

Organizational structure in the view of single business concentration and diversification strategies– empirical study results¹

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Abstract: - Matching structure to strategy requires making strategy –critical activities and organizational units the main building blocks in the organization structure. Internal organization of each company is somewhat idiosyncratic; the result of many organizational decisions and historical circumstances. Moreover, every strategy is grounded in its own set of key success factors and critical tasks inherent in the company strategy. This paper presents the empirical study results on specific features of organizational structures in Polish companies in the context of concentration and diversification strategies. The organizational structures of companies that pursued concentration strategies were mainly of a functional nature. Tasks were mainly divided and grouped according to functions and stages of the technological process, and coordination was based on hierarchy. Furthermore, tasks were highly centralized and formalized. In diversified companies there also prevailed organizational structures of a functional nature. Only a few of the companies studied had flexible modern structures of the divisional or matrix type which would be suited to the strategy of diversification. It seems, though, that even such companies should introduce changes to their organizational solutions so that they could efficiently function in an increasingly complex and volatile environment.

Key-Words: - grand strategy, growth, single business concentration, diversification, organizational structure, enterprise

1 Introduction

The relationship between the strategy and organizational structure is the key issue in the organization and management theory. This issue has been the subject of study of many researchers for a dozen of years. Here one should point precursors as : A.D. Chandler [4], H.I. Ansoff [2], H. Mintzberg [7], A.A. Thompson and A.J. Strickland [13] and many others. It was shown that on one hand, the strategy models the company organizational structure and on the other hand solutions implemented within the organizational structure affect the process of strategy development and implementation. Every company should decide whether it should grow or reduce, specialize or diversify, operate in one or several markets, use creative or non-creative imitation, enter into alliances or not. Literature mentions various variants of strategies at the corporate level that take into account different directions and types of company development [6, 8, 12]. There are concentration and diversification strategies among them. The first one is a grand strategy in which a firm directs its resources to the profitable growth of a single product, in a single market, with a single dominant technology [11]. It involves focusing on doing better what a company is already doing well. It is realized by using existing strengths in new and

productive ways, but without taking the risk of great shifts in direction. Except concentrated growth (increasing use of present products in present markets), the concentration strategy includes: market development, product development and innovation [11].

On the contrary diversification is the strategy whereby a company sets up or acquires businesses outside its current products and markets [10]. A diversification strategy can be realized by the acquisition of a new business in related or unrelated areas, or by investment in new ventures. The key objectives are to gain an extra market share and seek opportunities which could generate synergy. This would lead to a larger size and increased power, and, ideally, to improved profitability resulting from the synergy [14]. Common diversification strategies include: horizontal integration, vertical integration, concentric diversification and conglomerate diversification. H.I Ansoff was first to distinguish this typology based on technological, market and financial synergies [1].

It should be noted that the rationale for a strategic choice between concentration and diversification is the optimum allocation of company resources manifested in the pursuit of the highest possible rate of return. Furthermore, another key factor for making such a

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choice is the company's standing and the stage of market development.

Every strategic option requires an adequate organizational structure ensuring its efficient implementation, thus contributing to the company's development. In order to adjust its structure to its strategy, a company will need to effect changes in the division of labour, its hierarchic structure, degree of centralization, method of coordination (cooperation between internal organizational units) and the degree of formalization [3, 9]. The organizational structure is also affected by many factors and circumstances which influence its form and shape. They named conceptual variables. Except strategy there are both external (company environment) and internal (human resources, organizational culture, technology, life cycle and company size) factors [5, 3].

The aim of this paper is analysis and assessment of organizational structures in the context of concentration and diversification strategies in Polish production enterprises.

2 Methodology and Field of Research

The objective of the research was to determine mutual relationships between the corporate strategy and organizational solution. The research was conducted in 2006 on a sample of 79 manufacturing companies represented different industries. Applied research method included telephone interview based on a standardized list of questions, supported by mail survey and Web survey. Respondents included representatives of chief managerial staff or persons indicated by these representatives. The studied companies were selected according to the following criteria: production activity, employing over 249 persons within the last 5 years, realization of the growth strategy reflected in substantial expansiveness (e.g. in capturing new markets, diversification of production and investment activities, etc.). Detailed data concerning the studied companies are presented in Table 1.

