Small and Silly? or Private Pitfall of Small and Medium-Sized Enterprises

A. Bencsik, V. Lőre, and I. Marosi

Abstract—Knowledge and these notions have become more and more important and we speak about a knowledge based society today. A lot of small and big companies have reacted upon these new challenges. But there is a deep abyss about knowledge conception and practice between the professional researchers and company-life.

The question of this research was: How can small and medium-sized companies be equal to the demands of new economy? Researchers would have liked to know what the sources of success are and how they can be in connection with questions of knowledge acquisition, knowledge transfer, knowledge utilization in small and medium-sized companies. These companies know that they have to change their behaviour and thinking, but they are not on the suitable level that they can compete with bigger or multinational companies.

Keywords—Knowledge, management, small and medium-sized companies, study.

I. INTRODUCTION

Experts of theory and praxis have been focusing on the knowledge and these notions have become more and more important and we speak about a knowledge based society today. A lot of small and big companies have reacted upon these new challenges. But there is a deep abyss about knowledge conception and practice between the professional researchers and company-life.

This area is frequently researched, but this survey was motivated by the following conception: researchers would have liked to know how the Hungarian companies are touched by this new system of requirements that demand changes. These changes are fundamentally important from the view of development of Hungarian economy in the future.

In this research a special segment of the native knowledge based on economy was focused on. The question was: How can small and medium-sized companies be equal to the demands of new economy? Researchers would have liked to know what the sources of success are and how they can be in connection with questions of knowledge acquisition, knowledge transfer, knowledge utilization in small and medium-sized companies.

This question is very important because these small enterprises have a disadvantage compared big or multinational companies at the competitive market. It could be clearly felt at the beginning of this research that the connection is knowledge between demand and success.

It can be a good question why researchers wanted to focus on the small and medium-sized companies?

This area is not in the middle of scientific researches but this segment is very important in Hungary and in the other western countries as well because it has a very significant influence on the economy. Their importance can be felt in their numerical superiority. In Hungary they are 99.87% out of all the companies, and they have 70% of the employed workers. This sector has 50% the added value.

Companies which are called small and medium-sized can have maximum 250 employees, turnover can be under 50 million Euros or total amount of their balance sheet can be maximum 43 million Euros.

The research hypothesis has been justified from two directions. First researchers approached the problem from the view of theory. This will be shown in Chapter 1. A practical survey was aimed to be described, but to understand it, it is needed to go back to the basis of theory.

In the second chapter the method of the primary research will be shown and after that the processes of knowledge based economy will be analysed.

During the research it was noticed that this area is very defective in scientific literature, because examination of knowledge processes is a little researched area in case of small companies. This question is very important because these small companies have a disadvantage compared big or multinational enterprises.

The essentials of this paper are about the primary research in that researchers focused on the following main groups - which can follow the interpretation possibilities of the survey of knowledge and competitiveness in small and medium-sized enterprises.

Organizational culture and leader’s style as prerequisites

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II. APPROACH OF BUSINESS THEORIES

This research has been continued from the view of practice, but scientists cannot work without theoretical basis. Economic operators have to find answers to the provocations of the environment – it is similar to that of nature where people have to adapt very fast to development. Changes of environment launch a process of adaptation at companies that proceed in a competitive surrounding. There are operators who can get advantages in this process and the others run into a disadvantageous situation. The solutions that are advantageous can spread and the others can fall into the background.

On the basis of these analogies the changes of knowledge-based economy can be caught. [2]

This new economy is only a challenge for companies they need to fit to survival. This is a threat on the one hand, because who cannot adapt to this demand well enough, they can fall into the background. But on the other hand every change is a possibility for companies to get a competitive advantage.

These changes can be possibilities, if the needed resources - knowledge - are at the companies on a suitable level. Otherwise changes have to be handled as a threat.

In this new knowledge-based economy the economic operators can have chance to adaptation or increase their competitiveness that can accumulate suitable resources - knowledge - in a proactive way.

