent technologies should be built based on scientifically objective frames with social and economic issues and backed by political and legal rules. This paper presents some ideas on how to build a complex, intelligent framework to support the assessment of the complete life-cycle of products, processes and services, covering eco-consistency requirements. Industrial systems in the future will typically incorporate integrated design and flexible manufacturing for user oriented *extended* artefacts and should expand over *virtual* organisations with intelligence (mostly in the form of DSS: Decision Support Systems) covering the life-cycle of products and services using different AI tools with a certified visibility of environmental impact.

Keywords: eco-design, intelligence, product-service, functions-market, extended enterprise.

Introduction

Sustainable development is a basic concern for the preservation of recent and future quality-of-life. A large number of studies have addressed resource sparing, environmental protection, cleaner operations, waste recycling, etc., as the situation critically looks for new policies in the market of goods, to lower tangibles spoilage, by value-chain paradigms turned on intangibles. In that context, new trade

patterns are considered based on the *product-service* concept, where, a *product* is a material artefact and a service is a mainly immaterial function or activity, supplied to make the product useful. If they are combined together, the two could outperform the separate provisions (at least, aiming at eco-consistency).

Eco-efficiency, in fact, is becoming urgent demand, in view of the fact that the industrial growth has evolved with commodities consumption and greater impact on the eco-system; *sustainability*, then, is viewed as the ultimate goal for mankind survival, against total depletion of non-renewable resources. See the discussions and decisions of the recent (2002 September) Johannesburg world meeting, too. The current analysis shows three critical facts (Binder et al. 2001, Michelini and Kovács 2001, Richards 1997).

- Over-population: with needs rising, to reduce poverty and to improve living standards, fully *free-trade* conditions result to be unfair, and regulations, with potentials requiring local and global balances, need be fixed, as the earth is a closed system;
- Over-consumption: to break the link between economic prosperity and consumption of tangibles, the market should be addressed toward *eco-efficiency* by re-setting, recovery, re-cycling, etc. rules, modifying the trend as compared to the habits of the affluent society;
- Over-pollution: local and global environment effects increase from the accumulation of waste and emissions, with falls-off in poisoning the surroundings and bio-diversity losses, unless proper

bylaws are enacted to forbid given behaviours and to support *eco-compatible* solutions.

The analysis is sketched in an early (1987) report of the the World Commission for Environment and Development, WCED, where requests of new economic paradigms are stated for *sustainable growth, that meets the needs of the present population without compromising the needs of future generations*. The consciousness of incumbents leads to promote:

- Education programmes to explain the effects in overpopulation, over-consumption and over-pollution;
- International agreements to help harmonising sustainability acts, rules and bylaws, by that keeping fair trade;
- Appropriate research projects to look after *method-innovation*, enhancing the eco-efficiency of tangibles or moving them off, by means of *equivalent* intangibles.

The quality of future life and the increased attention on *sustainable growth* have many facets, distinguished into social-economical goals, political-legal rules and technical-scientific means. The consent backgrounds should establish, to define behavioural trends consistent with the goals of lowering resources consumption and turning off from the (largely advertised) affluent economy standards, with ceaseless replacement of goods whenever fashions modify; this does not necessarily brings to lower the quality of life, rather switching from an market grounded on trading tangibles, by a different one where the trading of intangibles dominates.

Then, to help stabilise these new social and economical goals, oriented actions have to be undertaken by governments to set a legal frame creating more conscious set-ups for development and forbidding the ways-of-life habits, with “not-acceptable” environmental impact. The enactment of bylaws and regulations is not without purports on a world-wide context, with benefit or damage difficult to assess as for local fall-off and time occurrence, unless coherent scientific frames and proper technical standard are used to measure direct and propagated effects. This motivated the support of R&D projects specifically aimed at a *method-innovation*, which will show coherent sustainability objectives.

Frameworks for Sustainability

In this section, hints on why growth sustainability will become the new millennium driving-motor are summarised. The *social-economical* framework is considered first, then the political-legal and, finally, the technical-scientific framework. The analysis shows that positive actions are requested to modify the current relationships; moreover, it suggests to aim at creating new reference standards:

- For moving the area of responsibility from *points-of-sale* to *points-of-service* by extended artefacts (service-reinforced supplies, leasing or similar agreements, etc.);
- For switching the market from *artefacts* to *functions* by consistent *product-service* delivery;
- For exploring eco-compatible patterns in the life-cycle of durables, by “*method-innovation*”, to aim at resource balanced exploitation.

The Social-Economical Framework

Centuries ago, the *agricultural* economy, based on selling *products*, consumed to satisfy basic needs, represented the main way to acknowledge the wealth of individuals or communities. The present *manufacture* economy is based on selling *artefacts*, consumed to satisfy an expanding list of needs. Both are sometimes referred as economies of *tangibles*, where effectiveness turned to different roles played by the exploitation of the natural resources and by the capability of expanding the labour productivity (according to the *industrial* revolution patterns).

The consciousness that our welfare is based on the consumption of non-renewable resources, suggests to look after different means to support the quality of life of future generations, and this results in “product-service” offers, to de-couple personal ownership from non-renewable resources consumption, with shift from supplying material artefacts, to providing substitution functions, satisfying all requested needs. The approach might by named *service* economy, and be based on selling *functions* to satisfy lists of special needs, overlapping the artefact embedded capabilities, required by the individual buyer.

The industrial revolution did not happen with self-explaining frames and foresight of inherent consequences. It, actually, progressively developed on the availability of *artificial* energy (as compared to *natural* energy), subdued to the human will as for the delivered quality and quantity. Even the reference word “industry”, completely changed its original meaning, from an abstract property related to the *diligent activity* of individuals, to the aggregate of manufacturing enterprises of subsequently developed business assets. The availability of *artificial* intelligence is the new pervasive occurrence, joining *knowledge* to *nature*, as originating wealth.

The *service* economy might be addressed to be more environmentally benign (by respect to the actual rate of resource decay), seeking options providing the clients with the equivalent (say, not changing the welfare level) functions, without dispersing the ownership of artefacts with non-reversible effects. This new service (*knowledge-based, intelligence-driven*) economy should maximise the effectiveness of the requested *functions* by the integrated management and allocation of the existing wealth (*nature, artefacts* and *knowledge*), aiming at longest activity span and highest use intensity of tangible supplies (*method-innovation*) (Krutwagen, Kampen 1999, Michellini, Kovács 2001, Suhas 2001).

The Political-Legal Framework

The market-driven profitability is bounded by the return on investment. The offer of goods is made in response to certain needs expressed by consumers or perceived by manufacturers, with shared benefits of buyers (satisfying their needs) and sellers (obtaining a gain from the activity). Sustainability leads to measure the effects on ecology, due to the decay of non-renewable goods. Tangibles depletion, moreover, increases environment burden and creates social costs, with profits restricted to the (free-trade) partners and with damages shared by people not guilty for resources consumption and surroundings pollution. The un-balance, once acknowledged, should be used as reference constraint to modify the users’ preferences and the suppliers’ earnings.

On these ideas, several propositions are worked out, mainly looking at establishing standards to measure all resources movements for provision of

client services (from extraction, to disposal), thus, the *spoilage* supporting the required service. The considered measurements are referred as: *TYPUS, tangibles yield per unit of service*, accounting the all material-and-energy flows activated along the life-cycle of the exploited artefact; they correspond, more or less, to the assumption that the depletion is assessed at the end of the artefact life (with account of net recovery). However, little has been done, up now, even if political movements (and *green* engineering) push to fix eco-consistency labels for the traded artefacts. The current habits, still, too much run in the opposite direction, according to the *use-and-dump* culture, due to pricing mechanisms that, in the majority of cases, do not facilitate resource saving and life-extension policies, see (Ausubel and Sladovich 1989; Friend 1994; Rasmussen et al. 2000).

A specific set of issues is generated by the diversity of the world, even if we restrict ourselves to Europe. Generally to most people Europe means the members of the UE, however there are at least three more groups to be taken into account:

1. The advanced, non-member states, who intentionally stay “independent”;
2. The candidate states, which are willing to join soon, within 1-2-3 years; and
3. The rest who are far from being able to join – independently of their wishes.

For these categories not only the political-legal framework, but naturally the social-economical framework and the technical-scientific framework should be investigated separately. If the whole world is the subject of our study the picture will be even more colourful and complicated.

The Technical-Scientific Framework

The technical-scientific framework is, finally, considered as the enabling means to create wealth on intangibles, by shared use of *artificial* intelligence settings. Computer technology plays primary role, directly, with the opportunities opened for new jobs and new products, indirectly, with the new industrial revolution options, turning *manufacture-* into *service-*markets. The practicability of eco-consistent set-ups depends on the availability of enabling technologies: these being *necessary*, not *sufficient*, unless the proposals social appropriateness economical return is assessed.

The trends show that main issues are *eco-consistent extended*-artefacts, with life-cycle visibility supported by *virtual* organisations. An *extended*-artefact modifies its basic technical properties in such a way to expand suppliers' responsibility up to the *point-of-service*. *Virtual* set-ups emerge as powerful aids due to e-functions: sustainability potentials are expected to enable *method*-innovation, supplying technological consistency to *intelligent* extensions.

Indeed, the characterising feature of the social assets we are looking for is to preserve the high living standards with balanced natural resources exploitation. Information technology is a recognised instrument, by which a new primary production factor (out of capital and labour) will add, giving rise to *knowledge-based* artefacts. These develop on a mainly neutral way, as far as non-renewable resources are concerned, since the value-chain builds on intangibles. The primary production factor 'knowledge' has also a very relevant impact in restructuring the engineers' activity.

With industrial organisations aiming at the economy of *scale*, the productivity gains concentrated on the (material) manufacturing phases; now, aiming at the economy of *scope*, critical contribution comes out from the capabilities of conceiving fit-for-purpose offers, with the efficiency of the *integrated design* patterns. The implementation of eco-design procedures follows, with falls-off on artefacts life-cycle (pre-setting monitoring tools and environment protection aids, with connected testing and control services), (Bras 1997; Graedel 1997; James 1997; Kriwet et al. 1994).

Application of intelligent tools and means for the design, simulation and operation/evaluation of advanced manufacturing systems was one of the main targets of research in IT and manufacturing. Some examples: (Ettlie et al 1994; Kovács 1996; Groumos et al. 1997; Kovács et al. 2000; Sárközi et al. 2002). Hybrid software systems, agent based systems and mostly knowledge based systems were developed, and applied, not always successfully, as gathering and structuring the available knowledge is harder to do as just to imagine it.

The concept of *virtual organisation* is tightly dependent on the availability of the co-operating infrastructures and related new ways of managing

industrial business. The infrastructure-based set-ups are deeply modifying the development trends. An information infrastructure is the technical support for co-operation, with different ranges of interoperability between the partners sharing the facility. The evolution aim at behavioural autonomy, with federated govern for conflict resolution. The net organisation is itself a service, with high added value in intangibles, having domain knowledge in legacy systems and information intensive features of flexibility, agility, reconfigurability, etc., so that the instrumental support of supplying commodities and utilities is readily modified as requests arise (Frederix 2001; Michelini and Kovács 2001; Suhas 2001; Thoben et al. 2001).

European R&D Activities for Sustainable Growth

When the technical-scientific framework is considered, scenarios do not turn, by themselves, to optimistic perspectives. Potentialities of knowledge-based organisations are readily recognised, with direct implications to create new businesses in the areas of information and communication industries, and with indirect instrumental ability to modernise the traditional businesses, by granting manufacturers and clients inter-linking aids. However, the effects on sustainability are not evident, unless key actions are reported to governments for educational-cultural purposes and for research-development issues. Thus, sustainable growth, rather than at narrow highly-oriented targets, shall first address broad-band eco-compatible goals, as the following preliminary guesses suggest.

- Research needs international spreading: in a world-wide market, sustainability rules cannot be confined in a country; the EU has already dealt with key actions in the 5th FP, particularly with the *Growth* work-programme, and more incisive actions are expected with the coming 6th FP. The extension of collaboration agreements with American countries, European partners and other countries involved in intensive exploitation of resources, is worth, on condition to have protocols of expected issues and chosen priorities, directly addressing sustainability.

- Combined issues are expected for the technological developments; - the instrumental aid of computer technology and related information infrastructures; - the contribution to up-date industrial aggregates and related supporting frames. The latter requires proper means from the former Attention, nevertheless, shall be concentrated on fixing patterns for *TYPUS* or other measurement method, to assess *resource* efficiency or *impact* severity.
- The *extended-artefacts* field, linked to individual or social needs, has to be addressed, in view to establish sustainability-consistent *service* markets, as the target is to preserve life-quality, while lowering resource decay. Research priority will be on designing and developing fit-to-purpose *product-service* offers. Knowledge provides enabling tools, e.g.: integrated design, virtual set-ups, eco-efficient techniques (for construction, for life-cycle, for recovery), condition monitoring up-keeping, waste re-processing, and so on, as far as problems are considered from the suppliers point of view.
- Sustainability requires proper checks of return on investment looking a little ahead, out of the success of individual R&D projects. For the stability of a *service* market, the setting of *fair trade* conditions is critical step. Namely, effective testing, certification and accreditation bodies shall develop to support objective measurement, assessment and ranking of delivered *products-services*, and need to be put in the supply chain with explicit regulation duties.

These guesses assume that transition toward sustainability requires deep change in industrial culture, focusing business ideas on *product-service* delivery and in increasing involvement of small and medium enterprises (SMEs).

Several Fifth Framework projects (as EPSYLON, PLENT, FLUENT, WHALES and others, see: Michelini 2001, Kovács et al 1999, Kovács, Paganelli 2001) assisted members of the community to better understand and apply co-operation of SMEs not only in manufacturing, but in assembly and disassembly, and even in reuse and dismantling, etc. as well. On the other hand co-operating management,

services, supply-chain issues, ERP problems, etc. were subject of R&D, too.

R&D Programmes for Sustainability

The analysis turns to the core aspects of *service* markets, aimed at technological sustainability. The matter is viewed from an engineers' standpoint, looking at feasible innovation with economical return. Clearly, social and political frameworks are critical prerequisites, but focus on technical and scientific means provides coherence to R&D programmes, linked to available technologies or to readily enabled options.

Today, the industrial activity benefits of using information processing by computers aids. The trend brings forth similar work-organisations, the *intelligent factory*, when not simple 'information', rather structured 'knowledge' is processed. Emerging option will be the ability of *automatically* solving sets of engineering problems by *knowledge* processing (select, evaluate, classify, co-ordinate) further to *information* processing (check, store, communicate, manipulate).

The efforts to automate engineering activity have often been casual, limited to plain technical facts; more formal procedures should evolve, to deal with the life-cycle visibility of complex artefacts, from ideation to planning, design and construction, utilisation and dismissal, within eco-consistent frames. Future engineer's commitment should, thus, account of *intelligence* share, with joint purposes: . to improve ideation/manufacture efficiency of artefacts; . to offer life-cycle support for the delivered "products-services".

Toward the Product-Service Market

The inclusion of *artificial* intelligence into traded goods, with incorporated data processing and classification, life-cycle monitoring, knowledge build-up and action setting forth abilities, allows fit-for-purpose setting at users' whims, merging concept developments and technological process into unique functional precepts of (actually delivered) extended-products.

The issue is consistent with dematerialising the new-economy staples, based on the value added as inherent intelligence, e.g.: *credited* native quality,

assessed on-duty reliability, certified eco-consistency or any acknowledged property testifying the users' benefits and the technological sustainability. The trend opens puzzling scenarios and, possibly, alternative outcomes can be devised. The very same *product-service* pair suffers contrasting accounts (Michelini and Kovács 2001; Michelini et al. 2001):

- On one side, manufacturers could be spurred to keep in charge the all *service*: artefacts supply, life-cycle performance and dismissal incumbent, so that the trade regulation would depend on single indentures;
- On the other side, independent enterprises could take benefit by safety rules and environment acts expansion to become *service* dealers, with product oriented qualification and infrastructure-based organisations.

The Designers' Concern for Eco-Consistency

The eco-design, to grant that sustainable technologies are followed, is viewed as engineering option supported by intelligence-driven set-ups. Better understanding of the trend can be obtained considering the changes in the industrial artefacts market, from ideation to dismissal, exposed to the information technology. For *factory* automation, computer-aids in engineering are well linked to *intelligent* work-organisation and decentralised decision manifolds, so that the value-cycle is readily extended to new figures, e.g., *resource* and *technology*, besides *labour* and *capital* efficiency.