Each growth strategy can be carried out internally or externally. Of course, there can also be a mixture of internal and external actions. Internal growth is based on a company's own investments that develop its potential on the basis of existing assets. External is manifested through various forms of cooperation with other businesses, which may vary from very loose cooperation to very close capital and proprietary relationships. Consequently, external growth includes the following: mergers (also consolidations and incorporations), takeovers (capital groups, holdings), strategic alliances and other forms of cooperation such as cooperation agreements, associations, consortia, and joint ventures.

In terms of growth direction, the strategy of concentration on one business (specialization) was

pursued by 39 companies (49.4% of total companies), and the diversification strategy by 40 companies (50.6%).

Table 1 Character of the studied companies

Description	Number of entities	
	N	%
Year of foundation		
▪ 1838 – 1960	33	41.7
▪ 1961 – 1988	12	15.2
▪ after 1989	34	43.1
Total	79	100.0
Organizational form		
▪ one site	44	55.7
▪ few sites	17	21.5
▪ holding company	8	10.1
▪ concern	6	7.6
▪ other	4	5.0
Total	79	100.0
Geographical activity's area		
▪ national market (only in Poland)	52	65.8
▪ international market	14	17.7
▪ global market	13	16.5
Total	79	100.0

N – number of companies % - the percentage of the group

Source: Own research

The research project encompassed a wider range of issues; however, for the purposes of this paper, only those results concerning the character and changes in organizational structures in the context of a chosen development strategy are presented.

3 Concentration strategy and organizational structures of polish enterprises

Out of the 39 Polish manufacturing companies studied that pursued a growth strategy based on specialization, almost half revealed wide product expansion (48.7%), which means that they manufactured a range of products belonging to one sector that were close substitutes meeting the same consumer needs. These companies mostly chose specialization based on the criterion of product, at medium or narrow market concentration. Only two companies from this group pursued wide market concentration (introduced their products to other geographic markets). In order to pursue a wide range growth strategy, companies more often chose the external mode involving: merger (4 companies), takeover (3 companies) and strategic alliance in terms of launching a new product (2 companies) or manufacturing (1 company). On the other hand, a similar number of the companies studied (12, which is 30.8%) chose narrow specialization focusing only on one product or product line and limiting their sales markets to one or a few segments in a certain geographic market. This is synthetically illustrated by Table 2.

Table 2 Single business strategy by product and market concentration and growth method in the companies studied

Range of market concentration	Total		Range of product concentration					
			Narrow		Wider		Wide	
	N	%	N	%	N	%	N	%
High specialization	20	51.3	7	17.9	2	5.1	11	28.2
Medium specialization	13	33.3	4	10.3	3	7.7	6	15.4
Low specialization	6	15.4	1	2.6	3	7.7	2	5.1
Total	39	100	12	30.8	8	20.5	19	48.7
Growth method								
Internal growth	23	58.9	8	20.5	6	15.4	9	23.1
Mixed growth (internal and external)	16	41.1	4	10.3	2	5.1	10	25.6
Total	39	100	12	30.8	8	20.5	19	48.7

N – number of companies % – percentage of the group (39=100%)

Source: Own research

One could argue that the greatest proportion of the companies studied (7, or 28.2%) pursued product development and concentrated growth strategies. Some companies chose market development strategies (4 entities) and innovation strategies (8 entities). Three companies followed moderate product or market development strategies, two companies intended to pursue a product development strategy, and four companies intended to follow a market development strategy.

Table 3 Type of organizational structure and growth method in the specialized companies studied

Type of organizational structure	Total		Single business concentration – growth method			
			Internal		Internal and external	
	N	%	N	%	N	%
Functional structure	17	43.6	14	58.3	3	20.0
Line and staff structure	8	20.5	5	20.8	3	20.0
Divisional structure	4	10.3	1	4.2	3	20.0
Project/team based structure	2	5.1	1	4.2	1	6.7
Matrix structure	2	5.1	1	4.2	1	6.7
Process structure	3	7.7	2	8.3	1	6.7
Networked structure/boundaryless organization	2	5.1	0	0.0	2	13.2
Others	1	2.6	0	0.0	1	6.7
Total	39	100	24	100	15	100

N – number of companies % – percentage of the group (39=100%)

Source: Own research

A company's development strategy as well as change in its size influences its organizational structure. In the case of a concentration strategy, many authors believe that the

best solution is a functional structure with a high degree of centralization.

