
Knowledge based economy: Factors which determine SMEs' placement as the first priority of the economic growth in the 21st century

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The last evolutions in economy, social, technology, science, education, politics, etc. show that in this century there are several essential mutations in the economic development. One of the most important is, as our analyze has demonstrated, the priority of SMEs in economic growth and social development. The main variables which determine the SMEs placement as the first priority of the 21st century are indicated in figure 1.

Factors

1. The congruency between SME characteristics and knowledge-based economy
2. Increasing the training level of the population and economic and social culture
3. Increasing of individualization and personalization of products and services
4. Technical and technological changes
5. Informatization of the economy and the society
6. Externalizing of some organization's activities
7. Regionalization and local development
8. Economic activities internationalization.

Figure 1: Main factors that determine the establishment and development of SMEs during transition to the knowledge-based economy

1 The congruency between SME characteristics and knowledge-based economy

The small enterprise presents several dimensional, structural and processual characteristics, which separate it from other categories of enterprises. Essentially, those are:

- a) Small number of components
- b) Small touchable actives
- c) Small complexity of activities
- d) Simple technical, economic, human, managerial structures
- e) Strong entrepreneurial spirit
- f) Flexibility
- g) Dynamic potential
- h) Strong interpersonal relations and group cohesion.

As it can be seen, the presented characteristics refer to small dynamic enterprises, not to the traditional ones. In fact, the knowledge-based economy will include first of all the high level economic sectors, where permanent innovation is the main condition of survival and the key factor for success. The small enterprise characteristics, which, are

not of course exhaustive, represent as many advantages for its redesigning according to knowledge-based economy demands.

The low number of components, small dimensions of touchable actives, the low complexity of activities and simple structures, determine knowledge to be in the flash light of concerns, decisions, and actions much easier. The entrepreneurial spirit, strong interpersonal relations, and the group cohesion, the flexibility and organizational dynamism are basic elements as well as for the knowledge-based economy and enterprise, which can be found, traditionally, within any small dynamic enterprise. Following the presented aspects, we can draw the conclusion of an equality, a strong harmonization between the small enterprise and knowledge-based economy.

2 The enhancement of training level of population and its new economic and social culture

The last century was characterized by spectacular progresses from the educational point of view, in almost all countries, the most impressive being, naturally, the developed countries. As a result, school provides labor with good background knowledge, and often, specialized in certain fields. In the same time, population's culture, its vision of life, is more and more characterized by flexibility, dynamism, creativity, self-success will etc. These changes in the field of human resources have a positive impact on SMEs, at least from two points of view:

- a) The percentage of population which has the necessary training and vision to initiate and develop entrepreneurial activities is continuously increasing.
- b) Most part of the population, through its qualities, can efficiently participate, as employees or as other kind of stakeholders, within SMEs.

As a result, for an increasingly part of the population, the professional and human achievement will be fulfilled within SMEs. We also must not forget that, in the last decade, the only entities which created new jobs, were the small and medium-sized enterprises, and not the large ones. Specialists say that this trend will also continue in the 3rd millennium. So, the opportunities for professional occupation will dominate SMEs sector.

All these elements allow us to state that in the next period there will be a continuation of the increasing interest and concrete concerns of the population towards small enterprises, having positive effects on both sides.

3 Intensifying the individualization and personalization of products and services

The economy and, of course, the industrial society were characterized by mass production, considered to be the most efficient. The mass production myth, especially in developed countries, started to fade two-three decades ago, together with the substantially increasing of population's purchasing power. People's strong individuality, the diversity of expectations, preferences and demands, are in vivid contradiction with mass production system offers. As a result, huge opportunities for small and medium-sized enterprises appear. By their qualities they are the most capable of satisfying the variety

of consumers' demands. Only at a small enterprise level, the individualization and personalization of products and services requested by consumers can be provided in an efficient manner.

When the economic development level and the life standard of population increase – which is happening all over the world, at present – the trend of individualization and personalization of products will emphasize. The proper solutions of this evolution will be provided by SMEs, which will substantially increase in number, diversity, economic performance and prestige.

4 Technical and technological changes

The rapid scientific and technical development in the last decades, which, as many specialists say, represents a revolution, determined many essential technical and technological changes, which are represented in figure 2.

Technical and technologies changes:

1. Minimizing the machines and the equipments
2. Technologies' specialization
3. Specialization of equipments
4. Modulizing the technical activities
5. Technical standardization
6. Computerizing the equipments
7. Proliferation of Telecommunications
8. Expanding the ISO 9000/ISO 14000 systems.

Figure 2: Relevant Technical and Technological Changes

The mentioned changes are to facilitate the start-ups and development of SMEs, due to the:

- Decreasing complexity of equipments and technology
- Relative and sometimes absolute reduction of necessary resources for new technical and technological elements
- Increasing individual performances of plants and equipments
- Facilitation of integration of products and services of SMEs in the complex products of large enterprises
- Technical cooperation with other SMEs
- Facilitating of communication between SMEs and their stakeholders (customers, providers, partners, banks, administration, etc.).

The result of favorable elements presented above is the reduction of investment, technical and human efforts, which are necessary to start and develop an enterprise, comparative to precedent decades, which has a strong impact in increasing number and power of SMEs in all the countries, not only in commerce and services field, but in industry, transport, construction etc. Because the technical evolutions are continuously increasing in intensity, generating a growth of presented elements, we can anticipate

the acceleration of developing small enterprises, strongly related to technical and technological evolutions.