For *design* automation, aiming at the economy of scope, simultaneous engineering and co-operative knowledge processing profit from distributed intelligence blocks, to reach problem solving goals with broadband acknowledgement of alternative set-ups. Special interest deserves *digital mock-ups* and *expert simulation* tests (based on algorithmic and heuristic knowledge architectures) as development-tool, for life-cycle checks done, since the design phase, on *virtual* set-ups.

The Integrated-Design Patterns

Earlier work-organisation, aiming at scale economy, required the optimisation of the scheduling plans, to avoid every hitch in continuity of productive flows. The present work-organisation, for the economy of scope, exploits the *integrated design* options. In terms of entrepreneurial policy, this means to combine all steps at the design stage (from ideation of users driven artefacts, to life-cycle concern of regular duty, maintenance and dismissal), balancing technical and economical properties of the offered items on a *product-service* scheme, with attention on every effect (eco-consistency included).

As for effectiveness, *integrated* design means a multi-disciplinary approach, combining technologies (mechatronics, etc.), to obtain functional devices with proper value/cost ratios. External

| IMPACTS | GENERATING ATTRIBUTES |
|-----------------|---|
| Profitability | <ul style="list-style-type: none"> • return-on-investment assessment • operation reliability figures • net present value figures |
| acceptance | <ul style="list-style-type: none"> • customer's satisfaction • quality function deployment • market-share betterment |
| consistency | <ul style="list-style-type: none"> • inventory management, lead time control • technological versatility • efficiency of integration |
| effectiveness | <ul style="list-style-type: none"> • productivity, delivery schedule performance • flexibility management • condition monitoring maintenance |
| appropriateness | <ul style="list-style-type: none"> • labour loading performance • training requirement • motivation, commitment |
| sustainability | <ul style="list-style-type: none"> • eco-consistency of technologies • life-cycle eco-compatibility • product dismissal eco-compatibility |

Figure 1. Example impact analysis of the economy of scope frames.

(life-cycle visibility) and internal (lean manufacturing) reasons motivate to formulate the engineering activity, with critical concern for enterprise effectiveness, as unit design costs rise to non-negligible amounts when fit-for-purpose products are considered.

Integrated design moves by impact analysis goals, Figure 1, and on extensive use of checks by digital mock-ups, since the tests in virtual reality provide explicit assessment of the hypothesised relations. The information build-up extrapolates the life-cycle, according to the chosen frames (*causal*

orders and *behavioural* modes). With AI aids, the logic relations are modelled on a judgmental basis that factually affects the parallel pre-set of deep knowledge schemes; the functional dependence, in the knowledge context, indicates interaction between entities without implying closed-form causality; therefore, the expert-modules in engineering provide a human-like progression, as compared to purely algorithmic strategies.

The expert-simulation refers to set of modelling concepts presenting mixed dependence on the declarative and on the procedural knowledge, e.g.: \diamond type definition for entities, by complex conceptualisation objects: 'attribute-value-belief'; \diamond context-driven decisional manifolds, for shallow-knowledge behavioural processes; \diamond implicit de-allocation of non instantiated entities, to actually fix the process strategic flexibility; \diamond type hierarchies for relationships, with possibly steering agendas to establish priority figures; \diamond situation-driven state transforms, for deep-knowledge structured models; \diamond message-passing co-operation and flag synchronisation, to exploit tactical flexibility; \diamond function specifications for the continuous interactions between concurrent processes; \diamond situation updating performed by scheduled or by conditional occurrences; \diamond dynamic allocation and reallocation of entities, to enable on-process operation flexibility (Michelini, Kovács 2001, Michelini et al 2001, Richards 1997).

The Manufacturers' Concern for Eco-Consistency

Productive efficiency is the basic challenge to grant competitiveness of manufacturing aggregates. R&D projects have been run for advanced design, engineering and construction technologies, aiming at intelligent manufacturing and processing, at eco-efficiency by cleaner processes, at artefact recovery and waste re-cycling, etc., so that innovation is fostered as for machinery and production equipment, as for computer-integration and quality monitoring, as for artefact upturn also in view of sustainability.

These projects have efficiently dealt with the *manufacture* market and (quite recently only) with preliminary aspects of the *service* market. The focus on *intelligent* factory (directly and, much

more on the related instrumental information aids) have contributed to address the economy of *scope*, as winning organisation by respect to the earlier

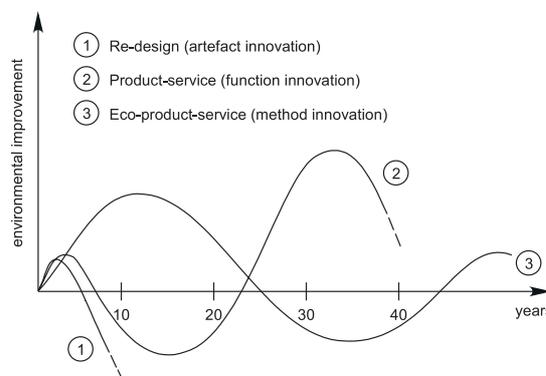


Figure 2. Eco-improvement trends of technology innovation

economy of *scale*, having corporate finance and manufacturing facilities for maximum outputs, so forth as the mass deliveries find buyers, according to the J-B. Say rule. The criticality of *method*-innovation stems from the lack of univocal technical leading strings.

In fact, by economy of *scope*, world-wide higher efficiency is achieved. If products and services are provided more efficiently (in terms of money), this will release wealth, which could then be used to, by increased offers of the same or other types, establishing the (so called) *rebound* effect, (Fig. 2): some earning (money saving) of efficient deliveries comes back, enhancing greater consumption.

The *rebound* effect is not a problem in cases where the product-service provision is inadequate. Within the affluent society, in front of higher standard of living, increased consumption will lead to higher environmental burden, and the productive effectiveness co-operates to increased resource decay. The extent of *rebound* effects can only be analysed on a case-to-case basis, and alternative guesses try to mitigate the final issue, showing that savings shall always bring benefits. In that context, the *method*-innovation will characterise by technical choices with rebound not affecting sustainability: the neutrality will depend on selective links between earning and resource accounted sparing (by means of TYPUS or other similar metrics).

Anyway, we have to introduce, straight away, the careful assessment of *resource* productivity, to rank the manufacturing eco-compatibility; and then only, we might start to investigate *method*-innovation with negative *rebound* effect. The

manufacturers' concern for eco-consistency, after these short considerations, should deal with three points:

- ◇ (artefact-, function- and method-)innovation, by that requiring enhanced focus on the ideation of new offers (*extended-artefacts*, etc.), within the lines of the integrated design;
- ◇ increased production effectiveness by adaptivity (flexible automation, etc.) and leanness, with account of the *extended* enterprise infrastructures;
- ◇ up-dated description of manufacture delivery, with account of the all *primary production factors*, adding knowledge **K** and consumables **M**, to the (traditional) labour **L** and capital **I** contributions.

The Flexible-Automation Abilities

Enterprises, looking at purchasers' oriented and eco-compatible supply, deal with time-varying delivery, and (for the economy of scope) extended mixes of items need be processed in parallel and shipped by quick-response schedules. These requirements are met by the intelligent factory, having resort to: • recovery flexibility, to face discontinuities and emergencies with technological versatility; • tactical flexibility, to control steady process schedules, nearby optimal productivity; • strategic flexibility, to manufacture extended (market requested) varieties of items. The shop information-system is basic structure, for govern actions driven, according to the enterprise strategy, by process monitoring (execution adaptivity) and

time-to-market opportunities. The manufacturing equipment can either exploit *modularity*, to make possible the off-process plant setting and re-setting, either *robotics*, to achieve native on-process versatility.

The choice of the set-up deals, (Fig. 3) with the control *levels* (supervisor, scheduler or actuator); with the manufacturing *facilities* (plant, section, device) and policy *ranges* (to organise, co-ordinate, execute); and with flexibility *horizons* (strategic, tactical, recovery). The assessment of real performance can only be metered by monitoring flexibility effects, for actual running conditions, comparing alternative capacity allocations and using management-control-command functions.

To set the govern logic, the connection among flexibility and its effects is described by decision-cycle models; these illustrate the coupled nature of decision-making in flexible-manufacture and specify the role that measured facts (current inventory, averaged flow-time, etc.) play on the plant effectiveness. The merit of each scenarios depend: - on the lay-out appropriateness and leanness (components, facility-configuration, control); - on the planning versatility and adaptivity (monitoring, decision-manifold, management), (see Michelini, Acaccia et al. 1989; Michelini, Acaccia et al. 2001b, Michelini and Kovács 1999).

Once the market goals are acknowledged, the intelligent factory looks for the most effective setting of the resources, avoiding the diseconomies of exaggerated sternness of optimal layouts. The flexibility, indeed, exploits adaptivity, distinguishing range and horizons, so that: • at the *organisation*

| | Facilities | Ranges | Horizons |
|------------------|------------------|---------------|------------|
| | Framings | Actions | Functions |
| Supervisor level | Enterprise/Plant | Organisation | Strategic |
| | Setting | Planning | Management |
| Scheduler level | Section/Cell | Co-ordination | Tactical |
| | Fitting | Scheduling | Control |
| Actuator level | Station/Device | Execution | Recovery |
| | Monitoring | Enabling | Command |

Figure. 3. Hierarchical material/information layout

range, the overall production agendas are planned, according to the enterprise policy over the full *strategic horizon*; • at the *co-ordination* range, the chosen product mix is scheduled on the available lay-out, for maximising the delivery on the *tactical horizon*; • at the *execution* range, the (planned or unexpected) discontinuities are over-ridden on the *recovery horizon*, by means of resources versatility. Actually, the abilities of flexible automation are largely prised. The competitive success of European enterprises depends on their ability to anticipate and better respond (in short time) at small costs (leanness), to changing consumers' needs in fast moving markets. Facilities optimisation in all phases of their life-cycle is important feature also in view of sustainability, and, reciprocally, flexibility is basic aid to that purpose.

Several – partly EU supported - projects deal with different important aspects of flexible manufacturing (Kovács and Mezgár 1998; Kovács and Paganelli 1999; Mezgár and Kovács 1999; Mezgár, Kovács et al. 2000) and in general with paradigms/problems of manufacturing automation (Kovács et al. 1996, Kovács 1996a; Kovács 1997).

The Primary Production-Factors

The enterprises' effectiveness comes out from transform operations performed on concurrent physical and information flows, established with resort to assessment frames of integrated design procedures, based on available know-how, commodities, work-force and capital assets. The current description assumes that the enterprise delivery figure, Q , is definitely specified by two primary production factors: capital C and labour L , with throughputs transformed into artefacts or services, freely substituting capital for labour anywhere, without affecting the results. Changes in technology, knowledge or know-how simply modify productivity of tangibles processed along the material flow. Raw materials, utilities or commodities are attainable resources without limits, as the affordable development trends are left undefined.

The considerations up-now developed suggest updating the model, assuming new factors, to become consistent with service economy, where the product-service pair depends on information bases and sustainability checks require assessing resource efficiency. Thereafter, the enterprise delivery Q

becomes the combined issue of four primary factors: investment I , labour L , technology or know-how K and tangible resources T , according to the balanced compromise:

$$Q = a_0 K \cdot I \cdot L \cdot T - a_1 K - a_2 I - a_3 L - a_4 T$$

Lack of any of the four factors means negative outputs; synergetic effects are enhanced when any single factor does not dominate (Grilliches 1997; Lamberton 1971; Laudon 1996; Michelini and Kovács 2001; Orlikowski 1992).

The new model presumes direct concern of sustainability bounds for energy saving, pollution avoidance, natural goods preservation, and the likes; these bounds introduce the concept of resource *efficiency*; the replacement of material goods is a cost to society, with non-negligible environmental impacts, that shall be endorsed by the benefits holders (and not poured out on the community). The fact is dealt with by the scaled factor T , and the implications are discussed several times in the paper. The explicit concern of technology K has different falls-out at the levels of design, manufacture and sale, dealt with, as for *trade fairness*, by quality engineering rules.

As a matter of fact, *quality* was originally defined as '*conformance to specifications*', binding the design (technical specifications files) with approval testing of artefacts; quality functions deployment or similar company-wide quality-control set-ups are later recognised as contrivances to improve efficiency, through zero-defects production; it is now referred to, as '*fitness for purposes*', with focus on users' requests. The last definition can be ambiguous, unless quality is measured according to standardised methods, within the frames of legal metrology. This leads to "certified quality", with assessments established by third parties (as compared to sellers and buyers).

At the same time, technology appears as a primary transformation factor, affecting the throughputs of industrial organisations. The matter can be looked as well, saying that *quality* is (technically) specified at the design (conformance to specifications) or at the marketing (fitness for purposes) steps, if reference standards are defined. Now, for logically connecting effectiveness up-grading and investments in computer-integration, quantitative achievement functions shall be stated, for detailing impacts and returns of fixed assets and served duties. By that

way, quality engineering becomes the meaningful go-between for company-wide information set-ups, and, to assess the value build-up of the delivered artefacts, the embedded technology has to be accounted for as primary production factor.

Virtual Organisations and Knowledge-Based Supply Chains

Virtual organisations (extended enterprise in a certain sense) emerge, in the technical-scientific frame, as relevant option for world-wide competition. Companies focus on their core competencies and join the efforts with others for co-design, co-manufacture, co-marketing, co-maintain, co-servicing and co-recycle, in view to fulfil the requirement of supplying *extended*-artefacts at clients' benefit and environment safety. In a co-operative cluster, every partner is just a *node*, adding some value to the networked business, and a *step* of the supply chain. A *virtual* setting is a *factual* alliance of companies, that merge together to share skills and competencies and to inter-link facilities and resources, in order to better respond to business opportunities.

The above issues, and practical aspects of virtual organisations composed from SMEs, and from big enterprises are investigated in several papers, often publishing findings of joint EU projects (Kovács and Mezgár 1998; Mezgár and Kovács 1998; Kovács and Paganelli 1999; Mezgár and Kovács 1999; Mezgár and Kovács 2000; Kovács and Paganelli 2001).

Actually, an *extended* enterprise answers to the challenge of globalisation, and strictly not to the urgencies of sustainability: the need to remain competitive and the availability of information and communication technologies suggest that, to become 'world-class', a company could focus on its core business and group foreign know-how and resources to achieve extended business scope. The option, although enabled by existing hardware/software instruments, needs be assessed on a case-to-case basis, to design and develop the targeted co-operation infrastructure, with supporting platform, effective protocols and exchange rules.

Information-Driven Eco-Setting and Assessment

Besides hardware of information and communication aids (*extended* enterprise), the software of engineering-like concern has growing relevance, since it provides visibility for the artefacts life-cycle. A knowledge-intensive set-up improves effectiveness, particularly, when the attention is focused on *product-service* goals. The evaluation of performance advance, achieved by integrated design, requires specifying technical and non-technical figures and the related decision manifolds. Lots of tools are today available, expanding the CAD and PDM potentials also outside the initial fields, to cover the interfacing to users and controllers, with feedback to designers Kriwet et al. 1994).

In fact, sustainability is satisfied by integrated design accomplishments, showing how ecology concern is dealt with, as for materials choice, energy saving, waste avoidance, etc. - along the manufacture process, by inner-enterprise duty; - during the artefacts use, up-keeping, refurbishing, etc., by teaching the users with the operation and maintenance guide; - at recycling or discharging of worn-out/damaged items and scraps, by properly detailing environmentally-safe incumbents. The knowledge-intensive frames of integrated design are a complement of the *extended* enterprise organisation, assuring instrumental support to sustainability; then, the branch of *green engineering* develops, fostering technology product and service innovation, with market-driven requirements (to win new buyers', facing world-wide competition) and official bylaws (to satisfy the enacted running and dismantling rules).

Basically, the *value* of the life-cycle visibility increases, when related to fair-trade contexts or reported to compulsory requests: general principles are issued (e.g., by CERES, Coalition for Environmentally Responsible Economies) and several organisations and companies include *green*-guidelines as standard design constraints, to be allowed to use eco-labels, testifying the conformance to compulsory prescriptions or the achievement of high sustainability records.