The function of small and medium-sized enterprises depends on their capabilities to catch knowledge, how they use it during their value creation, because the added knowledge-value becomes more and more significant in the economic processes. [6]

It is documented by a report of OECD that was published in the year of 1996. According to this report about half of GDP of well developed countries comes from knowledge industry and 8 workplaces out of 10 are called into being at a knowledge intensive sector. [5]

The biggest problem for small and medium-sized enterprises is a special process at the market, where companies concentrate their forces as multinational companies. It is only the “tip of the iceberg” because they can push the small enterprises form the market in this way. This process can be seen especially in the area of food trade, where hypermarkets are called into being after each other and in parallel with this process the number of small shops is decreasing. [9]

III. KNOWLEDGE CAPITAL

People have talked about knowledge a lot, but it has not been defined it. This task is not too simple because knowledge is an inconceivable and complex notion so it can be only been defined it. This task is not too simple because knowledge is a heterogeneous and continuously changing mix from limited experiences, values and joined information. It is expertise that can give a frame to judgement and attainment of new information and experiences and it originates and useful in the knowledge possessing people’s mind. Companies take care of this knowledge not only in documents and stock-lists, but they store it up in their proceedings, practical activities and standards as a part of organizational routine. [1]

Knowledge has value therefore it can be caught as an element of property. Knowledge is capable of value creation, so it can be caught as an element of capital. Intellectual capital is an amount of special knowledge that can give competitive advantages and it is in possession of companies. [8]

IV. METHOD OF PRIMARY RESEARCH

A representative sample was not aimed, but to collect information about the connection between knowledge and small enterprises was purposed by the way of experience. In spite of the measure of the sample it could be analysed widely, because the examined companies have very different functions. They are from the following sectors:

o Property protection
o Trade
o Catering
o Insurance
o Financial Sector
o Transport
o Constructing
o Agriculture
o Production
o Else

The method of research was a survey by a questionnaire. The essential new thing was in it that the non - measurable characters at companies were measured with a big sample. These features are studying, intellectual capital and their connection with competitiveness.

The aim was to collect as big a sample as possible and to increase willingness to give an answer, parallel with it to decrease the falling of the sample. To reach this, researchers departed from the rules of the traditional methods. The time limits were respected and the filling time was reduced to the minimum. A very simple structure was used in questionnaires. To answer subjective questions (elements) the Likert scale was used with 5 grades in order to have an easy lucidity. This range of scale was a good compromise to keep information content and review. The questions were structured, but the logical schemas were held, at the same time well separable blocks were formed.

It was endeavoured to compose very simple and easy to understand questions, because leaders have a very different education, culture, intellect, so it was tried to avoid complex and difficult to understand economic expressions. But it means that a compromise had to be found between the usage of exact economic expressions and unambiguousness. Some important financial data were asked for that can show the characters of companies. From these researchers tried to conclude the size and the development of companies. But this
information is defective. Companies did not give this information with pleasure.

400 questionnaires were collected and the rate of answers was very high 92.4%.

Varied statistical methods were used. In the first step simple descriptive statistical methods were used with MS excel, but later the answers were analysed in complex way with SPSS 14.0 program. Sampling was a simple random sample at country level.

V. ANALYSIS OF QUESTIONNAIRES

Functions
The functions of companies were examined from 3 points of view: capital intensity, labour intensity, knowledge and information intensity. The research results can be seen in the Table I.

<table>
<thead>
<tr>
<th>Functions of Companies</th>
<th>Very Low %</th>
<th>Low %</th>
<th>Average %</th>
<th>High %</th>
<th>Very High %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital intensity of function</td>
<td>2,86</td>
<td>11,4</td>
<td>37,14</td>
<td>31,43</td>
<td>17,14</td>
</tr>
<tr>
<td>Labour intensity of function</td>
<td>0,00</td>
<td>0,00</td>
<td>28,57</td>
<td>47,14</td>
<td>24,29</td>
</tr>
<tr>
<td>Knowledge and information intensity of function</td>
<td>0,00</td>
<td>1,43</td>
<td>32,86</td>
<td>37,14</td>
<td>28,57</td>
</tr>
</tbody>
</table>

As for capital intensity it can be said that it is not too important for companies, labour, knowledge and information intensity of function are more significant. Values can be seen in the Table I.

