

HORIZONTAL COLLABORATION - A RELEVANT STRATEGY FOR SMALL TO MEDIUM BUSINESSES FOR SURVIVING THE ECONOMIC CRISIS

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Abstract: *This paper aims to present the inter-business horizontal collaboration approach as a viable solution for a small to medium enterprises to cope with extreme economic factors that arise from a worldwide economic crises environment. A series of core features of an efficient business monitoring system are being presented for this scenario. The practical application of the horizontal collaboration business approach is exemplified by the successful case of MTS GmbH Germersheim in Germany, a fairly new player on the market that understood the need to develop strategic partnerships within the E.U. supportive legislative framework.*

Keywords: *horizontal collaboration; strategic systems; project management; business monitoring; operating efficiency; economic crisis*

1. INTRODUCTION

Drawing up a particular future-oriented strategy is a necessary and compulsory activity for any small to medium business (SMB) regardless of its structure or state of development. Even under ideal present economic conditions future events will have to be tackled considering an unpredictable degree of vulnerability. The multitude of factors that act as constraints to the modelling of future processes that will constitute the SMB's environment, especially the interactions between them, must be fully understood in their minute detail by the management team; both from the causality of the generating actions perspective, and the effects resulted from the stated interactions perspective.

Another aspect worth considering is the relationship between the individual (individuals) and the organization. If in the large-business environment this issue is being differentially dealt with, based on the specific business activity involved, at the SMB level the management – employee relations are essential. Management must constantly monitor the business activity in order to establish the economic efficiency of each employee, thus remunerating each of them on a merit basis and considering the greater economic context when dealing with incentives based on seniority and hierarchical position within the organization. Following this approach, each employee has a specific intrinsic value that defines a specific set of skills inherent to the professional within a particular organization. The value of the same specialist may be radically different in a different organization regardless of its profile. Consequently, professionals are known with predilection within their own organization and too little outside.

This particular evolution, correlated with the necessity to assure a certain sense of employment security, has created a differentiating gap between the internal reality of the organization and its external environment. Furthermore, organizations are staking a great deal on durable relationships with their employees, and as they invest in personnel formation techniques and procedures, the organizations gradually accumulate and ensemble of transmissible abilities, knowledge and know-how. All these assets are virtually worthless intangibles to the company outsides.

Over the past two decades, in Europe, it has been established that the effects of this process may be hindering the economic development of a nation; therefore, the specific elements of this type of endeavour have been under constant pressure from external factors, thus creating the premises for the emergence of new elements in the individual – organization relationship:

- Specific operations specialization – this process has generated transformations at the production level, as well as organizational management.
- New strategies development –regarding the production planning process according to the market requirements as well as a close co-relation with the parameters that regard the economic efficiency of the business system as a whole.

We witness the emergence of new aspects specific to the planning process flexibility, and new strategic approaches regarding the available material resources. We witness an increase in the number of market intermediaries that stimulates the emergence of both a secondary labour market with different degrees of complexity, and a secondary intangibles market for technology and know-how, that are all too necessary to complete complex projects. This is all happening because of a dramatic improvement in the creativity process and a drastic increase in the rate of innovation.

At the SMB level the process of innovation is far more intense than in the large corporate world because the SMBs need to be flexible and constantly adapt to the continuous market environment changes, in order to survive and prosper in the long run.

Instead of transactional relationships and vertical integration, new forms of organization that relies increasingly more on partnerships, relationships that are

not of transactional nature and nor governed by hierarchy. These were defined in different ways, as alliances, partnerships, or partnerships that create added value [1, p 30]. Sometimes, when a group or network of companies working in a partnership, the "arrangement is called a strategic network, or virtual corporation, or extended enterprise" [3, pp.25-27].

The existence and activities of SMEs is essential for running a business performance market economy. Statement with the statistical data shows that multinational companies working with many SMEs, applying the principles of outsourcing specific processes, products and services for their production base. Thus OPEL company works with more than 43,000 SMEs, FIAT with more than 33,000 in Europe, USA, Asia, the RENAULT company works with over 12,000 SMEs from Romania and abroad, only to manufacture motor vehicles in Romania.

