

DIAGNOSTIC OF ACTIVITIES TO SMALL AND MIDDLE SIZE COMPANIES

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Abstract. The paper presents a model of activities analyze to small and middle size companies, based on strategic segmentation method according which, each activity is evaluated by its contribution to society patrimonial fortune.

The objectives of diagnostic analyze is to evaluate all companies activities by contribution to general value and by integration ratio into global companies strategy. The proposed model take account the booth type of factors: internal and external specific to small and middle size company due by diversity of activities and resources partition. The three main steps in analyze are: determination of “key success factors” (KSF), which enforced the activities competition position, followed the regrouping in “strategic activities domain” (SAD), that use common factors and “strategic base” (SB) which share same resources. Based on these determinations is built the “strategic activities map” that allow to divide resources into maximum efficiency conditions.

Model proposes a general plan of analyze, developed on stages, making evident the necessary work instruments. Finally paper present an example of diagnostic to a small package factory. Conclusions refer to implication of analyze results on company’s management strategy.

Keywords: competition, competitive forces, evaluation, determinant factors, process, pressure forces

1. The objectives and premises of the analysis

The diagnose analysis of the activities portfolio has a purpose the classification of them from the point of view of the resource consume and the value contribution at the society patrimony in order to show the attractions and vulnerabilities offered by the intern medium but also the opportunities and dangers resided from the impact with the extern environment.

The activities of a company have assimilated in time and have been generated many times by conjectural events that have disappeared or have been modified. Giving up on an activity at a certain moment is a much more difficult decision than starting it as a result of the psychological factor that assimilates quitting with failure in mission. This way many resource consuming activities are still on even if their value contribution is very low or inexistent. This phenomenon is even more obvious at small and medium companies where, as a result of the big flexibility of the decisional factor, the activities have a large diversity and an inertial force bigger than companies with shared administration. The cause is concentration of the decisional power in a single power point who, in lack of a qualified skill acts accordingly subjective

purposes than economical ones. For example: “If it exists, why shutting it down?” Or “If others do it, which means it’s ok”.

But in the diagnose analysis of the activities portfolio there is only one important principle: the segmentation of the activities according to the value contribution at keeping society patrimony. So, there are two main activity objectives [1, 2]:

- Emphasize all the company’s activities and establish their value;
- Verifying their integration in the global strategy of the society.

The first of the two objectives is about determining the key success factors (KSF) of every activity, the ones that ensure a competition advantage on the market with a supplementary value of utilization for third party (clients, users, distributors, etc) or by reducing costs.

The second objective is about determining the strategic activity domains (SAD), the ones that unite activities similar to KSF and that divide the common resources. These activities contribute with great efficiency at the company’s value. They become this way a part of the company’s global strategy, they allow identifying some market segments, technological concentration, alliances, etc. Also, acquiring this objective is linked with

determination of the strategic basis (SB) that reunite groups of SAD in between there are horizontal links (Ld) related to sharing resources, knowledge, company image, complementary links of product range, etc. Mainly it is about those domains where the decisions must be taken considering the effects on other domains from SB. So, there are some conditions for defining the horizontal basic strategies that will consider the links between SAD components. In between different SB the only links are the ones that share the general administration costs, financial services and maybe even a common distribution of the cash-flow (Lb).

2. Theoretical model for diagnosing the activities portfolio

The diagnose analysis of the activities portfolio starts with presenting the basic company's activities and with identifying KSF, SAD and SB. Based on these we can build the "strategic map" of the company's activities that allows us to analyze the resource sharing between company's activities.

The basic activities are defined in literature as individual technology, application and group activities [1]. In small and medium companies that have a big diversity of activities from the category of services we accept completion of the "technology" term with the "abilities" term for enlarging the theoretical spectrum of the activities.

After defining the basic activities we can now identify KSF in each one.

There are two main categories of key success factors that determine the strategic segmentation of the activities [2]:

- Internal factors (KSF_i)
- External factors (KSF_e)

The internal factors are the ones that ensure the improvement of the value contribution in internal linkage: research, design, production, distribution, selling with a rational distribution of the resources between the activities within the linkage. They can be: the professional skills and experience of the employees, having licenses, franchises or brevets, high level technologies and machinery, implementing a quality assessment system, product design, production flexibility, the capacity of rapid transfer of technology, proximity and continuity in deliveries, sale prices, reliability of products and many other factors that depend on type of activity and on knowledge accumulated during the company's activity.