Labour intensity has a bigger significance because for the business profit it is the most important factor. According to the interviewed people their work has very high requirements in this area.

Nowadays knowledge and information requirement has become more valuable. Information is very important for every company because 37% of the questioned people marked a high level and in this case researchers had the highest rate of people (28.6%), who chose the very high categories.

On the basis of these results it can be said that most parts of small and medium-sized enterprises need to use knowledge capital. This appears as a necessity of information and knowledge. Compared to practice it is not a surprise.

Organizational Culture and Leadership
Factor analysis was completed with this group of questionnaire. To the examination a test in Bartlett style was continued and on the basis of this result the zero-hypothesis (correlations among factors) was rejected, consequently the variables are not in correlation with each other.

It was supported by the Kaiser-Meyer-Olkin’s indicator and at the end factor analysis could be used as a suitable method. On the basis of the 20 elements the six factors were born. They are:
1. Employees trust in each other
   - In our company it is typical that people are in a close connection with each other
   - I am a determined person as a leader
   - Our conceptions are always realized by my employees
   - I always give concrete aims and tasks to my employees
2. Initiatives frequently come up from the ground
   - Top management supports this movement from the ground up
   - We decide upon our aims and tasks with my employees
3. Our employees have considerable independence in decision making
   - Studying is an accepted demand among our employees
   - I encourage my employees to form their own aims and tasks
4. In our company there is an open atmosphere
   - We use teamwork in our daily work
   - Employees frequently work together spontaneously
5. Motivation is below among our employees
   - Fluctuation is very big among our employees
   - Conflicts frequently are among our employees
   - I urge my employees frequently to keep deadlines
6. Spheres of activity are strictly regulated
   - There is a hierarchic relationship between leaders and employees

The first factor is called leader’s definiteness and trust, the second is employees’ initiative, the third is independence and possibilities, the fourth is collaboration, the fifth is the negatives and sixth is regulation.

Expectations from organizational culture can be summarized in these factors that are conditions for studying and development of small and medium-sized enterprises. Leaders agree with the first factor (definiteness and trust), Generally it can be said if people have to work together in a team it is indispensable to be with each other in a trustful atmosphere. If they lack this condition, they cannot work in a team effectively. In the form of close connections among employees time has an essential role. The new employees can fit in workplaces with difficulties because everybody is concerned about their workplace and position. Connections in work for a long time can support trustful atmosphere.

To operate companies successfully the leader’s definiteness is indispensable. People agreed with this fact during this survey. Most employees do not take the opportunity to be independent they expect instructions and allocation of tasks from the top management. Nowadays it is characteristic of the small and medium-sized enterprises that leaders decide upon simple and concrete tasks, limit the sphere of activity for effectiveness. So leaders agreed totally that employees have to do their conceptions.

About variables in the second group (employees’ initiative) has to be said that the rate of initiatives from the ground up is low. In most places leaders refuse these, due to
the hierarchical structure, and commands. Employees' independence is rather limited. Collaborations with top management to determine aims and tasks are at a middle level, but we can feel a little opening in this area.

In case of the third factor (independence and possibilities), considerable independence in decisions is disproved by the regulated sphere of activity, and by obligations towards the top management. In this way it is rather on the middle level or under it. Studying is an accepted factor, because everybody knows that it is one of possibilities that can make people feel secure at their workplaces for a long time. Most leaders want to encourage employees to realize their aims, because leaders are frail people as well. In most cases money is all they offer to motivate employees, and to reach the purposes of the companies they will use this tool.

The fourth factor is collaboration. It contains teamwork and willingness to use it and atmosphere. Most of the questioned leaders agreed with the necessity of the open atmosphere. Teamwork is a generally used method of work, but spontaneous cooperation causes some problems. Most employees want to work alone and solve problems without help. We think they are not flexible enough.