And it is the functional structure that prevailed in the companies studied (43.6%) together with the line and staff structure (20.5%), which is shown in Table 3. The growth method pursued turned out not to be very important. However, companies with external growth tended to choose functional structures (14 companies). Some companies had more complicated organizational structures typical of diversified companies: a matrix structure was revealed in 2 companies, and a divisional structure in 4 companies. Only a few companies used the latest structural solutions, such as: a project structure (2 companies) or a process structure (3 companies). In one company with a mixed type of growth a hybrid structure was found, defined as a functional structure with elements of a matrix structure.

A range of factors influence a company's organizational structure. Therefore, respondents were asked to assess the importance of selected structural factors from the point of view of their impact on organizational structure. Results are shown in Table 4.

Taking into consideration the type of concentration, the factor with the greatest relevance for company structure was customer requirements (the average grade for this factor was 4 or higher in all the groups, and in companies with narrow product concentration the median was 5, which means that according to 50% of respondents in that group this factor played a key role in shaping organizational structure). Other significant factors were strategy and technology, which is shown by their medians being 4 in the case of most groups of companies. In companies operating in extremely specialized markets and in those characterized by a mixed growth type (both external and internal), strategy was assessed to be a very important structural factor (medians of 4.5 and 5).

Company size and sector are more essential for the structures of companies with either narrow or wide product concentration, operating in highly and moderately specialized markets (a median of 4), and less so for companies with medium product concentration operating in low concentration markets (a median of 3). Company size is a more important structural factor for companies with internal growth (3.61 on average), and sector is important for mixed growth entities (3.86 on average).

According to respondents, the least important was governmental policy; however, high standard deviations and interquartile range calculated for this factor in each of the analyzed groups show that respondents had the most diverse views as to its significance and either perceived this factor as critical or relatively unimportant from the point of view of company structural solutions.

Table 4 Conceptual variables according to market / product concentration in the specialized companies studied²

Conceptual variables	Narrow product concentration 12 entities				Wider product concentration 8 entities			
	\bar{X}	S	M	Q	\bar{X}	S	M	Q
size	4.0	0.81	4	2	2.87	0.99	3	1
technology	3.9	1.04	4	2	4.0	0.92	4	0.5
strategy	4.0	1.04	4	2	3.85	1.12	4	2
environment: - government policy	2.81	1.25	3	2	2.62	1.59	2.5	3
- trade	3.75	1.35	4	2	3.42	1.13	3	2
- customers' requirements	4.27	0.90	5	2	4.12	0.83	4	1.5
	Wide product concentration 19 entities				High market concentration 20 entities			
	\bar{X}	S	M	Q	\bar{X}	S	M	Q
size	3.55	0.92	4	1	3.61	0.77	4	1
technology	4.11	0.87	4	1	4.35	0.67	4	1
strategy	4.0	0.90	4	2	4.05	0.97	4	2
environment: - government policy	3.37	1.31	3.5	2.5	3.38	1.33	4	2
- trade	3.77	1.06	4	2	4.15	0.95	4	2
- customers' requirements	4.22	1.00	4	1	4.47	0.77	5	1
	Medium market concentration 13 entities				Low market concentration 6 entities			
	\bar{X}	S	M	Q	\bar{X}	S	M	Q
size	3.58	1.08	4	0.5	3.17	1.32	3	1
technology	3.55	1.0	4	1	4.0	1.09	4	1
strategy	3.69	1.03	4	1	4.33	0.81	4.5	1
environment: - government policy	2.81	1.40	3	2	2.33	1.21	2.5	2
- trade	3.63	1.15	4	1	3.0	1.26	3	0
- customers' requirements	4.0	1.12	4	1	4.0	0.75	4	1

\bar{X} – average S – standard deviation M – median Q – quantities deviation
Source: Own research

The organizational structure of a company is characterized by certain properties, such as: the manner of division and grouping of tasks, the type of internal coordination, the level of centralization and formalization.

In the majority of the companies studied, the division and grouping of tasks had a functional character, which was often accompanied by other types of division and grouping of tasks, mostly technological and product-based. Over half of the companies had vertical coordination, often concurrent with personal and horizontal mechanisms of coordination. Hierarchy as a

coordination mechanism prevailed in companies with internal growth irrespective of range of product and market concentration. Grouping personnel in task teams was more popular in companies characterized by narrow and medium product concentration, and in particular in those which divided and grouped tasks according to technological and process criteria. A personal character of coordination was primarily characteristic of entities operating in highly specialized markets and having wide product concentration, that is, those which pursue a product development strategy. Coordinator positions were more often made use of in companies with mixed growth, medium product concentration and high market concentration.