5 Informatization of the economy and society

Although approached in general, the informatization is located in the category of technical and technological changes referred to above, by its content and implication, it represents more than others. Being a product of informatics revolution, which started after World War II, informatics provides now multiple potential facilities for SMEs, as follows:

- Having remarkable performances in processing information at low costs, accessible to a large number of people and organizations
- Obtaining, along with informatics equipments, of a large number of programs, that the enterprise needs, at low costs
- Saving a large amount of human resources, especially in management and clerk fields
- Assisting the more efficient use of technical and material resources of enterprises (raw materials, equipments)
- Putting into force a substantial managerial efficiency of the entrepreneur-manager and his potential colleagues, as a result of the possibility to have a rapid access to a large amount of information and decision alternatives
- Realizing an easy and cheap connection between SMEs and major external sources of commercial, financial, technical, governmental information, etc.
- Facilitating the contracts with external partners of the firm – customers and providers etc.
- Easing and amplifying communication between the SME and business and human communities, it belongs to
- Decreasing or even eliminating the informational gaps which existed until two decades ago between small and large firms, banks, public administration.*

Due to these elements, computerization in the last period was accompanied by a continuously increasing number of small and medium-sized enterprises, simultaneous with substantial amplification of their functionality and performances. Due to the fact that computerization is continuously carried on, the benefic effects upon small companies sector development will amplify.

6 Externalization of some organizations' activities

Being almost recent, the externalization trend of large companies activities is still going on. As already known, “externalization of activities” means the renouncement of an organization to self-realize certain processes, less important, by decreasing complexity of its managerial and operational activities, in order to concentrate on key activities,

* We mention that these advantages are obvious in the last two decades, because information had been inaccessible to small companies, due to the high costs, the complexity and high qualification of involved personnel.

determined by their performances. All externalized activities are taken over (carried on) by small and, rarely, medium-sized enterprises. Into a large firm, externalized activities are usually auxiliary and administrative, not the basic ones. In figure 3 you can see the most often externalized activities.

The enhancement of externalizing activities is specific to the movement towards knowledge-based economy, for large firms, as well as for medium-sized and even small enterprises. By this, new opportunities for establishing micro-firms and small firms will be created. Otherwise, this evolution is mentioned into a recent paper written and published by OECD specialists.¹ The part of economy that SMEs have, will increase in the same time with the large firms externalizing their activities.

We can anticipate that, in the present situation, where a great number of firms will evolve towards market economy – inevitable process, essential for their survival – there will be an explosion of new small firms, following the massive externalization of activities.

Externalized activities:

- Cleaning spaces
- Spaces hygiene
- Equipments maintenance
- Plants and building repair
- Producing tools, devices, measure tools, etc.
- Managerial assistance
- Realizing marketing studies
- Publicity
- Raw materials storage
- Materials acquisition
- Products distribution
- Accounting
- Accountant audit
- Personnel selection
- Employees training
- Personnel evaluation
- Juridical assistance

Figure 3: Main externalized activities

7 Regionalisation and local development

This is one of the most often encountered trends of economic development over the past 20 years. So, the apparition of regional policies and of local socio-economic development techniques was a natural consequence. This trend is very popular especially in EU countries. It's quite benefice for SMEs that a great deal of attention is focused on developing regional economic and administrative policies. As a matter of fact, the

¹ Perspectives of OECD, p.8

SMEs are main users of these techniques. It's been proved that the economic potential of SMEs is improved by this policy. The OECD or EU statistics regarding this matter are quite clear.

At this moment, these trends are getting stronger and stronger, aiming the uniformization of economical levels of cities or regions belonging to a country or to a group of countries. The establishment of new SMEs and the increased development of the existing ones are some of the effects of this policy.

8 Economic activities internationalization

This is one of the most powerful and complex economical evolution over the past decades and it causes many negative effects – stronger competition and economic instability – as well as positive.

Some of the positive effects are:

- a) Access to new markets
- b) Access to raw materials and materials with better quality-price rate
- c) Possibility of getting better trained employees for lower salaries
- d) Fastening technological, commercial, managerial renewal
- e) Improved opportunities to get, buy and trade new products and technologies licenses
- f) Fastened and improved transfer of international managerial know-how in all the fields of the firm's activity
- g) Improved opportunities for strategic partnerships and alliances all over the world.

Their benefic effects are to be seen in the increasing number of SMEs and in their economical strength. These effects are obvious if we look at successful firms in fields like industry, transport, commerce, services, etc. Their cultural and managerial evolution over the past 10 years allows them to get over the negative effects of global economic activity and to take advantage of its development opportunities. As this internationalization of economic activities is still present – and even increasing – its impact on SMEs will surely have direct proportional benefic consequences.

The global effect of these factors, as well as the effect of other factors which were not mentioned above, is represented by the powerful development of SMEs sector. In most countries, this sector is already responsible for creating more than 50% of GDP and new jobs, and in the near future, its contribution will increase. As specified in the OECD study, mentioned before, in the next few years “The SMEs' sector dynamism will represent the engine of increasing productivity and global economic growth in OECD countries.”²

² Perspectives de l'OCDE, p.8.

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