The Consumers' Concern for Eco-Consistency

Buyers/customers are interested in the actual exploitation of the purchased items (artefacts or functions); the interest is shared by providers, in front of life-cycle point-of-service coverage. It turns out that today delivered supplies (products and services) are more and more equipped with instrumental aids to grant safe operation by trend monitoring up-keeping. Safe-running and reliability are not *a priori* requirement, rather figures to be assessed and enabled for running situations, after diagnosis and restore. On one side, performance visibility, failure-forecast control, life-extension expedients, etc. are integrated design topics. The operation transparency and data recording are feasible and cheap additions, protecting against abuse or misuse. With a similar setting, on the other side, the ecology acts are automatically carried out, through, when required, patterned constraints visibility for control bodies.

Proper progress, this time, means that the added costs in instrumentation are object of agreement between the parties and are balanced by the factual benefits of weighing the *a priori* reliability and recovery settings contrivances and of proving, with documentary evidence, the smart behaviour of every one (supplier, user and controller).

The discussion based on merely technical aspects is certainly too simplistic. Changes in the consumers purchasing habits require modifying the social structures (after *method*-innovation), that determines current individual needs, and this involves assessing product *extensions*. But, the ecological consequences raise further question marks. Most of the direct environmental impact results from the activities of established institutions; these fix the consumption patterns and social structures, with range covering: instrumental aids (facilities, equipment, logistics, technologies, etc); human structures (individuals and their well-being, with out-comes from education, training, etc); social lay-outs (cultures, procedures, traditions, orienting the decision-making). These are mainly non-technical conditions, still they need be carefully acknowledged.

On the technical side, as well, several facts make difficult to deal with alternatives, since we are *manufacture* market minded, and consumers, gen-

erally, belong to low receptive areas. Thereafter, appropriate information and training programmes should be run: - at an initial stage, only consumers from target groups could be involved; - in parallel, social infrastructures should be established, to help recognise advantages and drawbacks.

The involvement of stakeholders has to be weighed against environment effectiveness; indeed, the expected eco-consistency (as forecast by integrated design) is a theoretical guess; actual issues (in front of unexpected interpretations) might considerably differ. The presumption that people is more interested in using goods and profiting of *functions*, than in possessing items, is questionable; it is also questionable that the ownerless consumption offers eco-advantages. If prices would become too low, consumption could dramatically increase, due to rebound effects, unless *method*-innovation leads to neutral choices in terms of eco-consistency.

The analysis is not complete at all, and the relationship with sustainability requirements needs deepening. We come back to *method*-innovation; the consumers concern appears with social implications, empowering the consciousness about natural resources depletion and with individual abilities to exercise the purchasing power, in order to affect the life-cycle stages toward more eco-conservative product-service offers. Today, purchasing decisions that favour a product-service with lower impacts in resource provision, in life-cycle use, etc., with properties that facilitate reuse or recycling, etc. are *qualitative* behaviours, mainly steered by emotional guess. *Resource* efficiency figures or *tangibles yield per unit service* label are suggested hypotheses: no established standard is available, to perform assessments; no testing body exists, to oversee and control, with generality of competencies. The situation may change only if targeted R&D projects are run with adequate concern on acknowledged metrics and certification infrastructures.

Conclusions

The frames of the technical development based on the conventional *manufacture* market could not propagate indefinitely, as wealth generation is tightly linked to the decay of existing tangible resources. The hypothesised remedial way-out looks after *service* economy set-ups, where users'

needs are satisfied by supplied functions, avoiding instrumental artefacts, directly owned by single consumers. The social and economical sides of these set-ups are not without hindrances; the legal and political sides still face severe questions; in general, careful bylaw need be enacted before even that the switching from *manufacture* to the *service* economy could establish.

Limiting the analysis to the scientific and technological sides, the path to sustainability is directly linked to the second industrial revolution, grounded on *computers*, and basically aiming at a new way of creating wealth by means of *intelligent* artefacts, whose value is principally out-coming from intangibles. The analysis shows the critical involvement of engineering activity, for the design of totally new goods, typically referred as *extended*-artefacts. The issue requests: *artefact* innovation, to improve the delivery effectiveness; *function* innovation, to create such new items as 'product-service'; *method* innovation, to balance sustainability by the carefully exploiting resources.

The stressed "extension" is basically connected to the *information* and *communication* facilities and related knowledge-based infrastructures. A straightforward notice would recognise the options offered by clustered companies, co-operating interfaced on web-based networks. The benefit of common information infrastructures has been properly assessed to support designers, suppliers, etc.; moreover, the option is here addressed to support communication with buyers and users and to establish effective links with supervisors and controllers, in view, in particular, of the incumbents on the environment protection and resource preservation.

To that purpose, specialised research activity exists in domain of virtual organisations and extended enterprises with shared information infrastructures, to foster technological developments, to assess business practices, to establish tools and standards, or, in general, to provide effective surroundings. On these premises, the information-driven *green-engineering* incumbents develop, by means of:

- conceptual design of *extended*-artefacts, assuring *fit-for-use* customers' satisfaction;
- *life-cycle*-design approach to achieve economy-of-scope, minimising resource spoiling;

- information infrastructures providing full visibility up to the traded goods *point-of-service*;
- *extended*-enterprise set-ups assuring transparency of certification bodies assessments;
- knowledge-based aids to train people toward the *smart* use of *smart* products.

The centrality of the designers' concern for sustainability is critical in achieving proper *extended*-artefacts, linked to auxiliary infrastructures (e.g., the virtual organisations incorporating ecological certification means or information infrastructures for the artefacts life-cycle monitoring and control) and enabling technologies (namely, integrated design and networked businesses). The designers' duty is primarily engaged in conceiving *smart* products and in specifying *smart* operation guides; to that purpose, the *TYPUS*, or similar metrics, shall be addressed to express the resource efficiency and to look after true prices with included eco-consistency costs. The technical coherence of *smart* goods and *fair* trade rules will train consumers to aim at eco-consistent choices and environmental respectful behaviours; on these grounds, branches of *green-engineering* are, in fact, expected to develop, on condition to look after scientifically sound objectives, grounded on acknowledged standards.

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Moral Underpinnings of the Precautionary Principle

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Abstract: The concept of the precautionary principle has emerged out of Western European public policy in an effort to forestall future environmental problems. In its simplest formulation the precautionary principle requires the originator of a proposal or a product to ascertain and account for the potential or risk for adverse environmental impacts prior to introducing the product or implementing the plan – essentially look before you leap. It is becoming an important element in the emerging principles of sustainable thinking in the European Union but has received little or no positive attention in the United States. In this paper I will investigate the moral reasoning that supports the precautionary principle and its major criticisms.

Introduction

The purpose of this paper is to explore the moral reasoning that may exist in support of the precautionary principle or its alternatives. An introductory description of the principle and its criticisms is provided for background purposes, but it is not intended to be an exhaustive exposition of the issues or arguments that surround this topic. Among literature there is wide acknowledgement on both sides of the issue that the precautionary principle is a values-based concept. A definitive analysis has not been completed largely because of the lack of a clear nomenclature and related semantic problems. It is not surprising then to find that there is actually very little written about the moral reasoning in support of precaution as a principle. The objective of this paper is to offer a preliminary analysis.

Background

It is difficult to identify with any precision where the precautionary principle first took form as an articulated concept, but the idea of caution is as

old as nature itself. Precaution implies forethought or anticipation, a choice where alternatives are distinguished from one another by a degree of risk or perceived hazard. It is a choice between two different acts rather than a choice between inaction and action. As a defined concept in public policy the Precautionary Principle (PP) is most often described as having emerged in Germany in the 1970's.

This is believed to be a reflection of a growing concern with environmental quality. In the years that followed it was incorporated into a number of international treaties and agreements, most notably the Charter of the European Union and the United Nations Conference on Sustainable Development (Morris 2000, 1-5). This paper does not include an exhaustive exposition of the literature or criticisms of PP however some limited discussion is illustrative.

There are any number of definitions for PP, however, the most common one emerged from the Wingspread Conference in 1998 (Montague 1998):

When an activity raises the threat of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships have not been fully established scientifically. In this context the proponent of the activity, rather than the public, should bear the burden of proof.

Another key definition is the language incorporated into the Maastricht Treaty that laid the foundation for the European Union. Article 130R(2) reads (Morris 2000, 6):

Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on principles that preventative action should be taken, that environmental damage should

as a priority be rectified at source and that the polluter should pay.

Such a concept stands in stark contrast to the market-based approaches of the past where a product or service was introduced and the public bore the risk and cost of determining the risks or hazards associated with it. Product safety most often was a function of imposed regulations, economic risk assessment of the costs of liability or market pressure of various forms. The precautionary principle stands the principle of *caveat emptor* on its head in so far as environmental impacts are considered. Predictably such an effort is controversial.

Christianson has observed that in its current form PP embodies six principles (Boehmer, Christiansen 1994):

1. Preventative anticipation: "a willingness to take action in advance of scientific proof of evidence of the need for the proposed action on the grounds that further delay will prove ultimately most costly to society and nature, and, in the longer term, selfish and unfair to future generations".
2. Expanding or improving the assimilative capacity of the environment.
3. Proportionality—"of response or cost-effectiveness of margins of error to show that the selected degree of restraint is not unduly costly. This introduces a bias to conventional cost benefit analysis to include a weighting function of ignorance, and for the likely greater dangers for future generations if life support capacities being undermined when such risks could consciously be avoided."
4. Obligations to care, that is creating a formal duty of environmental care. This puts the onus of proof on proponents of change. It is this feature that is often criticised as limiting innovation and risk taking. On the other hand some see the principle as a source of inspiration and innovation.
5. Promoting the cause of intrinsic natural rights. An expansion of the legal notion of ecological harm to include the need to allow natural processes to function in such a manner as to maintain the essential support for all life on earth. The use of ecological buffers in future management gives a practical emphasis to the thorny ethical concept of intrinsic natural rights.
6. Paying for past ecological debt.

Criticism of the Precautionary Principle

The practical use of PP presents a number of challenges. Critics often predict that broad use of PP will result in an end to innovation (Brombacher 1999, 32), the end of science (Blanchfield 2000), redistribution of global wealth (Cohen) and a race to the bottom (Tantillo 2000). Most of the printed word on the Precautionary Principle is committed to arguing the use of precaution in a particular case. For example much is written about the application of the precautionary principle and genetically modified food or precaution and global warming. These specific arguments generally share one or more basic criticisms. The key arguments levelled against precaution are that it is not scientific, not coherent, that PP has its own risk of unintended consequences or that it will be the end of progress.

Morris provides a good analysis of PP. He notes that in general the definitions fall into one of two fairly broad definitions, which he calls the strong precautionary principle and the weak precautionary principle. Strong PP requires that no action be taken unless there is certainty that it will do no harm. Weak PP states on the other hand that full certainty that no harm will occur is not required in order to proceed with an action (Tantillo 2000, 4). Strong PP is an unworkable standard since certainty is not possible and requires proponents to prove a negative (Appell 2001). Weak PP on the other hand requires precaution and perhaps a shift in the form of discussion from science to politics.

Risk assessment is commonly described as objective, based in science and therefore "scientific". The risk assessment process is replete with assumptions and limitations that are necessary to address the limitations of our ability to model anything as complex as the real world and the future. These assumptions are very often value-based assumptions that reflect the beliefs and bias of the assessors. The algorithms of contemporary risk assessment may have the patina of objectivity but not the substance (Levidow).

Claims of or calls for scientific certainty in the end are always hollow. In the end perhaps decisions about the world and technology are not questions of science but questions of values, because we are able to do something. Does it follow that we should or must do it? If this is the case the question is not whether decisions are to be based in science or

politics but how do we consider the former in the process of the latter?

How then might science be modified to serve more precautionary purposes? Cranor begins by asking, “given what we know at present, what could precautionary science be?” (Cranor). He notes precautions are routinely taken to protect things we value. We plan and organise in anticipation of a threat or risk to protect these things: our children, valued possessions, etc. It is central that we do not wait for the actual threat or harm to occur and then respond, but that we think and anticipate to avoid the threat. He suggests that if the environment or resources are considered valuable it is likely or possible we would eventually develop corresponding anticipatory methods. The emergence of PP as an articulated concept in public policy may reflect such a shift in values.

Science in principle is an objective search for the truth in nature. Modern science however, is conducted in laboratories funded by corporate and other interests. Those interests determine the foci of research and those interests interpret the results. In light of these trends science cannot be viewed as not having a point of view or goals beyond merely the “truth”, it has contributed much to our understanding of the environment and much to “... This paradigm of nature-as-capital, reducible to fungible, trans-nationally tradable units of bio-currency...” (McAfee).

In 1850 French economist Frederic Bastiat completed his essay “*That which is seen and that which is not seen.*” He provides an important view of the classic libertarian economic thought and an important introduction to thinking about unintended consequences- both good and bad. Bastiat’s argument is revived frequently to rebut the PP. In essence the argument is that the use of the precautionary principle may allow society to avoid some impacts that may result in other hazards with worse consequences. The most effective of these arguments included Gokany’s analysis of the use of DDT and genetically Modified food (Gokany 2001).

In essence the argument acknowledges the impacts and risks of a decision but illustrates the costs or results of not using the technology. Gokany carefully constructs a case for the indoor use of DDT and for genetically modified food using the precautionary principle. More human lives would

be saved by indoor use of DDT in malaria prone places with little risk to ecosystems. Genetically modified foods would improve crop yields, extend ranges of food crops and contribute to a reduction in world hunger. The benefits outweigh the risks in both cases so precaution dictates the technology be employed¹. This argument is repeated in various forms many times.

There are several counterclaims made in response, for example Ticknor argues “Precautionary action need not always mean banning a potentially hazardous activity. There must be ways to say “yes”—with caution. Such tools and structures would shift the responsibility to those who create risks to examine and choose the most environmentally friendly options” (Ticknor 2000). Among the components Ticknor refers to are the general duties to take preventive, precautionary action in the face of uncertainty that most reasonable people would acknowledge have always existed. Using this as a basis, governments and businesses have a responsibility to act in a precautionary way if there is evidence that an activity (or substance) might pose a risk to health or the environment, even if there is no specific regulation of that activity.

Much of the criticism of PP is rooted in the ambiguity of the terms used to describe it. Ticknor suggests that Goal-setting for environmental and public health protection would provide a stimulus for innovation and an acknowledgement of potential risks. For example, focusing on preventing harm and methods of clean production have been demonstrated not only to produce benefits to the environment but also to increase economic competitiveness and innovation. Finally Ticknor acknowledges that decisions made under a precautionary framework must be followed by continuous monitoring to ensure that they can be updated as new information becomes available. The environmental and public health goals should also be revisited to encourage continuous improvement and to avoid the unintended consequence.

Another response to Gokany’s view is the value system employed. For example Gokany argues that any single human life is worth more than any animal, and “non-mortal threats to human life should take precedence over threats to the environment...” (Gokany 2001, 9). Although he allows that there might be exceptions to the latter criteria he does not provide a basis for making such excep-

tions. His view however, does not recognise that most environmental impacts have at least a potential for human health impacts and that decisions are rarely based on the life of a single animal versus a single human life. Would his argument extend to entire species and, by default, whole ecosystems? The fact of the matter is that the basis for the precautionary principle is our inability to anticipate unintended consequence. Those who defend the traditional approach have not provided protection from unintended consequences in the past and often resist even acknowledging them until forced to do so.

It is counter intuitive to expect a corporation engaged in economic competition to embrace the necessary requirements of public disclosure, or shoulder the burden of precaution without being compelled to do so. Gokany predicts genetically modified food will provide food for hungry millions and that on the face of it this is a justification for allowing it in spite of risks. History has shown us however, that such advances are not sufficient to feed the world's hungry. Decisions being made regarding genetically modified food are being made inside for-profit companies presumably for the benefit of shareholders. There is no tradition of corporate altruism to rely on for how such technology will be employed and for whose benefit. Hunger in the world today is a reflection of political and distribution problems not of supply.

Under the traditional system materials, processes and products were assumed to be safe until proven otherwise. The burden of proof nearly always fell on government or third parties. Further, experience has shown that industries affected by demands for precaution engage in several tactics to create a false sense of uncertainty (Lewis, Sanford):

- concealment of what they themselves know;
- hiring scientists inside and outside the corporation to both create "contrary" opinions and promote the notion of uncertainty;
- public relations and political "spins" to create the sense of uncertainty.