In 18 out of the 39 companies studied, respondents said that the degree of decision centralization was very high. They were mostly companies operating in a narrowly specialized market as well as those characterized by medium product concentration. At the same time, those companies showed a medium to high degree of formalization (8 and 7 entities, respectively). On the other hand, 11 respondents indicated decentralization. They were for the most part companies with wide and narrow product concentration operating in medium and low specialization markets. The lowest level of formalization was revealed in entities with wider product and market concentration and in less centralized organizations. In companies with internal growth, the degree of decentralization and formalization was assessed to be higher than that in companies with mixed growth.

4 Diversification and organizational structures of polish enterprises

In the 40 Polish manufacturing companies studied which pursued a diversification strategy, horizontal diversification prevailed (97.5%). That means that they introduced technologically similar products into existing markets. With this type of diversification, respondents most often indicated its medium dispersion (20 entities), large (10 entities), and small (9 entities). To a definitely larger degree, growth was accomplished through a company's own investments (72.5% of entities), in particular in fixed assets related to manufacturing capacity. Cooperation with other companies in this respect was preferred by 25% of the companies studied. Detailed information pertaining to this issue is presented in Table 5. However, it should be stressed that respondents were allowed to select more than one type of diversification, and that is why in particular groups the number of companies and percentages do not add up to 100%.

Conglomerate and vertical diversification had a marginal presence in the group of companies studied. Only a few

² Respondents were asked to assess selected factors on a 0-5 scale, where 0 meant that a factor was unimportant, 1 that it was of small importance and 5 that it was a key factor with a strong influence on the company's organizational structure. Only assessments ranging from 1 to 5 were taken for further calculations.

companies (5 in the case of vertical and 2 in the case of conglomerate diversification) chose that kind of growth implementing it both internally and externally. Concentric diversification, or expanding beyond a company's own industry but with a common market or technological path characterized 20% of the companies studied. Half of them effected this growth on the basis of their own resources, and the other half cooperated with other business entities.

Table 5 Diversification strategy and growth method in the companies studied

Diversification strategy	Total		Growth method			
			Internal growth		Mixed growth	
	N	%	N	%	N	%
Horizontal Integration	39	97.5	29	72.5	10	25
Vertical Integration	5	12.5	3	7.5	2	5
Concentric Diversification	8	20	4	10	4	10
Conglomerate Diversification	2	5	1	2.5	1	2.5

N – number of companies % – percentage of the group (40=100%)

Source: Own research

Diversification requires more decentralized structures. It should be noted that in the case of related diversification the most suitable structures are divisional or matrix. On the other hand, in the case of unrelated diversification realized in terms of external growth, a decentralized structure or a holding may be more adequate. Table 6 present the type of organizational structure of the companies studied in the context of their diversification strategies.

Table 6 Type of organizational structure and diversification strategy in the diversified companies studied

Type of organizational structure	Related diversification						Unrelated conglomerate diversification	
	Horizontal integration		Vertical integration		Concentric diversification			
	N	%	N	%	N	%	N	%
Functional structure	15	37.5	0	0	3	7.5	0	0
Line and staff structure	9	22.5	3	7.5	1	2.5	0	0
Divisional structure	5	12.5	1	2.5	2	5	1	2.5
Project/team based structure	3	7.5	0	0	0	0	0	0
Matrix structure	1	2.5	0	0	0	0	0	0
Process structure	4	10	1	2.5	1	2.5	1	2.5
Networked structure/boundaryless organization	2	5	0	0	1	2.5	0	0

N – number of companies % – percentage of the group (40=100%)

Source: Own research

Analyzing the data, it becomes clear that functional and line and staff structures prevailed, while structures typical of diversified companies occurred only in a few

cases. Divisional and process structures were revealed in 5 and 4 companies respectively, and these structural solutions were found in entities using unrelated diversification. One company with horizontal diversification had a matrix structure, and two operated in a networked organization (one pursued horizontal diversification, and the other one both horizontal and concentric). In companies revealing vertical diversification, line and staff structures prevailed, and in some cases divisional or process structures were identified. Companies using concentric diversification more often chose functional and divisional organizational structures.