2. SMALL TO MEDIUM BUSINESS-SPECIFIC STRATEGIC SYSTEMS

The fact that any business is structured as a more or less complex system, containing a multitude of strategic systems, generates a series of difficulties when implementing new administration methods, production process efficient usage, or modifying an existent business orientation.

Accepting the concept of a system – applicable to any sort of organization – generates a series of relations between the inherent elements of the system. In time, these relations tend towards a certain degree of stability, but also towards an ensemble of reciprocal influences with a time-variable intensity gradient. Hence, as a result of the union of accepted values, beliefs and of the action and administration components of the business, there emerges a functional model that will level off in the long run.

Any attempt to unbalance the equilibrium of a strategic system, regardless of its manifestation, implies a series of chain reactions – initially without any differentiated character – that may have adverse effects on the initial objective during the implementation of this process. Furthermore, as shown by Forrester's System Dynamics[4], if a system's components are tightly interwoven, and they interact as the result of a prolonged experience, the strategic system can develop home-strategic properties. The adopted changes may trigger protection and conservation mechanisms that may reduce the system to its original state, thus maintaining the initial rate of change. Therefore, in order to be successful in pushing the system out of its original state of equilibrium, and towards a new and more desirable state of equilibrium, it is imperative that drastic actions be taken. Strategic system changes are relatively easy to implement if these changes reflect the natural evolution of the system; in the same time the changes must be in sync with the level of flexibility tolerated by the strategic system.

Over the past two decades, studies have shown that the degree of flexibility of SMBs towards the changes in their strategic system is higher than the case of large corporations: the causes being multiple, internal and external.

Here are a few internal causes worth mentioning:

- The strategic system architecture of an SMB is less complex; it is based on fewer options and an adequate information system.
- The great majority of SMBs perform in turbulent and unstable environments; in many cases within a rather relaxed legislation framework.
- Internal changes regarding product assortment, production volume, and processes technical and technological parameters are being implemented quickly, without any memorable additional costs.
- The creativity process and the tendency for self-improvement are extremely highly valued, developed and supported within SMBs

Furthermore, here are a few external causes:

- The transition towards a consumer society has generated a necessity for an increase in the production volumes as well as specific mutations in the way products are being utilized.
- Using new strategies in the production processes has generated an increased collaboration between SMBs and SMBs and the large corporations. (Opel has business relations with more than 40,000 SMBs, Fiat with more than 22,000)
- Under the conditions of an economic crisis, the internal re-structuring processes, the re-organizing of activities and the re-adaptation under the constraints of a new strategic system are easily implemented, without major additional costs.

The elements that constitute the basis of any strategic system are:

- Options referring to the product matrix to be considered for the future.
- Options referring to the available and desirable markets.

Strategies are being analyzed, accepted or rejected, vis-à-vis the cost dynamics related to the specific activities of each strategy type, especially as a function of the ratio between these costs and the revenues obtained on each particular market niche.

It is obvious that the structure of a strategic system that is specific to a particular organization encompasses an ensemble of material resources, components, assemblies, and specific know-how that at any given moment define the organizational capacity of the company.

Depending on the ability a company manages to develop this organizational capacity, the business may

benefit from the economic advantages inherent from the product selection and production volume that would be made available on the presumed markets, without the negative effects of complexity costs modification (increase).

The evaluation of the organizational capacity of a business is not only an internal process, specific solely to that particular business: in the evaluation process one must consider factors inherent to the external environment.

In the context of the European economic integration, process that has been unfolding with unsurpassed intensity over the past two decades, the organizational capacity is influenced by the European legislative system that favours multiple and rapid contacts between various industries entrepreneurs, in various countries regardless of the size of their business. Furthermore, this legislative system also creates the possibility that each participant on the economic stage bring about whatever it has best quality and performance wise. With this incentive, all business players adopt a policy to perfect their collaboration relations with their partners through an increase in the quality of their own activities and products. In the same time, each entrepreneur must modify, redefine its present strategy in the sense that the architecture of the new strategy will need to take into account new forms of relationships and new arrangements meant to seize economic advantages in the medium to long run.

Business market consists of all organizations that buy products and / or services or use them to achieve other products / services that are in turn sold, given or rented to others, either for resale or lease them as such [adapted from 7, p.390].