The impact is to delay action via public uncertainty. The impact of uncertainty has been decades of delay in responsive action to toxic exposure issues ranging from lead, tobacco and asbestos.

It is precisely because of our experience with government and corporate dealings with uncertainty and unintended consequence that encourages the adoption of PP. Sanford suggests the interests of society and corporations could be served by identifying "precautionary matters". By listing such matters society, through its civic infrastructure and regulatory process would identify types of risks that would trigger the precautionary principle. In support of this, society should also establish legally binding principles that guide public and private institutions, acting in the absence of specific societal standards targeting the activities, so that they know when the facts before them, or activities they are engaged in, may reflect a "precautionary" matter. Such a system would require an affirmative duty to study risks and alternatives and an obligation to maintain an open and transparent process. To protect individual rights a prescribed pre-emptive privilege would apply (attorney / client, trade secrets, etc.) but be narrowly construed with regard to issues of public health and safety.

Although not mentioned in literature the "unintended consequent" argument takes a very paternalistic view of the world and technology in which the scientists and owners of technology reserve the right to decide for themselves how and what technology is to be employed.

For many the fatal weakness of the precautionary principle is its attempt "to convert moral choices into legislation" (Holm and Harris 1999). They feel the principle oversimplifies very complex decisions. In the face of such complexity the precautionary approach would require us to stop all research and progress because of uncertainty. Others argue however that the precautionary principle does not require research to stop at the outset. It only requires that at each stage in the process it be applied to determine if the anticipated benefits of going further outweigh the risks (Howard and Saunders 1999).

An important criticism is that PP does not provide a formal decision making or analytic process. The form of PP is such that in it is unable to make specific decisions or conclusions. Rather it functions as a process that enables people to come to a conclusion. Attempting to rebut some of the criticisms of the principle the author writes "that the precautionary principle is not an algorithm for

making decisions...but it is a principle on which to base decisions” (Ho 2000).

Foster *et al* observe that there is a precautionary continuum that ranges from weak to strong formulations. It is this variability that weakens the principle in the scientific community (Foster et al. 2000, 979-981). They make a science-based argument for the precautionary principle based on five guidelines:

1. Proportionality. Measures must be proportional to the desired level of protection and must not aim at zero risk.
2. Non-discrimination. Comparable situations should be treated in similar ways unless there is a compelling basis for not doing so.
3. Consistency. Measures should be comparable in nature and scope with what is known scientifically.
4. Costs and benefits of non-action should also be considered
5. Measures should be provisional so that reassessment is possible as new data is available.

These provide important guidance and diffuse some of the more common criticisms of the principle and describe a reasonable process for continued progress.

The majority of arguments against PP are based on an application of the strong PP argument which no one seriously proposes, or on promises of the future good or benefits expected to accrue from technology expected to more than offset the risks or costs. Most arguments against PP offer no reasonable alternatives except the status quo. Only few critics deal with the difficult issues of translating precaution into a practical method of guiding public policy. Several items emerge from a review of both sides of the argument:

1. Even weak PP presents a significant challenge to public policy makers and business.
2. Employing PP will require an open stakeholder oriented process.
3. Science has an important role to play in implementing PP.
4. Precautionary decisions are forward looking and tend to be value based.

It is this last finding that leads us to the purpose of this paper.

Moral Underpinnings of Precaution: What do we Owe the Future?

Precaution is by nature a forward-looking act. As a decision-making principle it is concerned with preventing harm or promoting the most beneficial outcome. In its most common use PP refers to protection of the environment and sustainable development. Among the most fundamental principles of sustainability one finds the idea of intergenerational equity. This is broadly defined as meaning that the interests of the future must be considered in the decisions made by current generations. PP rests firmly on the idea of intergenerational equity. The first consideration of the moral basis of PP is to determine if we in fact have a moral duty to future generations?

The argument for a moral duty for the future has been approached from several different perspectives. First however, is the assumption that there will be a next generation and one after that and so on. These future generations are, however, unborn. They do not consist of individuals that currently exist. Although such persons will have rights when they are born, non-existent persons cannot have rights. A right is an entitlement to act or have others act in a certain way. If you have a right to do something then others have a correlative duty to act in a certain way. Human rights are universal, equal, and not transferable and cannot be relinquished, and they are natural rights that are not derived from human institutions (Shaw and Barry 2001, 73).

Negative human rights reflect the interests human beings have in being free from outside interference whereas positive human rights are interest we have in receiving certain benefits (e.g. the right to free speech). Moral rights have the effect of moving the focus of moral judgement from society as a whole to the individual.

Rights would seem to require a subject to which they can be ascribed. In the absence of a subject there can be no rights or obligations (Beckerman 2000, 46-59). Although some have argued that there is no temporal dimension to human rights this seems a difficult stretch, how do I consider my rights and obligations relative to generations past or future? There are no future or past persons relative to my rights or obligations. Furthermore, should the future possess such rights it would be reasonable that such moral obligations would be

considered *prima facie* obligations (Ibid, 70-71). As such it would be an obligation easily overridden by a more important obligation to current persons.

Instead it is reasonable that unborn persons would acquire such rights at their birth and therefore could be described as having an interest in current actions that will affect them. Still some suggest that future persons have no right to complain since it is up to us to determine whether they exist at all. This is the so called "futura problem": "Our long term environmental policies cannot violate the rights of future generations, because the existence of particular future people depends on what we do. Unless they would prefer non-existence, future people are in no position to complain that we behaved badly" (Wenz 2001, 44). It seems to me that this principle has little substantive moral basis.

To say therefore that future persons have no current rights is not the same as saying we have no obligation to take their interests into account. It is a challenge to attempt to predict how the future might value the environment, technology or the world that they inherit. In general such efforts do not fare well. Still it is reasonable to assume that the value of clean air and water, biological diversity, available resources and the like will continue to be important. Likewise an environment without toxins, and other imposed risks would seem preferable to the alternative. To the extent that these are reasonable assumptions we can identify the interests of the future and our correlative obligations.

The Duty to Prevent Harm

Moral laws do not exist in nature. Hobbes posited that in the state of nature there is no immorality, nothing is prohibited and nothing is required. In this view laws of conduct come into existence only through agreement of individuals. Since there are no moral laws in a state of nature every person has the right to do whatever is necessary for their own survival. Individuals leave a state of nature by voluntarily renouncing the Right of Nature and, in their own self-interest, accept the authority of a sovereign. The laws of nature for survival with other people, according to Hobbes (1651), might be "Do not to another, that which thou wouldst not have done to thyself" (Hobbes, ed. Barcalow 1998, 172-175).

In coming to a society of people and leaving a state of nature, the individual agrees to abide by the laws of nature and to the rules of conduct established by the sovereign. Hobbes suggests there are two reasons why the individual must do this: (1) having made a promise to do so they have a moral obligation to fulfil their promise, and (2) to not do so would be irrational because it would be acting against their self interest.

John Stuart Mill expanded on Hobbes' thinking by stating that society has a duty to interfere with the actions of people to prevent the strong from preying on the weak, in short to prevent harm. He was concerned that social or government interference in our lives would result in "mindless conformity" (ibid, 232) but held that society did have a duty to interfere to prevent harm. This maxim is known as Mill's Harm Principle and it limits interference on personal freedom to what is necessary to prevent harm to others.

There is general agreement that we have a negative duty to not cause harm and a positive duty to prevent harm if we are reasonably able to do so. It is reasonable to extend these duties to our obligations to consider the interests of future generations in our decision making.

There is disparity however in how to assess harm. Act Utilitarianism considers an act right if, and only if, the good or benefit of an act outweighs the bad or cost of the act. Good and bad are not determined solely in terms of the agent but in terms of the benefit/harm to all. On its face this would seem to be consistent with the PP. Mill argued that rightness and wrong-ness are relative and occur as a matter of degree: an act is right in proportion to its tendency to promote happiness. The more happiness it will produce, the more right it is. Act Utilitarianism however might require people to forego their own interests or happiness in favour of increasing the total happiness. Also Act Utilitarianism ignores duties, justice and the distribution of happiness; as long as the greatest utility or happiness is achieved the distribution is unimportant (ibid, 136).

Rule Utilitarianism on the other hand distinguishes between an act and a rule. Rule Utilitarianism requires that moral rules are observed and that we select these rules to follow based on the greatest utility or tendency to promote happiness. Mill

suggested that we should follow moral rules and consider the utility of a choice only when there is a conflict between rules. According to these views our moral objective is to produce the greatest total of goodness, no matter who will enjoy it.

Utilitarianism is extremely demanding, we are always bound by the obligation to improve the total happiness or utility whether we benefit or not. Utilitarianism is also not concerned with distribution *per se* only the total of happiness or utility. This approach would support a PP approach only in so far as the benefits or utility were increased for someone not necessarily the future. It may also require current generations to sacrifice their own happiness in favour of greater happiness in the future (Hurka). Where our duty requires us to consider the interests of the future it does not make us subject to them. Hurka finds that "What is required of each generation is just that it passes on a total package of opportunities that is comparable to its own, whatever the exact composition of this package may be (ibid)".

Kant believed all rational beings will pursue their own happiness and when people act for a reason, that is, they decide to act, they following a rule of action, what he called a maxim. He did not believe each of us established a rule of action for each decision but that we could discover our reasons for acting if we were to stop and think about it. From this he derived the Categorical Imperative: "Act only according to that maxim by which you can at the same time will that it should become a universal law" (Kant, ed. Barcalow 1998, 148).

A universal law is understandable and can be discovered through reason. It would apply to all people all of the time. As Kant saw it a maxim could be tested or evaluated by looking for contradictions in their universality. Inconsistency can arise in a maxim in two ways (1) if, as a universal law, it would jeopardise our survival or happiness, and (2) if we will something to be a universal law that cannot be a universal law. He then summarised the duties that were derived from the Categorical Imperative: everyone has a duty to help those in need, gratitude because of a benefit is a duty and general respect should be given to other rational agents. At least the first and third duties speak directly to PP.

John Rawls on the other hand believes the correct standards of justice are those that rational, self-interested individuals in a certain hypothetical state analogous to the state of nature, which he calls the Original Position, would accept if given the choice. It is important that the acceptable moral rules are those everyone can agree on and that can be publicly justified. Further, in the hypothetical condition Rawls requires there be a *veil of ignorance* over all members of society, that is, they can have no personal information of themselves. All decisions about principles are made behind a veil of ignorance that assures impartiality and objectivity (Rawls 1999, 102-130).

Rawls says that all rational, self-interested individuals in the Original Position behind a *veil of ignorance* would agree on two principles to regulate the distribution of freedoms and economic resources in society:

1. Each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others;
2. Social and economic inequalities are to be arranged so that they are both (a) of the greatest benefit to the least advantaged and (b) attached to offices and positions open to all under conditions of fair equality of opportunity.

It would seem reasonable to assume that under such an approach a reasonable person would chose a precautionary approach to decision making to be sure that their interests were considered. It places an equal burden on all current generations to consider future generations as they would want themselves to be considered.

Conclusion

There is a strong moral argument for PP particularly when considering Kant and Rawls. Much of the world has started to embrace the principles of precaution, however, there is still wide disagreement on how to apply it practically. As a practical tool it still lacks the formulation required. There is however, significant resistance toward adoption of PP in the US. At the core of the resistance to PP in the US and elsewhere appears to be a lack of willingness to share decision-making and an institutionalised resistance to the necessary transparency.

There are legitimate concerns with its use, but a lively debate continues. This debate has remained strong in technical, economic and political circles but has not been as robust among ethicists and philosophers. Still when one considers the general use of the principle, the adoption in key international agreements and the interests of globalisation it seems the trend toward precaution is significant. The firm moral basis of the principle only serves to strengthen the trend.

Notes

¹ In fairness to Gokany in his conclusion, consistent with Bastiat, he states that he seeks only that the precautionary principle consider all sides to an issue and that it be objectively applied. Others using Bastiat's argument however are less open.

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Images of Women in Advertising: Dynamics and Consumer Perceptions

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History

The history of images of women in advertising goes back to the end of the 19th and beginning of the 20th century. In most of the cases cosmetics (like powder or soap) or sweets and drinks (like tea, coffee, chocolates) were promoted. Some samples from private collections in Estonia portray a playful, plump young lady with the curls often accompanied by a well-dressed moustached gentleman. The goods were made locally or in Germany, UK, or Saint Petersburg. According to Van Zoonen, Goffman and other authors this style of advertisement appears to be common in Europe and US at that time (Van Zoonen and Liesbet 1994), (Goffman and Erving 1979).

Since the 1920s the perfect housewife was one of the key figures in advertising. However, the goods promoted were not necessarily related to household activities at all, but the images were still within the realm of the good wife, caring mother or skilful homemaker. The image of the female as a sexual figure is more recent.

It is also necessary to note that women in the ads world wide from the 1920's to the 1990's have become progressively thinner. Most of the countries in transition, including Estonia, re-joined the world of advertising at the end of this period, and inherited from their more economically developed partners the stereotype of the extraordinarily attractive and unrealistically thin female models.

The task of the current article is to examine new trends since then in highlighting the images of women in advertising, and the implementation of this process in Estonia. The author will try to discover and comment upon some consumer perceptions. Despite the fact that the topic needs deeper

research, which is beyond the aim of this article, an overview of the dynamics of images of women can be useful for future advertising plans and sociological investigations.

Idealised "Thin" Images and Perceptions among College-Age Women

Usually, women possess more flesh than men. This is connected with their motherhood function. "For much of human history, this characteristic was admired, sought after, and celebrated in the arts" (Jacobson and Mazur 1995). Currently, women with any fat struggle to fit the waif-model image which has pervaded the media.

The most well known research on the influence of the "thin ideal" upon the attitudes and behaviours of young women was published ten years ago in the "Journal of Communication." The study by Myers and Biocca states: "The research indicates that both media messages and the target audience of younger females place a high value on physical attractiveness" (1992). They are constantly comparing themselves to the unattainable images of the super models. However, as later researchers showed eating disorders and body image are still the main preoccupation among young girls in the Western world.

"A generation ago, according to Naomi Wolf, a typical model weighed 8 percent less than the average woman; more recently she weighs 23 percent less. Most models are now thinner than 95 percent of the female population" (Jacobson and Mazur 1995).

One very general conclusion from US-based research is quite sad: idealised body images have a negative impact on attitudes, perception

and behaviours among young women. “The use of women’s bodies in ads is essentially a cheap trick that marketers use instead of making more thoughtful arguments on behalf of their products” (Jacobson and Mazur 1995). Many women find these ads degrading and insulting to their being.

Self-comparison with the extraordinarily thin models produces dissatisfaction with one’s own body image, increases anger and depression, and decreases self-esteem. In most cases these investigators used a direct stimulus-response model (short-term or natural exposure to advertisements containing thin models, (Fang Wan and Wells 2002)).

The author of the current publication used the same methodology to discover attitudes and perceptions towards thin models among college-aged women in Estonia. Two groups of women were randomly selected from among the students of the Estonian Business School: Estonian-speakers and Russian-speakers.

At the first stage of the experiment the first group was introduced to different images of the well-known supermodel of Estonian origin, Carmen Kass. The second group was shown the advertisements portraying a celebrated sports-lady of Russian origin, Anna Kurnikova. By the second stage both groups were altogether watching about 35 different local and international ads containing thin female models and scoring the pictures against certain criteria proposed by the author.

The members of the first (Estonian-speaking) group all recognised Carmen Kass, however, this did not have any special affect on their attitudes compared with their reactions to the other ads they were exposed to. About 55% claimed that they would like to look like the models, 20% said they do look like the models themselves and 18% replied that they never wanted to look like a model.

Most mentioned that they were paying more attention to the make-up, hair do and general style than the body-size of the female on the ad. About 87% of the respondents revealed that they select food very carefully with concern for their body-size. None of the respondents from the first group agreed that they were on a special diet. Even those respondents who claimed to “currently look like models” were not completely happy with their own body-image, and about 46% were completely dissatisfied, how-

ever, they had not so far connected this feeling with the images of extra thin models.

The results from the second (Russian-speaking) group were quite similar to the responses of the Estonian-speaking group. Russian-speakers paid more attention to the body-size of the model, most wanted to look like a model, but some explained that they agree more with the statement “to be well-cared for like a model” rather than focusing only on body size. (Some made the comment that “men do not like skinny women”, “hanger-like women” as one of the respondents expressed it). The Russian-speakers revealed more attempts at using special diets, but claimed that this was as useful for controlling body-size as for general health.