External factors are those who determine the market value of the products, their utility on buyers. From these we can list: commercial market, reputation, contracts with strong companies, certain favorable conjunctures on market, inclusion of some known networks of distribution and selling, etc.

3. Practical model for diagnose analysis of the activities portfolio

We analyzed the activity portfolio for SC Dynavit Trade SRL Braşov. This society is a small and medium company with capital 100% private, 8 employees and total turnover at about 200.000 €.

3.1. Listing the basic activities

The activities deployed in this society sorted by volume (total turnover) are:

- A1. Pack production
- A2. Commercial brokerage
- A3. Industrial liquids production (demineralized water, substances of windshield washing)
- A4. Rental of production property

From analyzing the basic activities we can classify the society within the ones focalized, with a small number of abilities-technologies with what it realizes many application for a big number of users.

The strategy is specific for small and medium companies with small or oscillatory (seasonal) activity which searches for a compensation of the activity with a relatively low consume of resources.

In the analyzed company it is about lowering the effect of the seasonal fabrication of bottles with a counter-season product (demineralized water and windshield washing substance) and also about using all the available resources from these activities (property renting, commercial brokerage).

Table 1 represent the determinant factors analyse containing technology or abilities, applications and clients group.

3.2. Identification and analysis of KSF

We need to identify and analyze KSF for each of the basic activities shown above. Activity is a certain observation of the client relations and internal producing procedures, marketing and management and also is a complete analysis of the costs for each type of activity. The data have been collected from different sources (clients, directors, accounting, market evaluations, etc), and the results are shown in table 2.

The KSF analysis is about establishing the sources for them in the productive activities chain and consuming of resources. Analyze is very important for the next stage in order to define SAD. The analysis results are in table 3 and 4

where one can see the benefits realized (process quality or cost reduction) and the intern resources implicated.

Table 1. Determinants factors analyse

Technology, abilities	Applications	Client groups
1. Blowing plastic matters in a mold	1.1. Making Pet bottles	→ 1. Liquid producers
2. Selling contract of chain stores	2.1. Selling products to the clients.	→ 2. Liquid bottlers
3. Demineralization and water osmosis.	3.1 Making demineralized water.	→ 3. Individuals
4. Available property	3.2 Making windshield washing substance	→ 4. Stores "cash & carry"
	4.1 Renting	→ 5. Car distributors
		→ 6. General stores
		→ 7. Industrial clients
		→ 8. Storage companies

Table 2. Dynavit Trade S.R.L. competitive position analyse

Activity	Basic activities	Key success factors (KSF)
1	The pack production activity for the liquid producers	1. Price and payment terms 2. Product diversity 3. Quality 4. Commercial brokerage (selling the client products)
2	The pack production activity for the liquid bottlers	1. Price and payment terms 2. Product diversity 3. Permanent stocks 4. Geographical distance (the only supplier in town)
3	The pack production activity for individual consumers	1. Price 2. Product diversity 3. Permanent stocks 4. Geographical distance (the only supplier in town)
4	Commercial brokerage in Selgros network	1. Exclusivity contract for selling some of the clients' products in Selgros network
5	Demineralized water production for car product distributors	1. Price 2. Permanent stocks 3. Geographical distance (the only supplier in town)
6	Demineralized water production for general stores	1. Price 2. Permanent stocks 3. Client distribution
7	Demineralized water production for industrial clients	1. Price 2. Permanent stocks 3. Geographical distance (the only supplier in town)
8	Property renting	1. Price 2. Quality of the rented space (comfort, utilities, access) 3. Geographical distance (central location in town)

Table 3a. Pack production activity for the liquid producers

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resources	Assets
Price and payment terms	Supplying	Closeness to sources of raw material Preferential relations with suppliers. Long payment terms.		*	*	*	
Product diversity	Production	Automatic production in series Flexibility Big number of molds.	*	*	*		*
Quality			*				*
Commercial brokerage services	Manag.	Bilateral relations of compensations and counterparty	*		*	*	