The fifth factor can show the negatives. At most organizations leaders did not answer these questions, because they are afraid of their own positive judgement. They disclaimed fluctuation, conflict and the lack of motivation. But reality is darker than it seems from these results. According to leaders employees only urge to keep deadlines is an acceptable feature at their companies.

The sixth factor is about regulation. Leaders agreed with the regulated sphere of activity but about relationship between leaders and employees they had a different opinion. Most leaders declare themselves as flexible people and they said that employees can talk to them at any time. But the reality is different from this declaration. Leaders are very busy they run all day and they keep the hierarchical rules. So employees have to register in advance to meet their leader.

Elements of Study
According to most leaders (31.4%) it is not characteristic to support employees’ studies with money. Only few leaders think that it is important to study, top management does not motivate employees’ willingness to develop and they do not give a financial assistance. During our research it became clear that at the questioned enterprises manual work is characteristic, but there are a lot of employees in intellectual occupations as well. May be this is the cause of leaders’ way of thinking that 47% do not support their employees’ higher education. It does not mean that leaders do not support their employees’ studies at all simple they do not need degree holder employees. In leaders’ opinion (53%) they support employees’ development in some kind of way by money, too. Altogether we can say that companies’ willingness to support their employees’ study is very different and it depends on their style of work, the rate between manual work and intellectual work and other additional factors (Table II).

Organized Internal Training at Companies/ External Training out of Companies
It would have been good to know if companies organize internal or external training for their employees or not. They can do it by their own organization or with outsider companies on the basis of contracts. This situation is the same as the earlier one. According to the questioned leaders (47%) it is not important to teach employees, but the others (53%) keep it significant and they do it in some kind of form. Only few leaders said that they organize a training and teaching for employees regularly and they give lectures frequently. (table 2.)

Leaders’ attitude to support individual study
Leaders’ attitude is very negative in this area. Most questioned leaders (64%) said that is not characteristic to support individual study and only the rest said that they support it in some kind of way. What can the causes be? It is thought that leaders, who do not support organized training, will not support individual study either. Leaders’ opinion is that these study methods do not bring effective results at all, they prefer practical experiences (Table II).

Regular teamwork
Successful teamwork depends on the quality of communication inside the team, leadership and leaders’ individual attitude in team. A team can operate in a more effective way if they can bring purposes, aims and interests of organization closest to them. Some questioned enterprises (20%) said that they do not work in team at all, but the others (72.8%) hold it as an important form of work and they use it regularly (Table II).

New employees’ coaching by skilled workers
It is very important for every company that their employees fit in the organization and to study work style and rhythm. They can support this problem solving that experienced workers help the new employees to study the new work style and to be aware of the expectations. There are only few companies where it is not a characteristic or a general method. In their opinion it is the most important basis of collaboration to help each other and to teach the younger employees by the older workers (Table II).

Participation in professional programmes
Some questioned leaders think (17.2%) that it is not significant for them. Most of them think about it in the other way. They find it important to be a participant at these programmes, because these can move their companies to reach a higher level in their work and at the market, and by this way they can increase their profit. Altogether it can be said that leaders do not support individual and organized trainings, but they find it important to participate in professional programmes. They think that they can change (get and give) useful information between each other at these forums (Table II).

Employees Share their Information and Experience with Each Other with Pleasure
The question is how characteristic the open atmosphere, helpfulness, adaptive skills and knowledge sharing is at
companies. A positive picture about this area was formed. Most leaders (84.3%) think that their employees help each other and share their experience and information with pleasure to make their work easier. But it has to be said that this attitude and behaviour depend on organizational culture and leadership in the biggest measure. (Table II)

**TABLE II**

**ELEMENTS OF STUDY**

<table>
<thead>
<tr>
<th>Flexible IT knowledge</th>
<th>Extremely important %</th>
<th>Not important %</th>
<th>Mainly important %</th>
<th>Importantly important %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0,00</td>
<td>25,71</td>
<td>65,71</td>
<td>21,43</td>
<td></td>
</tr>
</tbody>
</table>

Companies demand employees to fit changes fast and should work together with other colleagues in an effective way to help the success of enterprises. It is advantageous if new employees with a higher degree can study new work fast enough and can fit to the moral of the company. This demand is called flexibility.