Most of the respondents were willing to use beauty surgery in order to “fit the high model standard”. Their attitude towards the “national model” Anna Kurnikova was rather different from the calm approach of the Estonian-speakers to Carmen Kass. All the members of the group knew who Kurnikova was, however, were not always able to recognise her in the pictures. Her modelling career was more connected with “beauty, tenderness and feminine qualities” of Russian women rather than with her success in sport or her thin body. Interestingly, female Chinese students did not use the words “beauty” or “tenderness” at all, finding that Kurnikova was “cool”, “pop”, “modern” and looks very much like any other Western model.

The Female Athlete Image

“Another image has recently been added to the stock of images of women in advertising – that of the female athlete. What differentiates these advertisements from the others is the fact that they present a strong, positive, capable and confident female. Advertisements using female athletes also incorporate copy, which inspires and bolsters a woman’s self-esteem. This image has emerged for two reasons: the rise of the feminist movement and the rising popularity of athletics among women.” (Caffrey and Hunter 2001).

One very important reason should be added: sports style and sports goods have changed their role in one’s wardrobe dramatically. They are no longer limited to making sporting activities and even everyday casual life comfortable. Some sports gar-

ment manufacturers like Nike, Adidas, Reebok and Ryka are now competing with the high fashion productions of Chanel, Versace and Cucci. Sportswear and skincare, nowadays, is the symbol of youth, health, comfort, and mobility.

After analysing numerous advertisements using female athletes by Elizabeth Caffrey and Marcelle Hunter in the US, three categories have emerged – youth, self-concept, and power. The advertisements target young girls by promoting self-empowerment and participation in sports. This leads to the second category of self-concept and the idea that women are in control of their own lives. The third category is the concept of giving women the power to be an athlete but also a woman. Marketing techniques such as these have been so successful because they represent key issues currently facing women in society (Caffrey and Hunter 2001).

However as some other researchers confirm, a major stepping stone in widening the women's market in advertising was the media coverage of the Centennial Olympics. The 1996 Summer Olympics has been hailed the "year of the women". "Previously, coverage of female athletes was limited to "feminine" sports- gymnastics and synchronised swimming. Not only was attention on the women's gymnastics in the 1996 Olympics but also on sports traditionally dominated by male athletes. For example basketball, softball, and soccer heightened a sense of pride of being not only an athlete but also a woman. Equality among sports coverage in the media helped to provide female viewers with athletic role models" (Caffrey and Hunter 2001).

Considering that the global impact of the Olympic images had influence in Estonia when looking at some local trends, after analysing ads in Estonia (both local and global) the author has proposed her own categories for the classification of the images. However it must be admitted that the identification of "women athlete ads" is quite subjective.

Three Categories of Women Athlete Related Ads in Estonia

The First Category and its Perception

Images of Gabriella Sabatini, Anna Kurnikova and her charming German counterpart are now closely related to perfumes, watches and other up-market goods promoted by using these sporting celebrities

as advertising models. The very popular Jackie Joyner-Kersey is constantly exposed in the Nike ads.

Some of these global advertisements were published in the Estonian media as well, however, there are some famous Estonian female sporting celebrities (Virge Naeris and Erika Salumäe) who were appointed to promote local goods in the local media.

None of the goods were related to sport activities or special healthy lifestyles. So, the image of the former champion-cyclist Erika Salumäe, who is in her early 40's now, was used to advertise kitchen furniture. It was also named "Erika" after the one-time fastest cyclist in the world. The champion is portrayed in a very domestic environment with the blue and white furniture, wash-basin and oven in the background. She is dressed in a smart-casual office-style tailored suit with a gentle smile. The ad could be decoded as an invitation to the former independent, world-famous, speed-cyclist to get back into the kitchen. As the female Chinese students stated, who have never seen Ms. Salumäe before, nothing reveals that she is an athlete. Her fame has been used for advertising purposes without any reference to her fabulous sporting career.

The Second Category and its Perception

Another type of ad related to images of the female athlete in Estonia could be called the "celebration of unisex". Unfortunately, in some cases it was not possible to find out if the ad was produced locally or overseas. Most of the ads analysed appeared to have had a foreign origin (to be exact: the foreign model and design was locally supplemented by written information in the Estonian language).

Very typical ad from this group was the street poster for the sports garment shop, "West East". The female model on the poster is a combination of "pure glamour" (polished nails, bright make-up, long hair) and athletic style (unisex clothes do not clearly reveal body curves, the girl is portrayed in movement, colours are clear and bright). The pose and facial expression are independent and not submissive, the look is firm.

From a lot of research into advertising it has been suggested that male sexuality is based on performance, while female sexuality is based on submissiveness. The way males achieve this need to feel

more powerful is by making women submissive (Van Zoonen and Liesbet 1994).

The street posters for the “West East” chain shop as well as some other images of the second category were shown to women students (Chinese, Estonian- and Russian-speakers). All of the respondents, in spite of their ethnic origin, agreed that the women in these images are “energetic”, “full of action”, “busy”, “independent”, “mobile” and “enjoying themselves”, “dressed to be comfortable, but not to seduce men”, they “regularly exercise”, and “know exactly what they want”. All stated that they would rather be like the “unisex celebration” model rather than the extraordinarily attractive very thin female model because the “unisex celebration” type produces more feelings of satisfaction and self-accomplishment. The advertisements currently depict an athletic woman working to gain independence and power for her.

The Third Category and its Perception

The ads of the third category presented in Estonia could be defined as the “cult of health, strength and the natural life-style.” Many of them are produced in Nordic countries, and very few are designed locally. One of the ads from this type is the ad for Swedish skincare, Y-products. The creator of some of the products, “Miss Universe 84”, Yvonne Ryding, is shown in a very casual sporty outfit. She does not have any nail polish or visible make-up on at all, and is playing football with a little boy, which has always been a male related activity, the child bringing the possible idea of her motherhood.

The ads from this category mostly show goods that can be used by women in extreme/special situations, while doing some sports activities or to help her to be strong, independent, but still feminine. Compared with the second category the emphasis is more on the well-developed, athletic body, and health and endurance rather than on the static made-up face and expression of the eyes.

There is also greater emphasis on the sport activity or environment than on the female model herself. She is shown as a natural, organic part of the environment having total control over it, and doing well to survive and enjoying overcoming difficulties.

The pictures show women climbing mountains or skating after having had some food supplements or special healthy food. On some ads the male models

are also present, however, both genders are presented as equals. The man does not patronise the woman on these ads, but acts as the partner in the struggle against a severe nature.

The female college-aged respondents have found the ads from the third category less appealing, but recognised that the female model has gained “respect”, “self-respect”, “public recognition” and “control over her life and circumstances.” They considered the female models to be “older” and “more experienced” compared with the ads from the second category.

The Feminine Male Image and its Perception among College-Aged Women in Estonia

A typical example of the feminine male image is portrayed on a poster on the trolley-buss stop in front of Kaubamaja department store in Tallinn. An image of a topless, longhaired young male seductively looking into the audience eyes is used to promote a sweet bar “Bird milk”. The position of the body, hairless chest and general “sweet” meaning of the image on the poster gives the impression of celebrated femininity. Some images of this type are used to advertise male underwear, means of contraception, perfumes, sweets, soft drinks etc.

It was a clear difference in the way this image was perceived between the Chinese and Estonian/Russian speaking female college-students. The Chinese found the image to be “attractive”, “tender”, “polite”, “caring for himself” and “clean”.

While Estonian/Russian speakers had the common opinion that “this male is possibly homosexual”, he is “weak”, “moody”, “might think too much of himself”, and even “would not mind if the girl paid for him in a bar” (!). The Estonian-speakers found the hairless chest “unattractive”. Most agreed that they would prefer a “tall, dark and handsome” stereotype – someone “like a real man”.

Conclusions

For a long time society has pushed for a certain body type but now images of athleticism provide a counterattack consisting of a positive, healthy example for young girls to aspire to.

The advertisement containing athlete-images illustrates women participating in sports for their own pleasure and self-benefit. This ad does not push women to play sports in order to lose weight or fit into a tight pair of jeans or to even to be the best, but to do what they believe feels good. The selected advertisements present this healthier image in three ways as has been investigated by some US researchers.

The research in Estonia revealed that fewer young girls under the influence of the extraordinarily attractive thin models in advertising would be inclined to engage in bulimic and/or anorexic behaviours. Both Estonian-speaking and Russian-speaking females select food carefully, most are not very satisfied with their looks generally, but are less concerned about their body-size and the impact of the image of thin models is definitely lower in Estonia than in the US.

However, in Estonia, the muscular female athlete has not emerged through advertising yet as it has in the US. The three categories of sport or athleticism related images of women in advertising in Estonia (both locally produced and foreign made) are not dominating in the media, where most of the space is taken by "thin ultra-feminine" models. However, the ads of the second and the third categories and their perception by consumers show that modern college-aged women are feeling more positive about images of women, which constantly suggest improvement and competition.

The perception of the feminine male image is rather controversial (more positive among Chinese women rather than Estonian/Russian speakers). Generally the college-aged girls preferred to see traditional masculine images and are more conservative in their perception of images men than of images of women.

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Peaceful Cooperation Between Cultures – a Basis for Successful Management¹

Some Philosophical Considerations

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Since the 11th of September last year it became clear to all of us that the diversity of cultures is *the* central problem of the future in a globalized world. Are we moving blindly towards a “Clash of Civilisations“ (Huntington) or is there a chance for the peaceful cooperation of people from different cultures? I am deeply convinced that there is a chance – but only under the condition that we all try and, if necessary, *learn* to use “reason“ (Vernunft) to solve our conflicts peacefully. By slightly changing what is sometimes the slogan at Church congresses I would say:

Peace is the result of justice and justice is the result of reason!

Reason instead of power! This is, as we all know, easier said than done. Sometimes one has the feeling that the situation is hopeless: I only need point to the relationship between Israelis and Palestinians. But, as we know, migration has also caused severe conflict between cultures, and this within countries like Germany, Italy or France. Elections show us the results of this.

Nevertheless, we know that we have no choice. We must try again and again to follow the old program of enlightenment, which is the program of reason. And this is true for all fields of life where conflicts of values and interests may threaten successful cooperation, be they private or public. But in an age of globalisation this is especially true for the *world as a whole*, for international politics, international economics, international management etc. Kofi Annan has made this abundantly clear when he asked for a global compact of multinational companies to help build up an order of world peace.

There is only time to summarise some fundamental considerations for a program of reason and to name a few preconditions and problems for a peaceful cooperation between cultures. Some of you may consider what I am going to say as idealistic, even utopian. But just how necessary it is to return to basic philosophical truths became even more obvious to me when I listened to some statements by Mr. Jean-Paul Picaper of “Le Figaro“. On German television he said last Sunday with respect to the situation in France ... “I do not believe in dialogue between cultures!“ But dialogue is an essential part of any strategy for peace between cultures. Indeed, as I shall show, it is, in fact, inherent in what we understand by “reason“.

I have organized my argument according to the following seven points.

1. To approach the problem let me start with economics because many of us regard economics as *synonymous* with rational action per se. Rationality as understood in economics has to do with the choice of means for given ends, with *efficiency* as the rational decision criterion: to reach a given end with a minimum of input. And most economists, even famous colleagues, hold indeed that this *instrumental view* of reason is the only one, which makes sense.

I think that this view is wrong. It represents too narrow a concept of reason. It overlooks the fact that there are many kinds of rationality, according to the different sub-systems of society (such as economics,

politics, etc.), but that there is only one kind of reason.

Since, according to this instrumental view, ends are not accessible to reasonable treatment, there remains only two ways of dealing with conflicts of values and interests: tolerance and power.

2. Now, one quickly realises that *tolerance*, though held in high esteem not only in western societies, and this rightly so for many reasons, is not enough when *common action* is required. This is so, for tolerance, by definition, does mean that everybody respects the convictions, values and interests of all the others and leaves them untouched. The idea behind this is that these are *incommensurable areas* of personal beliefs: there is no rational way to bridge the gap between differing value statements or worldviews. Max Weber made this point as early as in 1919 in his well known paper "Science as a Profession"; even earlier, namely in 1904, he referred to the political relationship between France and Germany to illustrate his point (Archiv für Sozialwissenschaft und Sozialpolitik, Band 19).

The consequence of this position is that *tolerance* remains the decisive and indispensable virtue for our living together. Otherwise there will be never ending disputes, carrying with them the danger of dogmatism, force and the suppression of those who are considered by others to have the wrong religion, the wrong world-view, the wrong values. The history of mankind, paved with many wars within and between nations, has taught us this lesson again and again.

3. Now, we must be aware that this answer carries with it an important pre-supposition, namely that there is a priori *no necessity* whatsoever to come to a *solution* of pending conflicts. In other words: it is presupposed that there is an unlimited freedom of the individual from all restrictions so that everybody can fully live up to his or her own values (e.g. in the sphere of religion). Only in this case, I hold, is tolerance an appropriate answer.

But this presupposition does not hold in situations where *cooperation* is necessary. And this is the case especially in modern economies where *division of labour* is the indispensable basis for an efficient use of resources. Thus, in order not to make common action impossible, conflicts of interests and values must be overcome, and this *for practical reasons*. But since there is, by *assumption*, no rational (or reasonable) way to do this, the use of power (in its manifold and often subtle forms) is the only alternative: those who are in power determine and enforce the rules of the game. The result is, at best, a *compromise as modus vivendi* reflecting the given distribution of power between the parties, and this on a national or international scale.

This philosophical position has, of course, far reaching consequences for politics and political action. One is that it is rational to define politics as power-politics, leaving out any moral considerations. Another is that *democracy* can be understood as the exercise of *the power of the majority over minorities*. The concept of democracy is reduced here to the counting of votes without scrutinising relevant arguments. This leads to the "tyranny of the majority" as Henry Thoreau already observed in the nineteenth century.

Another consequence is to minimise the use of power via effective competition or by building up "*countervailing power*". Competition is the most forceful and, I think, indispensable instrument we know of to curb economic power. Countervailing power is well known from all forms of *collective bargaining* in the field of industrial relations. In his book "American Capitalism" of 1952, John Kenneth Galbraith, the quite famous American economist, even regarded the idea of countervailing power, instead of competition, as the most characteristic feature of the American industrial society at that time.

These few examples show that the instrumental concept of reason has far reaching consequences for the way we organise our living together.

4. Now, we know already from every day life, that the use of power per se is dangerous. First and quite obvious, it is a continuous threat to *individual freedom*. Secondly, its misuse can undermine the *legitimacy of institutions*. “Power corrupts and absolute power corrupts absolutely“, so the well-known statement of Lord Acton, a great English historian. And finally, power is also a continuous threat to a successful coordination of actions, and thus, finally, to economic efficiency itself. This is so because each (substantial) *change in the distribution of power* questions the status quo and makes it thus notoriously unstable.

As a consequence, there is a permanent danger of war, be it civil war within societies or war between nations. So it seems worthwhile to ask the question again whether there is another way to lay a more stable foundation for institutionalised cooperation in and between societies or cultures.

It is my conviction that there is an alternative solution, which we may call “peace“. This is not to say that the use of competition and of power is irrelevant for co-ordinating actions in the real world. What I only want to say is that neither the rules of competition nor the use of power can be handled simply as if they were *natural phenomena*. And as *cultural phenomena* they need a *legitimate basis* for contributing to peace. Let me elaborate on this a bit.

5. I hold that a philosophical position that *starts* the argument with individual freedom alone, freedom understood as “freedom from restrictions“, that such a *neo-liberal* position is incomplete, leads to inconsistent results and cannot serve as a legitimate basis for political action. What is neglected from the very beginning is the necessity to come to unified action, where necessary. So, to reconcile “freedom *and* unity“ (or order) is the philosophical problem; the alternative “freedom *or* unity“ (in the days of the cold war the slogan read in political disputes in Germany as “freedom *or* socialism“) seems to me to be false. And this problem has a solution, a trivial one, one might even say, namely *peace*.