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Table 3b. Pack production activity for the liquid bottlers

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resources	Assets
Price and payment terms	Supplying	Closeness to sources of row material. Preferential relations with suppliers.		*	*		
Product diversity	Production	Automatic production in series Flexibility Big number of molds	* *	*	*		* *
Permanent stock	Marketing	Direct promotion		*	*		
Geographical distance	Management	Production organization	*		*		

Table 3c. Pack production activity for individual consumers

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resources	Assets
Price and payment terms	Supplying	Closeness to sources of row material. Preferential relations with suppliers.		*	*		
Product diversity	Production	Automatic production in series Flexibility Big number of molds	* *	*	*		* *
Permanent stock							
Geographical distance	Management	Production organization	*		*		

Table 3d. Commercial brokerage in Selgros network

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resource	Assets
Exclusivity contract	Marketing	Relations with Selgros personnel	*		*		
	Management	Bilateral relations with Selgros	*		*		

Table 3e. Demineralized water production for car products distributors

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resource	Assets
Price	Supplying	Packs from own production		*		*	
	Production	Full automatic process Gravitational bottling line	* *	*			* *
Permanent stocks	Marketing	Personal relations with distributors	*		*		
Geographical distance	Management	Production organization	*		*		

Table 3f. Demineralized water production for stores

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resource	Assets
Price	Supplying	Packs from own production		*		*	
Permanent stocks	Production	Full automatic process Gravitational bottling line	* *	*			* *
First hand distribution	Delivery, logistic	Own transport vehicle		*	*	*	*
	Marketing	Personal relations with store management	*		*		
	Management	Production organization	*		*		

Table 3g. Demineralized water production for industrial clients

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resource	Assets
Price	Production	Full automatic process Stock in bulk	*	*			*
Permanent stock	Marketing	Only producer in area	*		*		
Geographical distance	Management	Production organization	*		*		

Table 3h. Property renting

Buyer value of KSF	Activity	Concurrency advantages sources	Process quality	Low cost	Human resource	Financial resource	Assets
Price	Marketing	Direct promotion		*			
Quality of location	Management	Personal relations with clients.	*				*
Geographical distance	Maintenance	Common maintenance of own property and rented		*	*		

3.3. Determination of SAD

We can identify 6 main strategic activities that use the same key success factors, in table 4.

As one can see at the analyzed company there are few basic activities that can use the same KSF even if some of them like price, stocks and geographical position are in most of the SAD. The situation is specific for small and medium companies that realize a large number of SAD by combining the relatively low number of KSF at their disposal [3, 4].

Table 4. Determination of SAD

SAD	Description.	Common KSF
1.	Serial pack production	1.Price, payment facility 2. Product diversity 3.Quality 4.Commercial brokerage
2.	Individual pack production	1.Price, payment condition 2. Product diversity 3. Permanent stocks 4. Geographical distance
3.	Demineralized water production for distributors	1.Price 2.Permanent stocks 3.Geographical distance
4.	Demineralized water production for final clients	1.Price 2.Permanent stocks 3.Distribution
5.	Commercial brokerage	1. Exclusivity contract
6.	Property renting	1.Price 2.Quality 3.Geographical distance

3.4. Determination of strategic basics (SB)

We found at this company 3 strategic basics between which the common resources are divided. (table 5).

Common resources divided at the level of the three SB are company's actives (R1), human

resources (R2) and financial ones (R3). For example, the production space is divided for all three SB and the productive personnel are distributed continuously according to needs between the two productive SB and are also used for commercial brokerage. This pluralism is characteristic for small and medium companies that have lower levels in technicality and specialization in order to make the resource use more efficient.

Table 5. Determination of SB

Nr. SB	Description of SB	Common SAD
1.	Pack production	1. Serial pack production 2. Individual pack production
2.	Demineralized water production	3. Production for distributors 4. Production for final clients
3.	Service production	5. Commercial brokerage 6. Property renting

3.5. The strategic map of activities

The strategic map is a short representation of SAD activities regrouped as SB related to added value. This is the basis for the analysis of resource distribution in the company.