Organizations make decisions to buy much more complex, often involving large sums of money, a lot of technical and economic aspects to be taken into consideration and clarification which involves contacts between people place on different hierarchical levels. In other words, "since there is a need for a product or service, up to the decision to purchase and evaluate them further, many other activities can take place" [10, p.242]. Consequently, the process is more formalized requiring detailed technical specifications and economic calculations, analysis and careful evaluation of suppliers, purchase orders and approvals by the official [2, p.5].

Among the main aspects which give the specifics of the organizational buyer decision process including:

- Organizational buyer is represented, usually by multiple people within the organization who have specific training and experience, making the process and effort buying professional. The professional approach to process and ability assessment information to ensure the premises making more decisions based primarily in terms of costs.
- In general, all processes carried out in an organizational framework are more complex and more formalized, so it makes sense that specific decision-making process is

more complex and takes longer than for an individual buyer. In addition, risks are higher for both the buyer company, and for personnel involved in the process, and resources can be mobilized to avoid risks which are much higher [5, p.273].

There is a procedural framework to materialize the relationships with suppliers, the economic process by which any organization obtains from external resources their materials and services for consumption, ie activities directed towards achieving organizational objectives.

Each entrepreneur has the opportunity to access a particular market niche, thus to develop a specific strategy for a given production volume, function of its own ability to maintain a certain balance between its total costs and revenues.

In the early 1990s Mintzberg [8], [9] delineates five major groups of general strategies: the location of the business, the distinction / identity, development, expansion and redesign / refine it. Classification reflects different concepts of the author on concept of general strategy, which puts it in touch with its core business and its strategic management process in various stages of its life cycle. In business life cycle theories are identified five stages / phases: launching, the survival and consolidation (with two alternatives: to maintain and increase training); growth and maturity [6]. In essence, the logic on which to delineate Mintzberg overall business strategies reflect the succession stages included in this model, but from the strategic perspective required for its analytical approach.

Therefore, the terms which designate Mintzberg general policy guidelines of management in each of the five stages are different from those used to describe those stages (ie, general strategies are called automatically launch strategy if the business is at the stage of release, or survival strategies if the business is at this stage so the five main groups of strategies are defined based on the idea that each stage of the business is approached from a strategic level, depending on the principal objective. So general strategic orientation focused on strategic management with the objective of each stage, basing the transition to the next level.

In this case, the entrepreneur's options are largely differentiated: if a market niche with a relatively low output volume is being chosen, the total cost - revenue relationship is not as favourable as if a higher output volume market niche had been chosen. Accessing one or the other market niche is conditioned in turn by the available financial resources of the business. Combining these two aspects, organizations can develop strategies that maximize efficiency under both constraints. Such an approach is being presented in table 1.

The adopted strategies must take into account the state of the external business environment; for example, under economic crisis conditions:

- the partitioning of a market segment needs to consider smaller amplitudes when dimensioning the newly chosen segment, function of available disposable income, or
- If the total cost – revenue ratio ≤ 1 , in order to maintain the product in its market segment, it may become necessary to temporarily divert capital from other sources, or strategies to cut current total costs may need implementation.

3. BUSINESS MONITORING – A HORIZONTAL APPROACH

As a company develops, the demands for achieving continued growth will change. The startup company faces structural challenges; the established company by contrast faces operational demands. These operational demands can only be understood and managed by effective monitoring, from which the company can learn and develop. One of the key factors to understanding the effective business plan is the emphasis that the research has placed on effective monitoring; the ability of the company to do, measure, and redirect resources.

The goals of an effective business monitoring system are:

- Maximize profit and other operational performance targets by failing to fine tune the existing operation
- Provide high quality and reliable information both to internal and external stakeholders
- Build effective and knowledgeable internal teams that understand how each component of the business fits together which become more knowledgeable over time
- Identify emergent strategic options early so that major opportunities can be seized before the competition
- Understand the key problems that the company faces in managing change
- Catch problems at an early stage when they are easy and relatively simple to put right
- Match company performance against the norms prevailing in their particular sector
- Create a framework which enables them to rapidly create a coherent and achievable overall business plan from the bottom up rather than the top down.