Following the proposal of Paul Lorenzen, a German mathematician and philosopher (see his “Lehrbuch der konstruktiven Wissenschaftstheorie“, 1987) I define peace as a state of affairs where a “*general free consensus*“ of all concerned is reached as the result of *argumentation*. This definition obviously reconciles the freedom of the individual (because it is a *free* consensus) with unity (or order) because it is a *general* consensus. Note, that this definition of peace has a *positive* connotation; it is more than the absence of war.

Before I elaborate a bit on this understanding of peace, let me stress one important point, namely that this definition of peace must not in itself be an *arbitrary* one; otherwise the rest of the argument would be arbitrary without any capacity to give us what we are looking for, namely a *reasonable* orientation to our life.

At this point, again, philosophical disputes come in which I cannot deal with here in detail. What I want to stress is that the definition of peace must be introduced not as a *theoretical* notion on the level of *semantics*, thought out (so to speak) by professors in the ivory tower of science. Peace must be introduced, instead, as a *pragmatic* category, namely as an explication of a *long-standing successful praxis of conflict resolution* in everyday life. We all, as *participants* of life, not as its distant scientific observers, have already a praxis of *peace-making routines* which we experienced as *more successful* than the use of power, and this in different fields, like family, professional associations, collective bargaining procedures and even politics.

Thus, the meaning or content of the word “peace“ is derived not from theoretical reflections, but from praxis.

Methodologically speaking, this implies a position which comes close to the *linguistic and pragmatic turn* in philosophy, namely that praxis precedes theory, and it should be regarded the task of theories in the humanities (politics, economics, management and so on), to develop institutions which help

contribute to the peaceful resolution of conflicts thus making peace more stable. In management this would come up, by the way, with a broader concept of managerial responsibility, discussed today under headings like “corporate citizenship“ or “business ethics.“ So, it is “praxis” which determines, from a methodological point of view, the objectives of sciences and arts, not vice versa.

6. Now, let me elaborate a bit on the notion of peace proposed here. First I should mention, that the word “peace“ must not be understood as an entity, as a final (utopian) state of affairs reached at the end of all days. It is, instead, just the word (and its notion) we derive as if we use the adjective “peaceful“ as a noun. And the adjective merely characterises what we *do* when we solve conflicts via argumentation instead of using power. And we all know, as participants in life and in our culture, what the word argumentation does mean. Argumentation is more than the exchange of words or simple rhetoric. It is a qualified process where parties in a conflict about validity claims, be it about questions of *truth* or of *justice*, be they related to means or ends, exchange and scrutinise reasons presented by the other side, where alternatives are creatively invented for a common solution of the conflicts. This process is *qualified* in the sense that parties are *competent*, that they try to leave any *prejudices* behind, try not to use *power* and try not to *talk the others over* etc. Argumentation in this sense is, like peace, also a word the meaning of which we cannot define if there were not already an underlying praxis to which we can recur.

It is this procedure of argumentation by which *good reasons* get a chance to produce *insight* (Einsicht). And what is important here: insight is *happening* to the parties, you cannot manipulate it via socio-technical procedures. It is the “forceless force of the better argument“, as Habermas has put it, which brings insight and thus reason (instead of power) into effect.

If everything works well (which is, of course, not always, the case) a peaceful

resolution of conflicts, a *consensus*, may be the outcome of argumentative processes, and this not only for means to given ends but also for conflicts about ends. And it is the insight of all concerned, underlying the consensus, which makes for a more *stable coordination* of actions than power – only if new reasons are presented, for example, because the situation has changed, are new endeavours for a peaceful solution of the conflict necessary.

And it should be clear by now that the word “free“ is not synonymous with an arbitrary use of discretion but is bound here to insight in better arguments. And it should also be noted that argumentation is an indispensable part of democratic processes. Counting votes is only the *ultima ratio*, when it turns out that minorities do not have enough reasons together to convince the majority, and this within a reasonable time. Counting of votes is then a „stop-rule“ and has nothing to do with the “tyranny of the majority“.

7. All this, of course, is only a rough sketch of a position which one may call, referring to French history, as “republican“ with peace as a (procedural) expression of “*res publica res populi*“. Of course, there are many objections to this position. One is that all this is the result of *idealistic* reasoning, meaning that it is unrealistic.

It is exactly in response to this argument that we have introduced the notion of peace as a *pragmatic* category instead of beginning at the level of semantics. And this does not imply, of course, that a consensus is always reached; sometimes a dissent will prevail because people simply insist on their interests or, as already mentioned, because the minority has not enough reasons together to convince the majority. But what is important here is that there is, at least *in principle*, an alternative to the power-induced compromise, namely the *consensus*.

Another argument is more serious. If we introduce the notion of “peace“ and “argumentation“ as *related* to an already existing “praxis of reason“, and this in *our culture*,

does this not mean that our argument is totally *relativistic*?

This is a tricky problem which we have dealt with a bit in our paper in the book “Mondialisation et sociétés multiculturelles” (edited by Ricciardelli/Urban/Nanopoulos, Presses Universitaires de France, Paris 2000). The result is that a “culture of reason” is *relative, but not relativistic*. This is so because the notion of reason carries with it the connotation of “*univerlizability*”, with universal values as its limes. For argumentation is, by definition, inclusive; it does not allow the exclusion *ex ante* of any argument for this may prove correct and useful for peaceful co-existence.

Thus the request and necessity to interact with other cultures to find out whether or not *our* worldviews, values and interests are commensurable with *theirs*. And this interaction must not be restricted a priori to the semantic level of language by *preaching* western values, as is often done. What is necessary is to dive into the praxis of a foreign culture *to learn from* and, if necessary, *to build up (construct)* first of all a common praxis and in order to then understand what it means to solve conflicts peacefully. A “culture of reason” cannot be expected to be universal, already; instead, we must try to develop it in a co-operative praxis if and where necessary.

It should be clear at the end of my short remarks that this was a pleading for a continental, as opposed to an Anglo-Saxon view, a view which one may call “republican”, rooting in the great values of the French revolution: *liberté, égalité, fraternité*. *Liberté* is necessary, but not enough. People must be *free and equal*: this is the fundamental requirement of all theories of justice and of political liberalists, like John Rawls in his famous theory of justice. But we must also add “*fraternité*”. It is indispensable if we want to live together in peace. Tolerance, the English way of life, is not enough. Solidarity with those who are worse off than we are is necessary for a world order which rests on reason. So I come back to my introductory remark:

Peace is the result of justice and justice is the result of reason!

Notes

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Doing the Right Thing Right: Ethics in Business Markets

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Our intention is to present ethical concepts applied to business-to-business marketing. Because uniformity and consistency are important in organisational responses to change and involve all functions of business, we offer observations of a wide-ranging nature. Our emphasis is on enterprises and managers in Baltic industries that function largely with intellectual and social capital resources.

The Ethical Dimension

We want things to be done right in business-to-business transactions. We expect delivery of the right quantity, the right quality, at the right time, and at the right price (Kings 2000). We ourselves want to do what has been promised. We want our suppliers and customers to keep their promises. In other words, we want performance that is based on professionally competent relationships in all respects.

In the selection of the right partners, we insist that they always do the right thing. In other words, we realise that our best relationships are built for the long term. In today's rapidly changing business environment, partners should work with each other responsibly and reliably, not entirely at arm's length, but in a spirit of honest, mutually beneficial cooperation.

Reputable character, expressed through ethical behaviour, is an ancient and fundamental aspect in judging the quality of credit and the credibility of proposed relationships. It is, according to Admiral Lamar Lee, former procurement chief of the United States Navy and professor of Stanford University, a necessary condition to successful commercial relationships (Dobler et al. 1996). This condition becomes especially important when the nature of long range relationships is uncertain and may change in fundamental ways.

The ethical dimension is of unusual importance for the growth of Baltic economies. It is one of the core dimensions of social capital, along with honesty, trust, cooperation and other interrelated work values.

First, ethical aspects of behaviour separate normal business in market economies (e.g., the nearby Nordic countries) from the traditional use of political power and influence in the former Russian Empire. One manifestation of these differences is widespread corruption in the Baltic states (Taagepera 2002). As the Soviet experience shows, performance based on the power to command special favours, or orders enforced by centralised management, is simply not economically sustainable. Decisions based on the exercise of political power misallocate resources, increase the cost of doing business, and limit the ability to compete.

Second, a reputation of ethical behaviour is especially important in establishing new business relationships, at home or abroad. Behavioural integrity is critical in industries exporting goods or services that depend on constantly improving business systems and on expanding use of new technologies. This is also a dominant characteristic of business to business enterprises. In these industries, both the consumption and the replenishment of social capital — an environment of trust and cooperation—supersede traditional capital investments and permanently regulated relationships. In this context, integrity expressed in reputation becomes a great asset. It is an essential value in business.

Third, an environment of trust is essential for the development of mutually supportive lateral relationships that are characteristic of the most innovative and productive business.

The key to a better future is not passive conformity to existing practices, but teamwork that suggests

individual performance on a high level, working closely with others. According to our colleague in Baltic studies, professor Rein Taagepera, it is teamwork that permits companies in the Baltics to transform passive behaviour to active and more productive performance. Teamwork empowers individuals to contribute their best efforts to larger and more valuable achievements (Taagepera 2001). Taagepera suggests that only with this real transformation among individuals can the Baltic nations make further progress. Things can be done right in business markets when individuals do the right things on their own.

Satisfactory business relationships, the world over, are based on a fairly stable continuum of legal, ethical and social norms. They range from the practical Roman doctrine of *caveat emptor* (“buyer beware”) and a tolerance of seller’s puffery and incomplete disclosure to strictly enforced rules in American government contract negotiations.

Internationally, buyer and seller relationships are subject to a more common acceptance of the relative merits to be considered and a wider range of acceptable cultural differences. Interestingly enough, historically well established trading centres such as Tallinn, Riga and Vilnius, are located at points where cultures clash. This suggests the need for expert knowledge of local rules, cultural differences and opportunities for mutually acceptable commercial agreements. These cultural aspects also reduce effective applications of the Anglo-American legal and ethical “prudent man” doctrine to a few selected practical decisions. In practice, we meet both an increasing diversity of international business norms and a greater pressure to legislate and control business behaviour.

Professor Peter Dickson (1997) of the University of Wisconsin at Madison is not pleased with the present ethical dimension in marketing:

The marketing decision may be constrained by the law as well as professional, company, and personal codes of ethics. Unfortunately, the marketing profession has been inactive in policing its code of ethics, in removing violators from membership in its professional associations, and in encouraging new laws that police and punish highly unethical marketing practices. An inverse relationship often exists between the standards and enforcement. The law is the floor of ethics, but it can be enforced. The personal code of the enlightened citizen, in

theory, should be the most demanding but is only enforced by personal values and conscience.

A look at American business curricula confirms Dickson’s assessment. There is some exposure to ethical issues in accredited schools, but further discussions in marketing courses may be limited to the introduction of the American Marketing Association’s code (Kotler 1997). The suggestions of this code include a wide range of rights, duties, and obligations. The provisions of this code are, however, difficult to enforce universally and consistently. Codified purchasing norms usually go beyond warnings against illegal actions. They are focused on narrower issues of concern in supply management. Thus, they discourage “sharp practices” such as the use of misleading information just short of fraud. Company instructions for buyers usually refer to codes of ethics and professional standards adopted by related groups and associations, such as the National Association of Purchasing Management, now the Institute of Supply Management, (Ammer 1980) and the National Institute of Government Purchasing (Dobler et al. 1996). Although company codes of conduct offer valuable guidance and provide reference points for discussion, they cannot by themselves assure ethical behaviour. According to our observations, practices vary from industry to industry and from company to company. Many decisions are made not only without professional competence, but also lack consistency and ethical universality.

Policies to Support Ethical Practices

In the Western world, the two most common (though partially conflicting) ethical ideologies are those of Kantian universal rights and duties, and the utilitarian emphasis on the greatest good for the greatest number (Berkowitz et al. 1997). Western governments increasingly enact laws to prohibit bribery and other damaging practices. Individual enterprises use arrays of their own written policies and regulations that reflect the legal prescriptions and principles expressed by professional associations. They usually add further procedural guidance in statements that may be in part widely publicised among buyers and sellers. They serve their limited purposes reasonably well in providing consistent rules for practice, but they often fall

short of establishing a well understood climate of company integrity.

For this reason, some companies, such as McGraw-Hill and Procter & Gamble develop shorter policy statements that promote the ethical environment they want to cultivate. Fundamentally, such short codes are used to cultivate a spirit of integrity. They rely more on individual judgement than on quasi-legal enforcement. The best such policy statements are built on solid philosophical foundations (Donaldson and Werhane 1993).

This broader approach seems to be more promising. Activities in business markets are not isolated from each other; individuals cannot be left entirely to control by imperfect market forces. Balts, reflecting on their own recent economic performance, should easily agree with the view of Thomas Hobbes that unrestrained self-interest leads to hostile relationships where life is solitary, poor, brutish and short.

The most suitable ethical foundation for Baltic decision makers is the concept of individual personal responsibility formulated by Immanuel Kant, the 18th century philosopher with family roots in Courland. The principles advocated by Kant are consistent with traditional values taught in countries on the Baltic rim. Kantian principles limit individual freedom. At the core of these principles is the duty to be honest and truthful, and not to harm others (Kant 1930).

As do many others, Kant insists on observing the Golden Rule, and requires that individuals follow moral obligations such as the following (Stewart 1996):

Consistently meet universal standards of behaviour, such as keeping promises unconditionally.

Be fair, with the same rules for all; empower individuals to do their best.

Guided by moral obligations, make personal free choices without regard to consequences. Do not rely on excuses offered by others for their behaviour. For the individual, company policy represents a consensus of individuals on deliberately chosen issues.

The examples below represent selected interpretations of Kantian principles for international business practice (Stewart 1996):

Howard E. Nolan, Chief Executive Officer, Moody/Nolan Lt., Inc. – “A company’s business ethics are

its self-established standards for its relationships with employees, customers, and the community as a whole. It is the fabric describing the integrity and values of a business as exhibited by its leadership and its employees. Moreover, good business ethics lead to improved products and services, improved employee performance and greater customer loyalty.”

William C. Byham, President of Development Dimensions International – “Business ethics build trust, and trust is the basis of modern business... A modern organisation does not have a long list of rules and procedures. The organisation uses mutually understood vision and values to guide decision-making and relies on collaboration and trust to get things done.”

Ralph Schey, Chairman of the Board, Scott Fetzer Company – “As nations race toward a global marketplace, the need for commonly accepted ethical standards has taken on new dimensions of even greater importance. Economic development requires that ethical standards substitute for force. Since trade, technology, and finance are the primary tools of business, there is crushing need to make business ethics an integral part of business training.”

Organisational policies provide condensed applications of values and increase consistency in applications of common marketing practices. They normally provide some guidance to grey area issues of possible conflict. For example, cost information is proprietary; however, in some industries with well-developed subcontractor systems, internal performance data are commonly shared in negotiations and in monitoring performance.

The following are several marketing practices (Morris 1992) with our comments about issues that involve ethical questions:

Differential pricing policies. The apparent discrimination needs explanation or justification.

Use of economic power to obtain concessions. Competitive bidding required by many government agencies frequently does not make sense. Rules of the game should be carefully structured for negotiations to avoid undue use of power.

Giving preference to favoured suppliers or buyers. Proposal and bid (tender) evaluations should be designed to avoid discrimination. Summaries of such evaluations should be available on request.

Providing free trips. Acceptance of free air travel for plant visits to evaluate new potential suppliers should be fully justified.

Replacing specified components with others. This should not be a unilateral decision; it should require mutual agreement for a change order.

These and related issues are frequently covered by written policy statements concerning standard operating procedures (Heinritz et al. 1991). They are most useful where the policies broaden the use of given principles, provide consistency of actions taken, and increase fairness. This is especially true in situations where what is common in one industry, is not at all common in another. Giving large gifts is illegal in some countries, but is common in others. In some industries, souvenirs of small value and invitations to lunch are widely offered and accepted. In some cases, samples are purchased. In universities, however, textbook samples are universally given and taken. Negotiations may follow strict rules in one extreme, but "sharp practice" may be tolerated elsewhere. In all of these and other cases, policy statements would be helpful.

Corrupt use of power is all too common in the Baltic states. It currently is the single, most negative factor in Baltic economic development. Abatement of this state of affairs is difficult. Those who give bribes are usually satisfied with what they have gained, while bribe takers are pleased to have the value of their power reaffirmed. Indeed, too many decision-makers believe that their behaviour is correct, and that their traditional power position allows them to use it.