For the given company the strategic map is in figure 1.

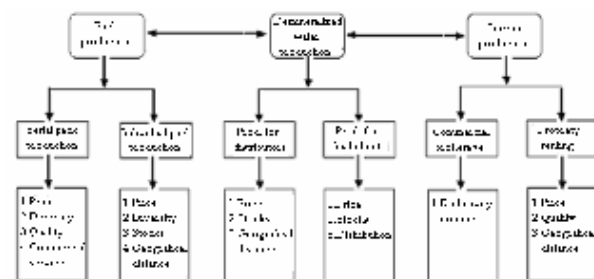


Figure 1. Strategic map

3.6. The analysis of resource division between SAD

The analysis is a comparative one between the current (existent) situation (E) and the ideal situation (I) that resulted after a strategic segmentation of the activities. The analysis takes into account the resource division on strategic basics (SB) and on activity domains (SAD) and also the transfers between the last ones.

The optimal repartition of the activities of different activities is based in value indexes of

profitability like: total turnover, added value, gross income, etc but takes into count also some specific links that are viewed inside the company like: common skills of persons or activities, potential specific interests, etc.

The analysis of the resource division can be included in a comparative table with 2 entries that allow the combined evaluation of the common resources. An example with the tree types of divided resources R1, R2 and R3 is presented in table 6.

Table 6. Model of resource division

SAD/ SAD	SAD1		SAD2		SAD3		SAD4		SAD5		SAD6	
	E	I	E	I	E	I	E	I	E	I	E	I
SAD1	•	•	R1=50 R2=40 R3=46	R1=30 R2=45 R3=30	R1=10 R2=10 R3=2	R1=5 R2=5 R3=0	R1=10 R2=10 R3=2	R1=5 R2=5 R3=0	R1=20 R2=0 R3=2	R1=0 R2=0 R3=0	R1=50 R2=0 R3=2	R1=70 R2=0 R3=0
SAD2			•	•								
SAD3					•	•						
SAD4							•	•				
SAD5									•	•		
SAD6											•	•

4. Conclusions

- The diagnose analysis of the activities portfolio is a critical evaluation of the existent situation at a certain moment in the company, compared to an ideal situation from a strategic point of view;
- The evaluation model proposed for small and medium size companies depends on their capacity of strong diversification of the activities, division of the common resources and the intense traffic between different activities SAD;
- The method used is the one of strategic segmentation of the activities based on added value at the society patrimony;
- Sequential determination of KSF, SAD and SB allows us to build the “strategic map” of the activities based on what the ideal profile of the common resources division is constructed;
- The evaluation of the differences between existent situation and ideal situation shows the attractions and vulnerabilities of a certain activity (SAD), the opportunities or the potential dangers and concludes the decision of reorganizing, conservation or canceling an activity;
- The diagnose analysis of the portfolio of activities in small and medium companies has a strong subjective component which is the

knowledge and experience of the specialists team involved.

5. Contributions

Paper present an original model of diagnose adapted to small and middle size companies.

Determinant factors analyze is made follow a long experience in SME companies that permit to increase the analyse level of trusting.

References

1. Atamer, T., Calori, R.: *Strategic diagnosis and decisions*. Dunod, ISBN 2 10 005555 0, Paris, 2003 (in French)
2. Lê, P., Rivet, P.: *To lead and succeed in enterprise innovation*. Maxima, ISBN 2-84001-466-1, Paris, 2007 (in French)
3. Nicolescu, O.: *Management of small and medium enterprises*. “Economică” Publishing House, ISBN 973-590-429-2, București, 2001 (in Romanian)
4. McClellan, M.: *Collaborative manufacturing*. St. Lucie Press, ISBN 1-57444-341-0, USA, 2003
5. Burduș, E.: *Management of organizational changes*. “Economică” Publishing House, ISBN 973-590-886-7, București, 2003 (in Romanian)
6. Charpentier, P.: *Entreprise management*. “Economică” Publishing House, ISBN 973-590-602-3, Bucharest, 2002 (in Romanian)