Understanding of the way in which improved business monitoring can drive profitability and enhanced customer loyalty is essential and three core features of an effective monitoring system have been determined:

		Market Segment Access	
		<i>Small</i>	<i>Large</i>
Total Cost – Revenue Ratio	≤ 1	Strategy to maintain the product on the market	Strategy to partition the market segment
	> 1	Strategy to improve the quality of the product	Strategy to diversify the product according to the market segment requirements

Tab. 1. Market Segment Access vs. Total Cost – Revenue Ratio

- A coherent structure
- Use effective information gathering and dissemination techniques
- Have the right content

Obviously, a detailed monitoring system makes demands on the company, and only becomes practical at a certain stage in growth. No company or organization can introduce a complete monitoring system overnight. It requires a detailed project plan and the company needs to be able to absorb minor modifications to ensure that the management team remains committed and interested in the project. As the number of components that must be integrated is increasing, the development of the monitoring system becomes part of the growing monitoring system, and is self-reinforcing.

4. THE MTS GMBH GERMESHEIM APPLICATION

A good example of approaching this strategy under economic crisis conditions, for the small to medium market segment situation is the case of MTS GmbH GERMESHEIM, Germany, a producer of multi-fan suction excavator. Using this technological process the company offers a comparatively secure way of removing materials through suction. This method completely avoids the destruction of structures, cables and components when certain repairs are needed in countless situations.

Suction excavators are in fact oversized vacuum cleaners, mounted on a truck chassis. They can absorb sand, silt, chemical substances, gravel, stones with a diameter of up to 25 cm and a weight of up to 20 kg. The suctioned material is managed through a flexible tube that is being manoeuvred around by a hydraulic system. The interior diameter of the suction tube is 25 cm. Pits of up to 10 m deep can be excavated using additional extension pipes.

This suction technology consists in the fact that the transport medium of the excavated material is an extremely strong airflow that is being produced by a ventilation system connected to the secondary power outlet of the propulsion motor of the truck. Specially designed couplers allow a smooth and continuous increase of the fan revolutions, until achieving the optimal parameters of 6,000 rpm. A two-circuit hydraulic system ensures that all the energy users in the system are being fully supplied during the excavation process.

Controlling this equipment is done using a command panel or it can be done remotely, this allowing for placing the suction excavator right in the heart of the excavation area.

Considering the necessity to cut production costs, a study has been effectuated within the organization. The conclusion of this study was that assuring a horizontal collaboration with different suppliers from different E.C. countries, and applying a management through projects approach, may spawn the initial premises for diminishing total production costs, alongside other important economic advantages.

The company had a modest product portfolio from a variety perspective (their product occupying the last position in the market segment top), as well as from a production volume perspective (the company produced 3 – 4 units per year). Starting in 2003, the increasingly noticeable advantages of their new products and because of the market segment expansion provided by new E.C. regulations, the framework for increasing the product portfolio was laid down and starting in 2004, the company increased the production volume to a small-to-medium output (7 – 10 units per year). This development dictated the necessity of designing of a new strategy for the production and marketing of the suction excavator.

Starting in 2005 the company adopted a strategy to diminish the total production costs deriving considerable advantages from the new regulations regarding business collaboration between E.C. based companies, analyzing the dynamics of the principal costs of production. Further then, they moved to reorganize the internal operational activities with the focus to introduce the management through projects business approach as an essential component in the company management. The new project, at the business level, covered the following issues:

- Rethinking the project so that the focus of the activities in the company would encompass assembly preparation activities, quality control or supplied components and subcomponents, final assembly and delivery to the customer.
- The whole line of components and subcomponents has been outsourced to specialized partners within E.C. The total production costs of these components has been calculated in such a way as to take into account, on top of production costs per say and logistics costs, also the costs related to international tariffs and taxes where applicable.
- The project coordinator (MTS GmbH Germersheim) had the following duties:
 - Project coordination of the production from an internal perspective and monitoring the delivery schedule of the outsourced subcomponents necessary for product final assembly
 - Quality control of all the components, subcomponents and products delivered for the final product assembly

- Performing the final assembly process, final quality control and final testing process
- Product delivery to the beneficiaries, respecting the contracted terms and conditions, including onsite machinery operation training sessions for the authorized personnel
- Development of a preventive / corrective maintenance schedule in order to keep the equipment functional according to designed specifications.