In this case, respondents were also asked to assess selected structural factors on a 1-5 scale, 1 meaning that a given factor was unimportant, and 5 that it was a key factor determining the organizational structure of the company. Survey results are presented in Table 7.

Table 7 Conceptual variables in the diversified companies studied

Conceptual variables	Total			
	\bar{X}	S	M	Q
strategy	3.78	0.97	4	1
size	3.50	0.99	4	1
degree of production diversification	3.55	1.01	4	1
technology	4.13	1.07	4	1
tradition	2.85	1.31	3	2
economic and financial conditions	3.73	0.88	4	1
employees' qualifications	4.00	0.78	4	1
managers' views	3.58	1.15	4	1
organizational form and degree of independence	3.73	0.75	4	1
government policy	2.73	1.36	3	2
trade	3.78	0.99	4	1
territory of performance	3.50	1.13	4	1
customer requirements	4.18	1.08	4	1

\bar{X} – average S – standard deviation M – median Q – quantities deviation

Source: Own research.

Data in the table show that, according to respondents, most factors were significant to organizational structures of companies. The most important determinants included: customer requirements, which is an environmental factor (average grade was 4.18), technology (4.13), employee qualifications (4.0), kind of business activity – sector (3.78), strategy (3.78), economic and financial conditions (3.73), and type of organization and degree of independence (3.73). This seems to be confirmed not only by relatively high mean values (in all cases over 3.7), but also a median of 4, which means that 50% of respondents believed that the above-mentioned factors were very relevant to organizational structures. Furthermore, low standard deviations and interquartile range (Q=1) mean that respondents' answers were rather uniform. Other significant factors included the degree of manufacturing diversification and management views (with a median of

4 and a mean of approx. 3.5). The least significant determinants of organizational structure were governmental policy (with a median of 3). However, in the case of these factors, respondents had the most diversified opinions. For some this factor was quite important, while for others it did not matter, which is shown by an interquartile range of 2.

A closer analysis of the features of organizational structures reveals that the functional criterion of the division and grouping of tasks prevailed, which is confirmed by the fact that the functional structure was the most popular. The growth method pursued turned out not to be very important. However, 16 companies that diversified on the basis of cooperation with other companies for the most part decided to pursue several strategic alliances at a time. Mergers effected by 4 companies were mostly pursued by horizontally diversified entities, while takeovers (in 5 entities) by companies with vertical and concentric diversification.

The technological criterion of division and grouping of tasks occurred more often in companies that were diversified with an internal growth method, while the product-based criterion in companies with mixed growth.

In terms of the type of coordination, the companies studied primarily made use of the simplest mechanisms such as hierarchy, rules and procedures. Coordinator positions were created in very few entities, mostly those developing on the basis of their own resources. Similarly, few companies made use of horizontal and personal coordination mechanisms, which was probably due to their relatively small range of diversification (horizontal diversification prevailed).

Thus, a relatively high degree of decision-making centralization was revealed in half of the companies studied. On the other hand, however, in 20% of entities, the division of power was found to be highly decentralized. A high degree of centralization as well as decentralization was accompanied by a high level of formalization. Only in 5 companies was formalization declared to be low, that is, characterized by a very small number of documents, rules, or procedures.

5 Conclusion

The companies studied implemented two types of development strategies: single-business concentration and diversification.

In summary, the companies studied that were pursuing a concentration strategy had mostly functional structures (with functional and line and staff structures prevailing), where tasks were divided and grouped according to certain functions and stages of the technological process (which resulted from the importance of technology as a factor determining structure), and coordination was hierarchical. Those companies were characterized by a

high degree of centralization and formalization. On the other hand, there were also those companies whose organizational structures had a more modern character (process-based and project-based structures), with a relatively high degree of decentralization, low degree of formalization, horizontal internal coordination and process-based division and grouping of tasks. The study also revealed companies with organizational structures typical of diversified companies (matrix or divisional structures), even if respondents declared a concentration strategy. However, they were only isolated cases in the studied group of companies. This might suggest that those companies were coming closer to diversification.

The companies studied that pursued diversification strategies employed rather classical structural solutions of a functional nature. Only few companies had more flexible and modern structures of the divisional or matrix type, which are most adequate for a diversification strategy. Therefore, it seems that the managerial staff of those companies should consider thorough organizational changes that would allow them to adapt faster and better to the constantly changing environment, especially since the environment was the most important structural factor according to respondents.

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