Issues related to supplier selection often involve special considerations. Legal requirements to use competitive bids (as compared to negotiations) may have unintended consequences leading to unrealistic and damaging decisions. In other cases, qualified competitors may be excluded in favour of other suppliers. Such disreputable practices point to incompetence and corruption. They damage the reputation of individual decision-makers, companies, and whole countries. They undermine all ethical behaviour and damage still fragile business relationships.

It is generally accepted that Latvia has the highest "state capture" index of the three Baltic states; it is also considered to be the most corrupt, though lowest of the three in bribe taking. Taagepera (2002) reports

that this pattern is in part due to an unusual concentration of strong political and economic forces aligned in the important Latvian role in transit trade. Other factors include the tolerance of improper use of personal and state power in the economy.

The limited market opportunities in a small country and the importance of favours granted by government officials make bribery tempting in the Baltic states. Conditions conducive to the use of competitive bids and tender offers are seldom suitable for large transactions. A quick look at concepts formulated by Admiral Lee (Dobler et al. 1996) suggests that free market strategies and tactics may be difficult to use in the sale and purchase of new technologies and services in the Baltic states. Frequently, specifications are not fixed, there is a shortage of qualified buyers who want to compete actively, and final choices are subject to special considerations.

Although it is logical to negotiate with best-qualified sellers, such negotiations are frequently impaired by political dictates and by a lack of agreed-upon ground rules. More than 200 different negotiation strategies and tactics are available (Karras 1974). Many of them are in conflict with each other, and some are downright unethical, especially in privatisation cases where long-term relationships are not expected. Comprehensive codification of proper behaviour is not possible under these circumstances. Just the development of a few useful norms for buying and selling in Baltic business markets will take much trust, time, energy and cooperation. The essential aspect of this task is to establish and strengthen personal and organisational integrity.

Certain aspects of international long-term relationships are directly linked to moral obligations. Alliances and partnerships are developed to assure the seamless flow of goods sold and purchased. Such relationships are linked to higher productivity and relatively lower costs. This is important in the Baltics as the Baltic countries strive to reach standards prevailing in the European Union.

Long-term relationships can both reduce and increase risks. Established patterns of responsiveness to unexpected crises show that risks can be reduced. On the other hand, business capabilities change over time. Cooperation may require good understanding and special handling of difficul-

ties that may arise. Good international relationships require the resolution of cultural differences that may affect performance. Moral obligations accepted in such situations are likely to be more valuable than typical legal remedies. Lastly, there are special risks that may be characteristic of operations in transitional environments where business performance can be affected by lingering Soviet practices, or by inept government efforts to regulate business and restrict the use of available resources. Such practices increase the risks that are faced by both Baltic entrepreneurs and their partners abroad.

Building Integrity and Trust

A climate favourable to ethical behaviour in business and public life is usually a function of widely respected social norms and enforced laws. When individuals or larger entities lose self-control, two developments are likely. The first, as in the Enron case, is the initiation of very visible criminal and civil legal actions against the company and its officers. The second is the loss of corporate and personal reputations, and the ensuing destruction of the business and personal fortunes. Indeed, it is precisely this immediate loss of reputation and public trust that in a very short time destroys personal professional careers in business and government, as well as the value of once envied organisations.

Even prestigious enterprises are especially vulnerable if their mode of operations is based on such combined volatile assets as knowledge and skills commonly known as intellectual capital, and an internal environment of trust and cooperation, or social capital. This, of course, is typical of the technical innovators that are at the leading edge of economic growth in the United States and also in the Baltic states. Capital invested in technology is worthless without intellectual capital. Intellectual capital is not sufficiently productive without social capital.

The building of trust and an ethical environment is a demanding managerial responsibility that does not stop with the writing and publication of appropriate codes of behaviour or operating instructions. It begins with the formulation and enforcement of a company's legal obligations. Of course, the immense number of decisions that involve ethical questions defies complete codification. Moreover, a pervasive enforcement climate may also undermine

individual trust and group cohesiveness. All policies require constant reviews, periodic assessments, and strengthening the acceptance of ethical dictates.

Business managers have the primary obligation of formulating and implementing behavioural norms in their organisations. They do, however, share these obligations with many different stakeholders, including owners, employees, suppliers, and customers. Their values often clash. Therefore, managers and others cannot avoid ethical conflict. For this reason alone, they need guidelines for developing agreed-on ethical practices and sets of values within their organisations (McCoy 1983). In other words, the integrity of an enterprise is both an individual and a group responsibility.

It may well be that the American lessons are not lost to the world. The protest vote in recent elections in Latvia shows that parties strongly suspected of unethical or illegal practices can be replaced overnight. When compared to the successfully privatised Estonian merchant marine, the value of the opaque Latvian shipping company is minimal on the Riga stock exchange. In short, successful leaders in government or business or in innovative companies are unlikely to prosper anywhere without a strong component of ethical behaviour in their operations. In Latvia, there is a strong demand for transparency in government decisions, in particular in matters of government subsidies, loans, and contracts. In such situations, it is not prudent for a single individual to micro-manage the actions to be taken. Improved practices in business marketing depend on both organisational integrity and professional competencies.

IBM executives Laurence Prusak and Don Cohen remind us that no one person can be an organisation (Prusak and Cohen 2001). Managers should, however, be models of ethical behaviour. Regulations issued by top management alone cannot assure organisational integrity. There should be no reason to distrust management. Organisational integrity must first emerge at the top level with open discussion of important issues and decisions.

Prusak and Cohen state that it is best to demonstrate a commitment to trustworthy personnel policies and practices with emphasis on what is done. In building trust, managers must lead the way in trusting others. There should be a visible practice of hiring personnel that fit the emerging organisational climate.

There should be clear policies on employee and group rewards, promotion of personnel, and retention of qualified employees. There should be much lateral networking to facilitate personal conversations across organisational boundaries – frequently with customers and suppliers. In the Baltics, where not much attention has been paid to ethical issues at work, progress depends on such open discussions and other learning, and on perceptions of fairness. These perceptions depend on both the norms developed by the organisational community and on the accumulation of observed practices.

Although we do not know enough about the strengths of positive values in the Baltics, our own research on work-related values among business students and young managers in Baltic rim countries is encouraging. Values related to trust and cooperation are high on the lists of these future managers — good grounds for hoping that this new generation of managers will help to increase the operational social capital in the region.

For example, the majority of students surveyed in the past two years at the Estonian Business School (53%) believe that most people can be trusted (King, Barnowe 2002). In the same EBS sample, students rated having a good working relationship with their superior as most important in a list of eighteen job attributes, and rated working with people who co-operate well with each other as the third most important job attribute. Students in Latvia, Lithuania, Poland, Norway and Sweden also rated these two job attributes as among the top six in importance. A large majority of students sampled in each of these countries also indicated that they wanted to work closely with their superior on a day to day basis: 79% of EBS students reported that they would prefer to be consulted about management decisions, or wanted to actively participate in the making of those decisions. The comparable figure for other countries ranged from 66% to 91%.

Analysis of other comparative data from these countries, presently underway but not yet completed, indicates that values for trust and cooperation are very strong within each student sample. These students already know that their integrity, reputation, willingness to work closely with others, and intellectual capital are their most valuable assets.

Many managers in the generation ahead of them seem by comparison to have difficulty linking trust

and cooperation in practice. Although they seem to be pragmatic in following what they see as the rules of the game, they seem not to appreciate that ready cooperation and high performance require a high degree of trust. Research by Cornell University professor Tony Simons (2002) confirms the pragmatic advantages of these social capital values. Focused on the behavioural integrity of management at 76 Holiday Inns, his study confirms that management of low trust cannot effectively enlist the full cooperation of employees. Conversely, for every percentage point gained in trust, there is a percentage point in new profit at Holiday Inns internationally (www.people.cornell.edu/pages/tlsll).

Political leaders and top managers in the Baltic states have a special obligation to assume ethical behaviour as an imperative for success in their organisations. Allowing for individual roles, industry differences and organisational functions, ethical values should be part of a carefully cultivated ethical environment (Cullen et al. 1989).

This extended emphasis is important. Although some industrial marketing and supply managers believe that education and training in practical skills should come first to reduce incompetence in business markets, actual decisions will most likely require the search for mutually acceptable criteria. Such decisions are usually made in essentially novel or recently changed situations.

The best solutions can be determined only when both partners respect each other's integrity. At a minimum, professional skills should go hand in hand with well-reasoned and clearly understood ethical considerations. As we know from the daily news, such processes are not yet common in the Baltic states and in Baltic business relationships.

Honesty, mutual trust and cooperation seem not yet to be strongly linked to each other in Estonian, Latvian and Lithuanian personal value systems. On the national level, there are the disappointing examples of Estonian-Latvian fishery negotiations, and conflicting claims concerning Lithuanian-Latvian offshore oil deposits. In both cases, there is little evidence of mutual trust or of planning for long-term cooperation and mutual benefit. Instead, these examples reflect the assumptions of an almost primitive zero-sum game. In Latvia, where simple divisions of spoils have become common, many leaders are perceived to be dishonest and are mis-

trusted. There is little evidence of cooperation in larger organisations in the sense of building mutual beneficial relationships. Cooperation without trust, however, is limited and largely ineffective.

To be competitive in business markets, an enterprise must have social capital beyond even the most complete technical competencies and traditional capital resources. International cooperation is especially demanding because of different values or “psychic distance” in communications (Doole and Lowe 1997). An ethical foundation of trust on a high level is needed to assure maximal cooperation. Cooperation and understanding of value differences are fundamental to all conflict resolution. Business marketing can be improved only when professional marketers mesh personal and corporate values with other considerations to arrive at fair and equitable decisions.

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Investment Climate of Lithuania and Advanced Ruling of Investments

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Keywords: foreign direct investment, investment climate, advanced ruling system, foreign investment inspectorate.

Abstract

This paper will discuss how motives and priorities, which determine the opportunities and expediency of investments for the country receiving investments and for the investors, are influenced by a favourable business climate.

The article also describes the dynamics and situation concerning investments in Lithuania. A survey was conducted with the aim of identifying the opinions held by the most important (largest) foreign investors in the economy of Lithuania, the opportunities, specific aspects and problems of doing business in Lithuania and the investment climate in Lithuania. Based on the survey, basic claims (remarks) by foreign investors concerning the present business situation in Lithuania have been identified and discussed, and suggestions for the improvement of the business environment put forward.

In order to form a more positive business climate a proposal was made to establish and implement a system of advanced ruling for work with serious foreign investors. The said system could be implemented by a Division for the Advanced Ruling of Investments. This division could be included in the structure of the Lithuanian Ministry of Finance and have its official base in Vilnius. The head of the division would be authorised to offer and guarantee special tax conditions and amounts to serious foreign investors, and sign official documents with them on behalf of the Republic of Lithuania. This could help eliminate any unnecessary bureaucracy

and ensure investors with the relevant stability of guarantees. There exists the opinion that the proposed advanced ruling of investments system would positively influence the investment climate and attract investments to Lithuania.

Introduction

The world's economic and financial systems are becoming more and more integrated and the interests of various groups, countries and even continents coincide within those systems. The division of labour is becoming increasingly international, and educational, industrial, financial and trade relations are becoming more and more complicated.

Any country receiving investments can judge the expediency and efficiency of foreign investments from their ability to invest in the following:

- Manufacture of prospective products in the market;
- New technologies and “know-how”;
- Industrial areas which can maximise employment opportunities;
- Business areas that promote export and the manufacture of products capable of competing on international markets, by giving the exporter favourable loans, giving guarantees or strengthening the legal and financial security of the exporter's business.

On the other hand, before making any investments the investor will always look after his interests. He wants his investment to be profitable, he wants to receive guarantees for its security, and assurances for the guaranteed repatriation of dividends and profit.

Therefore, before deciding to invest, the investor will try to satisfy the following questions about the opportunities and priorities for the investment in each separate country:

- Motives of the state and agencies of municipal administration;
- Promotion of investments and investors;
- Investment limitations and prohibitions;
- The procedure for the registration of enterprises;
- Possible business structure;
- State procedure for investments (acquisitions);
- The system of accounting and auditing;
- The financial system;
- Repatriation of capital and salaries;
- The system of taxes;
- The quality of the labour force and its price;
- Local and foreign markets;
- The possibilities for international financing and the stock exchange;
- Information and assistance during the organisation of the business;
- Promising trends for investments.

By making an investment the investor also pays special attention to the following factors, which are crucial to his positive decision:

- The country's political stability;
- International status and security;
- The country's economic developments and economic stability;
- The country's banking system and its stability;
- The policy for regulating the national currency;
- Signed bilateral Investment agreements;
- Signed conventions for the avoidance of double taxation;
- The absence of taxation sources for interest and author's emoluments;
- The possibility of investing companies to conduct investigative negotiations with responsible officers from the taxation inspectorate;
- The image of the country at the international level.

All the above mentioned factors help form a positive climate for a business environment which cannot be left unnoticed abroad, and in many cases may attract individual investors and international

companies to establish their enterprises within the country.

If used sensibly, foreign investments in business can give the country opportunities to improve its economic situation – to increase employment rates and the technical level of industry, develop export and failing regions and increase the country's economic and business environment, and even its political situation.

Investments only make sense when the investor's interests coincide with the interests of the enterprise or country receiving such investment. The investments bring profit to both parties, bringing additional benefits to the party receiving the investments through infrastructure development, the creation of employment opportunities, regional development and integration into the international division of labour.

Therefore, investments are an effective means to improve the economies of developing countries and help them find their way in international markets. They also assist them to integrate into the operating structures of economic communities, and overcome their economic weakness by providing economic assistance, loans, and technical and scientific assistance.

Foreign Investments in Lithuania

The dynamics and situation concerning foreign investments into Lithuania's economy has been thoroughly analysed and presented in Table 1 and Figures 1, 2 and 3, which have been prepared on the basis of data provided by the Bank of Lithuania, the Lithuanian Ministry of the Economy and the Lithuanian Department of Statistics.

During recent years the increase in the number of enterprises with foreign capital is noticeable. The number of such enterprises has increased by 223 during the last two years, while investments into such companies have increased by 1,579m Lit. The number of companies having between 10 and 50 per cent foreign capital has decreased by 48 and investments into them have also decreased. The number of companies having more than 50 per cent foreign capital remained the same but direct foreign investments have considerably increased (1,411m Lit.).

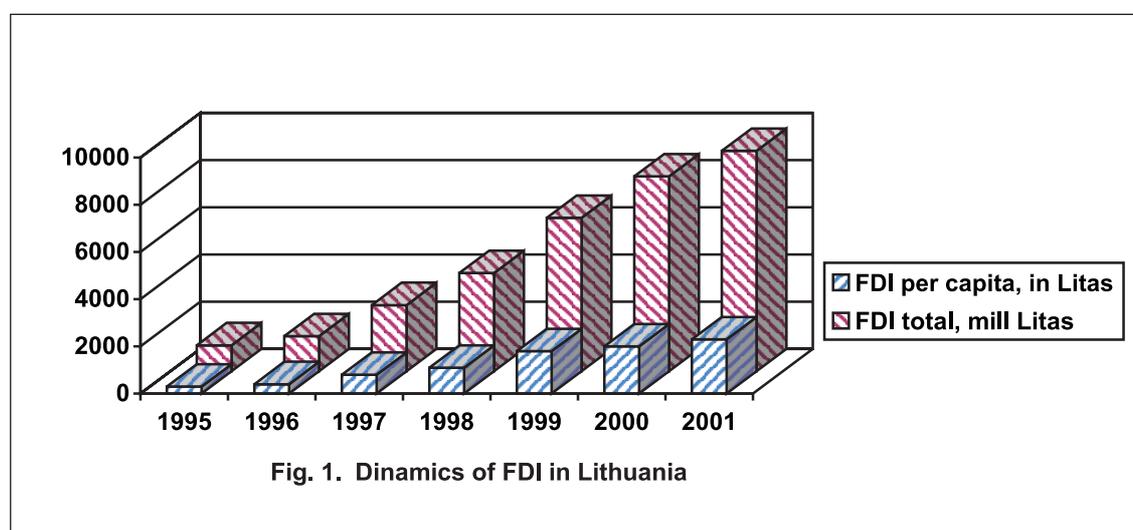
Table 1. Dynamics of FDI in Lithuania as of January 1, mill. Litas

| | 1997 | 1998 | 1999 | 2000 | 2001 |
|-----------------------|-------|-------|-------|-------|-------|
| FDI total | 11253 | 15864 | 19714 | 24667 | 26774 |
| FDI | 2801 | 4163 | 6501 | 8252 | 9337 |
| Portfolio investments | 1227 | 1664 | 1473 | 3514 | 4561 |
| Other investments | 7225 | 10037 | 11740 | 12901 | 12875 |

Investments per person in Lithuania are the smallest when compared with the other Baltic States. For example, in Latvia they amount to 3,119 Litas, in Estonia to 13,533, while in Lithuania only to 2,529 Litas. In 1998 investments per person amounted to 2,421 Litas in Estonia.