One of the issues the company was confronted with was the choice of partners. The goal was collaboration with organizations offering advantages in total production cost reduction under already existing quality constraints. Studying the supplier market MTS concluded that in order to maintain a quality gradient according to the existing specifications it was necessary to attract partners specialized in specific subassembly production, as follows:

- For the production of the subassemblies that needed a great deal of welding and manual labour, the company approached a supplier in Romania. This supplier uses a production system that allows for the final product to be delivered exactly to the specifications of each separate subassembly. The quality of the raw materials involved (metal plates, electrodes and different other components) is controlled by the coordinating company by purchasing them from specialised suppliers in Germany. Furthermore, the coordinating company set up a branch in Romania (Concept Construction Divers) that is responsible for the project management part that involves participating partners in Hungary and Romania.
- The air compressors that are at the core of the suction system are being produced by a dedicated supplier in Italy
- The two power modules necessary for the hydraulic mechanism are manufactured by an English company and the hydraulic network (hydraulic cylinders, feed valves, distribution elements) are manufactured by another Romanian company.
- The carrier vehicle is being provided according to specifications by one of the European automotive conglomerates (Mercedes, DAF, MAN, Renault, Scania, Iveco, Volvo). Upon reception, the vehicle is further modified so that it can tolerate supplementary weight by the coordinating company, depending on the customer's requirements.

The movement towards the series production business phase has generated modifications in the internal structure of the organization:

- New production floors have been developed through the reorganization of existing ones

- New warehouses capable of storing 3 – 4 units were added to the existing structure
- A new encoding system was adopted in order to facilitate an eventual SAP implementation at the company level
- A preventive / corrective maintenance department was created in order to cover the warranty of the products

The company intensified its marketing efforts through the participation to different specialized European business fares, where MTS is already a recognized brand.

5. CONCLUSIONS

The necessity to decrease total costs, in order to maintain the product on its market segment, generated the idea of horizontal collaboration. This idea was supported by the new legislative framework in the E.C. that is facilitating international cooperation contracts between organizations throughout E.C.

The opportunity to horizontally cooperate with other business allowed MTS GmbH to use project management practices as a production and assembly process management.

In order for this project management approach to succeed, the first step was to redesign the products in the DINO line (DINO 2, DINO 4, DINO 4) by transforming component subassemblies into modular structures and emphasizing the importance of the interface elements between these subassemblies, thus setting the premises for a company-wide implementation of a quality management system.

The horizontal collaboration generated a dramatic decrease in the total production costs, the current labour costs being 7-8 times smaller than the costs incurred when the production was completed exclusively in Germany. At the same time, the total manufacturing costs diminished 3-5 times compared with the original scenario.

The advantages offered by the new product that has been realized through horizontal collaboration, namely, suction materials removal is 12 times faster than manual removal and it also protects piping and cabling against potential damage, present a high efficiency, patented technological process. These advantages add value to the producer, as there is a great deal of cost reduction for all stakeholders involved.

Typically, each link between companies in the supply chain - during which it adds value to a product - is like a pact of convenience, a result of transactions based on the market price auctions and negotiations.

The last decade of the twentieth century marked a real "turning point" in Western theories and practices, reflecting a change of view on the mechanisms that govern businesses, competitiveness and economic performance condition [1, p.47].

In these mechanisms relationships between firms have acquired more valences, occupying a place increasingly important in various approaches aimed at solving current problems and future of the new economy.

Traditional model in which the vertical integration and transactional relationships based on bargaining power were "winning combination" in a company's competitive advantage, began to be replaced by new approaches aimed at integrating the virtual networks that compete based the advantage offered cooperation partnership relations.

Interorganization / horizontal relationship management is a core competency of contemporary performance organization, expressing the ability to ensure effective contact between suppliers and customers, or the ability to implement and coordinate value creating business processes from end to end of the supply chain. Mutations occurred in the last period in the evolution of international business print market increasing complexity and difficulty of organizational processes, requiring the development of viable strategies, adapted to the environment in which each company and do business.

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