The demand (to be flexible), is not a surprise. This feature was appreciated on the important or very important level by most of the questioned leaders (85.7%).

Leaders expect from employees with a higher degree that they should be reliable, loyal, leaders can trust these people and they can empower responsibility and give tasks too. On one hand companies demand these employees with a higher degree to be independent, creative, reliable, suitable for teamwork and motivation. But on the other hand leaders are dissatisfied with some characteristics, for example: knowledge of languages, skills for problem solving, creativity, flexibility. And some companies signed that they miss from these people their willingness to development, precision, system thinking (to see connections among things).

The conclusion can be drawn that at universities there are very few lectures where students can study these skills. They do not have enough seminars or practices where students have to work in team or individually, where they should use their own brain, where they should solve real problems in real situations.

In the questioned leaders’ opinion to speak languages is not important. It was said by 40% of the leaders. May be these

**Employees with a Higher Degree**

Leaders believe this demand very important that their employees should have suitable professional skills and knowledge, namely most of all considered this fact more important than moderate. On the basis of this professional experience this demand is there among the most important expectations at the companies. Only a few of the questioned leaders consider it important that new employees with a higher degree should have practical experience. (But it is typical in Hungary that bigger companies demand from young people to have more higher education degrees, they should speak more languages, they are not older than 25 years, but they should have minimum 3-5 years of experience.) (Table III)

**TABLE III**

**EXPECTATIONS FROM YOUNG PEOPLE WITH A HIGHER DEGREE**

<table>
<thead>
<tr>
<th>Extremely not important %</th>
<th>Not important %</th>
<th>Mainly important %</th>
<th>Importantly important %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional knowledge</td>
<td>0,00</td>
<td>0,00</td>
<td>11,43</td>
</tr>
<tr>
<td>Experience</td>
<td>0,00</td>
<td>2,86</td>
<td>8,57</td>
</tr>
</tbody>
</table>

Leaders expect from employees with a higher degree that they should be reliable, loyal, leaders can trust these people and they can empower responsibility and give tasks too. On one hand companies demand these employees with a higher degree to be independent, creative, reliable, suitable for teamwork and motivation. But on the other hand leaders are dissatisfied with some characteristics, for example: knowledge of languages, skills for problem solving, creativity, flexibility. And some companies signed that they miss from these people their willingness to development, precision, system thinking (to see connections among things).

The conclusion can be drawn that at universities there are very few lectures where students can study these skills. They do not have enough seminars or practices where students have to work in team or individually, where they should use their own brain, where they should solve real problems in real situations.

In the questioned leaders’ opinion to speak languages is not too important. It was said by 40% of the leaders. May be these
enterprises do not want to work with other nations, they plan their activity only at the inside market. This thinking is for a very short-distance and it will bring problems in the future. Demand to know PC and PC programs and to use them very well, is significant from the view of leaders. These demands (languages and informatics) are influenced by the area of activity at the companies. About students’ communication skills leaders’ opinion was very good. Most of them recognize that employees with a higher degree have an extended professional vocabulary, they have a selected way of expressions and these facts can become later their advantages.

Leaders reckon university informatics teaching is a strong point, because young people can use not only basic programs, but special and high level programs, too. This competitive knowledge can increase the standard of companies and it can contribute to successful operating.

Connection with Higher Education

It is very sad that these enterprises do not keep connection with universities or colleges at all. If they have something, it is limited only to help students collect some information about experience and practice to write their thesis. But it is sadder that these companies do not want any connection in the future at all. It was said by 65% of the questioned leaders. Only 27% of the leaders plan that they will teach or train their employees at all. It was said by 65% of the questioned leaders. Only 27% of the leaders plan that they will teach or train their employees together with universities. They can imagine this collaboration not only at a higher degree but other professional trainings and teaching. It was a surprise too that these leaders (73%) do not keep informal connection with employees of universities (teachers, professors, etc.) at all. Their satisfaction with the younger with a higher degree can be seen in the Table IV.