The considerable growth of investments in the sphere of financial intermediation is also noticeable, which shows the intensive growth of the Lithuanian financial market.

One of the most pointed problems for investments in the Lithuanian economy is not so much their limited

**Fig. 1. Dynamics of FDI in Lithuania**

The largest proportion of direct foreign investments is made by the European Community group of countries. Therefore when Lithuania prepares to join the European Community it is necessary to improve the Lithuanian investment environment and to increase the attractiveness of investments and as soon as possible to harmonise the laws of the Republic of Lithuania with the standards of the European Community.

By looking at Fig. 2 and 3 one can notice the trend of investment in specific branches of the economy, which could provide guaranteed profit, quick repayment of the investments and exceptional state support.

Therefore investments are most apparent in manufacturing, wholesale and retail trade, post and telecommunications, financial intermediation and the real estate business.

quantity but their unequal geographic distribution. Vilnius receives about two thirds of all investments (62.1%) and Kaunas receives six times less.

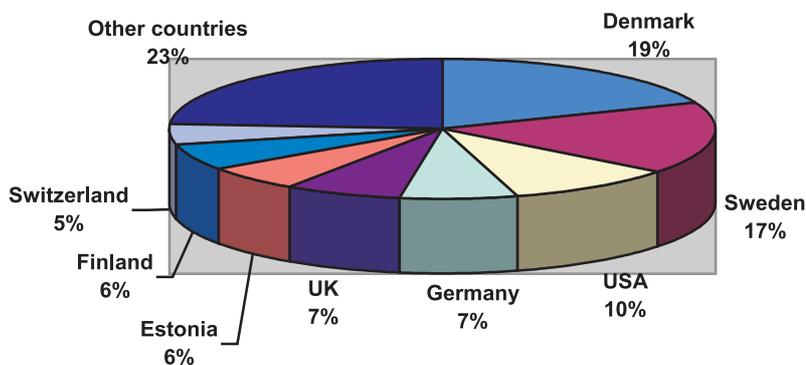
Despite Kaunas having developed science and industry using the considerable potential of its engineers and high qualified workers, the downward trend in investments is causing trouble.

It is necessary to improve the present imbalance of investments with the aim of avoiding further damage to the Kaunas town and county economy.

The Investment Climate in Lithuania

By means of personal interviews in 1998 and 1999, the author conducted a survey of 20 Lithuanian enterprises, which had the largest investments. The author's aim was to analyse the investment environment in Lithuania and point out the deficien-

Figure 2. Major countries investors as of January 1, 2001



cies of the state structure, which interfere with the development of investments. In 2001 and 2002 the 30 largest enterprises were interviewed.

The Problem with the National Laws, their Wording and the Duration of their Validity

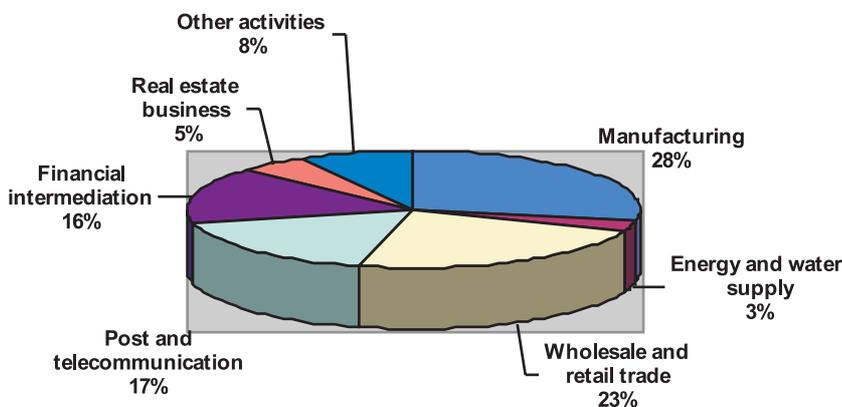
Foreign investors in Lithuania have to abide by considerably more laws, regulations, rules and limitations than in the Czech Republic, Hungary, Poland and even Latvia and Estonia. These especially concern labour, the movement and sale of goods and the possibilities for leasing land. Therefore, more investors are dissatisfied with the excess of laws and regulations and their vague, complicated and

even contradictory wordings. New laws, amendments and supplements are passed rather often, but businessmen receive little information about the drafting and implementation of these laws and what information they do get is often inaccurate and out of date.

Opinions held by the heads of small and medium sized enterprises about the work performed by public officials, which differs from those held by larger investors.

Large investors characterise higher state officials with whom they deal while implementing various projects as flexible and intelligent. But the heads

Figure 3. FDI by economic activity in 2001



of small and medium sized enterprises (SME) have a different opinion of all the bureaucrats and state politicians in terms of investments and investors. They think that they are corrupt and do not pay enough attention to their enterprises – failing to provide relevant assistance to them in spite of the fact that they add value to the economy and provide employment. They state that SME's are being oppressed by the taxation inspectorates, the economic police, the customs officers and even government officials, who very often raise ungrounded requirements and treat them as potential smugglers and tax evaders. Therefore, we can see that the opinions of the state structures held by large enterprises is different compared to those held by SME's. The reasons for such differences could be that those difficult rules and regulations are much more difficult to comply with for SME's unable to hire professional financiers or lawyers.

All employers have a negative opinion of “severe actions” – course but ineffective means of collecting taxes. This contradicts the recommendations put forward by the World Bank to create and implement a fiscal policy promoting voluntary compliance with laws on taxes. For example, the regulations-requirements of 30 April 1999 for customs officials to conduct physical inspections of all the cargoes (except transit TIR Carnets) crossing the state border of the Republic of Lithuania, completely destroyed the work of customhouses for a period of several weeks.

A Positive: Lithuanian Immigration Policy

Foreign investors give positive evaluations of immigration services operating in the Republic of Lithuania. The procedures related to the permission issued by the immigration services to commence business are direct, clear and easy to follow. In this respect, Lithuania is better than other countries especially considering the positive feedback given regarding the prompt consideration of applications submitted by foreign investors within the period of 30 days.

A Negative: The Procedure for the Acquisition and Management of Land

Investors note that the biggest obstacle in the way of increasing investments in Lithuania is the prob-

lem of the acquisition and administration of land. Although the 1996 constitutional law contains a provision under which ownership rights on land plots can be administrated by Lithuanian and foreign firms, the procedure for the acquisition of the land was only confirmed a short time ago and so there have been very few occasions when land has been purchased.

Another problem associated with the acquisition of land is the incomplete restitution of land ownership, which often had to be implemented based on the land reform and in the absence of the landowner. This makes the acquisition of land rather complicated.

A long-term lease of land is a complicated and strictly formal process, which lasts for six months. It is obvious that a potential investor would like to acquire the land on time and without any great risks. Foreign countries, which have managed to attract numerous investors, became interesting because they offered a liberal policy for the acquisition of land. Acquisitions of land via auctions is an evident and clear, but rather drawn out, process, which frightens many potential investors away.

The Procedure for Permitting Construction Works

In Lithuania, it is rather difficult to obtain permission for construction works, because it is necessary to get approvals from no less than 10 government organisations. This becomes more difficult when at certain stages of the construction it is again necessary to receive approvals from those authorities.

As throughout the whole world the granting of permission for construction implies a lengthy and complicated process. Investors all wish that the procedure of documents necessary for construction could be strictly formalised and available together with the regulations for construction works, and that the granting of permission for construction and the monitoring of the construction process could become easier.

A Complicated System of Licensing

A complicated system of licences with various and often sizeable taxes exists in Lithuania. Foreign

investors say that licences for them are much more expensive than the licences for locals. Also, certain branches of industry are closed to foreign investors. Such problems do not exist in the other Baltic States or the countries of Central Europe.

A Rather Strict Procedure for the Acquisition of Shares

Foreign investors think that the maximum limit of shares that can be bought from another company is too small. If it is exceeded it is necessary to obtain the approval of the Competition Service. This overburdens not only the acquisition but the work of the stock exchange.

A Strict Fiscal Policy and Difficult Administration of Taxes

The state fiscal policy and administration of taxes is one of the most important problems that the world and Lithuanian businesses face. Many requirements and documents which make activities more difficult are still in force in Lithuania, and are much more complicated than the ones in force in other Baltic States or the countries of Central Europe.

They are: special invoices for all commercial transactions and all kinds of transportation; all cash-register tapes signed by the Director, and invoices of transactions and transportation must be retained for a period of 10 years;

Every three years the Taxation Inspectorate inspects all stock companies to a degree that would only be applied in many countries in cases of serious abuse.

The resembling results were obtained by FIAS – Foreign Investment Advisory Service of the World Bank after surveys conducted in 1999.

The investors would like Lithuania to implement a strategy of voluntary compliance with tax laws and an automated system for tax auditing. It is necessary to cease collection of taxes under the “severe action” method, which causes more damage than benefit, forcing many SME’s underground where there is no hope that they will pay any taxes or obey other laws and decisions. It is necessary to annul the requirement of using invoices issued by the Government for sales and transportation activities,

because they can easily be forged and therefore are inefficient in terms of requiring payment of VAT. EU member-states and countries planning EU membership collect VAT without such documents.

The interviews of foreign investors conducted by the author highlighted their opinion of the Lithuanian business environment. It is necessary to note that although many foreign investors are satisfied with their rights, which are equal with those of Lithuanian investors, and with the guarantees provided for investments in Lithuania, many of them are anxious about the administrative procedures operating in Lithuania. They think that such procedures are too complicated and involve too many layers of the state authorities (too many ungrounded stages), requiring the investors to provide a lot of information, which often has to be very detailed and is evidently unnecessary and useless.

Foreign investors are not only interested in the establishment of Klaipėda and Kaunas free trade zones but also in the development of activities within those zones.

The Principles of Advanced Ruling on Investments

It is necessary to note that foreign investors are worried about the Lithuanian tax system and the activities of the Taxation Inspectorate in the following respects:

- Inaccurate wording of tax laws which allows ambiguous understanding, explanation and interpretation;
- The clear absence of any policy for the interpretation of laws;
- The slow harmonisation of Lithuanian tax laws with the laws of the European Community;
- Frequent changes to the tax regime without prior notice of the introduction of new tax laws;
- Delays on VAT returns (although the law specifies a period of 10 days, on average it takes 1 month) which cause additional problems for export-import companies.

From this list the main problems that foreign investors face can be defined as:

- The considerable and rapid changes to the tax system;

- The absence of any opportunity to obtain long-term land lease ;
- The complicated, multi-stage co-ordination of each business project with state institutions and municipalities.

Such claims from foreign investors not only decrease investment possibilities for Lithuanian business entities but also decrease the image of Lithuania as a possible recipient of investments on the international level.

Therefore, in order to improve the efficiency of dealings with foreign investors and eliminate their complaints to the tax administration, we propose the implementation of advanced ruling of taxes. Similar structures, performing different functions, operate in the United States of America, Sweden and Holland. We think that the application of such a method will not only make the foreign investors' work easier but will also improve Lithuania's image and make Lithuania more attractive to investors.

The essence of the method for advanced ruling is the establishment of a special government structure to work with large foreign investors. This structure would be given legal powers to negotiate, consider and guarantee important investors appropriate tax conditions and the stability of the principal laws and government decisions for the first several years of their work.

Within the Ministry of Finance of the Republic of Lithuania it is necessary to establish a division for advanced ruling which would deal with large foreign investors.

The purpose of that unit would be:

Personal work with important investors – investing 20 million Litas or more – during the preparation and implementation of the project;

Guarantees, on behalf of the State, concerning the stability of laws on ownership and finance and government decisions for the first 5 years;

Ensure the clear and reliable interpretation of the law.

All the above mentioned factors would guarantee the investor with:

- Stable taxes;
- Stable profit and dividend repatriation possibilities;

- A positive State approach to the establishment of new working places;
- The promotion of competition for exports;
- A positive State approach to innovation in projects via the creation and implementation of novel engineering and technical solutions.

The aim of the advanced ruling is not only to guarantee a more favourable application of taxes taking into consideration international tax structures. First of all the advanced ruling system must be administered by an inspector who is competent in the law – the law of precedent and administration taking into consideration the peculiarities of such activities. Those inspectors who work with serious foreign investors must abide strictly by the principles of advanced ruling.

If the institutions engaged in the administration of taxes publicly show a particular interpretation of a situation, such statements become binding, and are legally equal to cases where an advanced ruling has been provided.

In the same manner, in order for the administrative agencies (on the basis of decisions, instructions or administrative practice) to have the possibility to persuade the tax payer and form in him trust based on the law that the laws on taxes can be interpreted in a particular manner for the tax payers to have an opportunity to argue with administrative bodies before applying to the court.

The following are possible types of advanced ruling:

- Advanced ruling taking into consideration exemption from the payment of taxes;
- Advanced ruling for financial companies;
- Advanced ruling related to the author's emoluments;
- Advanced ruling related to financing via the permanent existence of foreign firms.

These types of advanced ruling should be valid for a period of 5 years. But instructions concerning the advanced ruling of taxes in particular should be invalid unless the entire policy for the administration of taxes was changed and all changes had been published officially.

It is necessary to note that competition between European countries is increasing as they all seek

to attract investors. That is why it is important to ensure that the various Lithuanian State authorities co-operate in their work with foreign investors. The importance of such co-operation is increasing annually.

We think that the aforementioned division for advanced ruling should be included in the structure of the Ministry of Finance of the Republic of Lithuania and have its official office in Vilnius.

The establishment and legalisation of such a structure would enable the investor as a payer of taxes to deal with a considerably fewer government institutions.

It is also very important that the procedure for the consideration of taxes be performed during the shortest possible time period.

The following basic taxes must be discussed, co-ordinated and a contract for a particular time period signed with the potential investor:

- Transport levies;
- Value added tax for the services provided or goods sold and imported;
- Registration taxes:
- Real estate transfer tax;
- Capital registration tax;
- Income tax for individual taxpayers together with satellites (maintenance taxes), taxes on salaries and the payment of dividends. The total amount of these taxes.
- Property tax for individual taxpayers;
- Inheritance tax and gift tax (for individual taxpayers);
- Corporate (joint income) tax.

The official of this new division would deal with investors on various aspects during the consideration and implementation of projects. He would ensure a smooth decision process, simplifying procedures and undertaking on behalf of the State an advanced ruling for a particular period.

The establishment and implementation of this structure would make the work of investors easier and improve the image of Lithuania among foreign investors. If put into operation advanced ruling would not go unnoticed by individual foreign investors or by international companies and could have an important influence upon their decision to establish companies and develop businesses in Lithuania.

Conclusions

1. Although investments in Lithuania are growing every year, the amount of foreign direct investment is lagging behind neighbouring Latvia and Estonia.
2. One reason is an insufficient system of incentives for foreign investment.
3. By means of interviews conducted between 1998 – 2001, the author conducted a survey of 30 Lithuanian companies with the greatest level of foreign investment. The chief problems in that field are:
 - Frequent changes in the tax regime;
 - The lack of clear practice on the interpretation of laws;
 - The absence of accountability for tax inspectors;
 - The slow harmonisation of Lithuanian and European Union tax laws.
4. The proposal for improving that system is:
 - An advanced ruling system for work with important foreign investors, which may be driven by an advanced ruling team as presented in the paper.
 - The suggested system of investment advanced ruling could help to eliminate unnecessary bureaucracy and assist investors via relevant guarantees.
 - The proposed system of investment advance ruling would positively influence the investment climate and attract investments to Lithuania.

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The Dutch Revenue Code, 1992.

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