Rate of Intellectual Capital

The rate of intellectual capital at enterprises was intended on our side to be estimated as well. Leaders were asked to appraise what the rate is of the value of intellectual capital out of the aggregated capital on the basis their experience. To this appraisal some important associated facts were given, the most characteristic examples of the types of capital were listed. Summarizing the parts of intellectual capital can be said that about half of the total capital consists of intellectual capital (human, organizational, customer) at these enterprises. This fact can be seen:

An average rate of capital elements at questioned enterprises:

- Financial capital: 27%
- Physical capital: 25%
- Human capital: 19%
- Organizational capital: 8%
- Customer capital: 21%

VI. SUMMARY OF THE EXPERIENCE

At the active small and medium-sized enterprises there is a very big distrust. They are in uncertainty and therefore they do not trust anybody. A lot of times they did not want to answer us, because they are afraid that somebody will use this information against them. And employees do not have an independence to give information about anything. They are afraid, they are uncertain they think their success is only luck or a current incident. They live overnight and they do not feel the importance of development, of study, of knowledge and they run after work and money. It would be good to know that these companies will have a steady basis for future, but Hungarian economy does not support this feeling. Nowadays these enterprises feel that they have to survive and to this they need money and financial capital. Therefore knowledge and study falls behind.

Most of these companies value manual labour more than intellectual work and higher degree. For them the most important thing is a professional knowledge, experience and skills.

People have to know that in Hungary the biggest cost is wage costs, their contributions and other benefits at the companies. The behaviour of companies reflects this problem because they apply only a few times, but for them people are valuable. Sometimes they can be only manual workers not intellectual employees it depends on the activity of companies. It could be seen too that sometimes enterprises should employ people with a higher degree, but they cannot pay them. As the market is saturated, these small and medium-sized enterprises should fight with competitors more intensively, they have to invest into new technology and they cannot pay for key persons enough money. Sometimes they call in experts or other help, because it is cheaper for them than employing somebody continuously.

The tendency can be seen that these companies are in connection rather with specialised secondary schools than universities. They employ more skilled workers than people with a higher degree therefore they need to be in contact with
special schools. They assure places to students to do their practices and they hope that these younger people will work later at their companies. It is very important nowadays because every young man wants to study at universities and only few can acquire skills. But if they have a connection with these secondary schools, they might get a good expert more easily.

It could be seen that companies know the importance of knowledge and study, but they do not do anything for it at their workplaces and they make the flow of knowledge more difficult.

They do not use the possibilities of universities that are nearby they think that they do not need this connection.

VII. CONCLUSION

Summarizing shortly this experience the following conclusions can be said about small and medium-sized enterprises:

People know that knowledge and study are very important for companies, their role have become more and more determined. In spite of these facts they cannot keep abreast of financial things because the purpose of the companies is to reach the highest profit. Information has become very valuable, but flow channels stay in the background, because people distrust each other very much.

Small and medium-sized enterprises do not feel the importance of study and knowledge, the necessity to build organizational culture and atmosphere to operate these systems.

It can be seen that these facts are inconsistent with data in the first chart, namely a large number of knowledge and information intensity of function. They know that they have to change their behaviour and thinking, they know that demand is increasing continuously, but they are not on the suitable level that they can compete with bigger or multinational companies. It is not surprising because the small and medium-sized enterprises do not get any support – from the government - that would be needed. Nowadays there is only one source - the EU support - in Hungary. According to the share of funds of National Development Plan-2, the multinational companies working in Hungary can get more than half of the useable amount. People and government can have concerns about the future of small and medium-sized enterprises and we cannot be surprised if they become distrustful and unstable.

In this situation it can be asked.

What can be done at universities so that students can be prepared - who will work at these small and medium-sized companies – that these enterprises can become really serious pillars of Hungarian economy and these companies should mean for us possibilities of development in future.

This research was very interesting and useful for universities, for companies and for economic experts, too and it would be good to continue the analysis to bring deeper relations into light.

REFERENCES