

**THESES OF DOCTORAL (PhD)  
DISSERTATION**

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**MOSONMAGYARÓVÁR  
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**THESES OF DOCTORAL (PhD) DISSERTATION**

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**COMPETITIVE MARKETING STRATEGIES IN THE  
NATIONAL BROILER FODDER SUPPLY MARKET**

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**MOSONMAGYARÓVÁR  
2013**

## 1. INTRODUCTION AND OBJECTIVES

The approach and study of competitiveness is a difficult exercise at both the company and the product level. It is an even more complex question with agricultural products, technologies and equipment.

I have chosen this topic for the research because in Hungary the economic relations of the housing systems of animal husbandry are among the poorly researched fields of science. No detailed study, in-depth analysis of this subject has yet been done at least in Hungary. However its usefulness in the current and future situation of the poultry sector is unquestionable given the expected strengthening of the competition in the market.

One of the core elements of animal husbandry technologies is the fodder supply equipment.

Modern equipment for increasing efficiency has a direct impact on the production results. The selection of automatic technical equipment (e.g. automatic feeding and drinking systems, feed bins and flex augers) mainly depends on the offer of the market users may chose from. The globalization present in the marketing of these products increases the role of the marketing strategies of the manufacturers and distributors. The so called competitive marketing strategy is primary important for the ones offering the product but providing a better offer as a result of that (price decrease, higher technical level, flexible distribution, etc.) is advantageous for the users.

The broiler fodder supply equipment distributors have their own, unique marketing strategy to maximize their profit.

The marketing of the broiler fodder supply equipment distributors, the comparison of the marketing strategies of these market players is the basis of the planning and organizing of the equipment distribution/utilization.

**To keep one's position and to expand (develop) in the even more competitive market is only possible by having a successful**

**(effective) marketing strategy.**

**The main objectives of the research** are to get to know the demand of the broiler farms for fodder supply equipment and find out what equipment is in use at those farms; to get familiar with the marketing strategies of the fodder supply equipment distributors and to exploit their sales potential by showing and analyzing the connections among these fields **based on the following aspects:**

- 1. To show the international and national situation of broiler meat production, the current trends and the expected future perspectives of the sector for the coming years*
- 2. To give an overview of the national specialties of the broiler fodder supply market, to present the broiler fodder supply equipment*
- 3. To introduce the marketing strategies of the fodder supply equipment distributors by the example of two market leaders*
- 4. To identify the influential factors during the purchase of fodder supply equipment and assessment of the decision making*
- 5. To evaluate the examined broiler fodder supply equipment distributors by SWOT analysis based on the results of the comparative analysis*
- 6. To develop the model of competitive marketing strategy, recommendations*

While setting the research objectives **I phrased the below stated hypotheses:**

*Hypothesis Nr.1:*

The technical level (equipment and solutions) used by the broiler farms play a significant role in the performance of the national broiler production.

*Hypothesis Nr. 2:*

Marketing and the related expenses spent on the activities of the national distributors involved in the sales of fodder supply equipment

differ at the companies but their impact on the profitability of the companies is significant.

*Hypothesis Nr. 3:*

There are differences in the use of marketing communication tools at the examined companies but both of them consider personal sales as one of the most important one.

*Hypothesis Nr. 4:*

Broiler farmers consider price as the most crucial one whereas distributors believe that the expertise and persuasion of the sales person have the greatest influence on the buyer's decision making when purchasing broiler fodder supply equipment.

*Hypothesis Nr. 5:*

With regard to the marketing strategies applied by the national fodder supply equipment distributors, the quality and strength of the partnership with the foreign supplier is determining.

### **3. MATERIALS AND METHODS**

The information and data collected during the research have been gathered by applying the two base methods of market research: primary and secondary data collection.

The research started with secondary data collection and based on its results it was completed by information resulting from primary research.

#### **3.1. Secondary data collection and its methods**

In order to get familiar with the international trends of the poultry sector data series and studies prepared by a Food and Agriculture Organization of the United Nations (FAO), Organization for Economic Co-operation and Development (OECD), United States Department of Agriculture (USDA), European Commission (EC), Agricultural Economics Research Institute (LEI) were the most

important. Moreover, many international magazines, publications, websites were studied.

Besides the above research institutes also national expert organizations were involved (e.g. Hungarian Poultry Board) helping the research by data supply and by providing national expert's publications.

### **3.2. Applied methods of primary research**

The data necessary for the execution of the own research was collected by the help of primary research, by both quantitative and qualitative data collection.

During the **qualitative primary research interviews of experts** took place with the managers of two broiler fodder supply equipment distributors. Since the companies required anonymity they are referred to as companies „A” and „B” in the dissertation.

The interviews with experts were preparing the „*face-to-face*” *interviews with questionnaires* that were realized with the managers of the two distributors.

The research aimed at the in-depth analysis of the following fields: technical parameter of the products offered by the examined distributors; the features of the services offered by them; the importance of marketing and comparison of the type of partnership with the foreign supplier (broiler fodder supply equipment manufacturer) as well as the six main aspects of their marketing strategies (target market, target group, product, price, distribution, promotion).

The balance sheets and profit and loss accounts received for the period of 2007-2010 were analyzed by the **calculation of financial-accounting ratios**.

Calculations were done for *analyzing the correlation between marketing expenditures (marketing costs) and revenue as well as between marketing costs and income* **with the help of EXCEL** for the period of 2007-2009.

Calculations of coefficient of correlation and coefficient of determination were done.

The calculation method of the *coefficient of correlation* is:

$$r = \frac{\sum (x_i - \bar{x}) \cdot (y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2 \cdot \sum (y_i - \bar{y})^2}}$$

The *coefficient of determination* is the square of the coefficient of correlation ( $r^2$ ).

Based on the comparative analysis **SWOT analyses were prepared** for the companies showing their strengths, weaknesses, opportunities and threats.

Another part of the research **involved eight broiler production units where interviews were carried** out with the managers of the broiler farms (according to the recommendation of the distributors). The necessary information and data were collected by the filling in of questionnaires during the interviews - as a **quantitative method of primary data collection-**.

To ensure the close link (comparability) to the results of the research gotten at the distributors, we have selected the broiler production units based on the criteria that they use broiler fodder supply equipment sold by one of the two distributors as well as that they are similar in terms of production volume (number of birds), production standards and years of existence.

The questionnaires served on the one side to collect production and economic data and on the other side to get an evaluation regarding the equipment in use and services offered by the distributors with the help of a 1-5 interval scale. The questionnaires were standardized in order to be able to assess them easier.

There are three different types of feeding systems at the eight broiler production units. From the available natural efficiency indicators and from the economic data a general operational efficiency has been calculated for each broiler farm and these efficiencies were linked to

the technical evaluation results of the three feeding systems. The results are shown in tables and graphics.

Due to the set objectives of the dissertation and the expected results it was of primary importance to get to know the decision making and its influential factors from the decision makers (broiler farmers) point of view.

The data required for this come from the information gathered during the interviews and by the questionnaires as well as from the information gained from the distributors from the interviews of experts and the questionnaires filled in during those interviews.

In this way we could get an insight into the decision making process of equipment purchase from both the buyer's (broiler farmer) and from the seller's (distributor) point of view. The results show in detail which factors and to what extent influence the investor's decision making.

Based on the results of the research (interview of experts, questionnaires, own calculations) and the detailed SWOT analyses *a model for the most efficient marketing strategy within the national environment is being developed*. Moreover some recommendations are phrased by which the distributors may increase their sales performance, their revenue as well as may gain a higher market share in the broiler fodder supply equipment market.

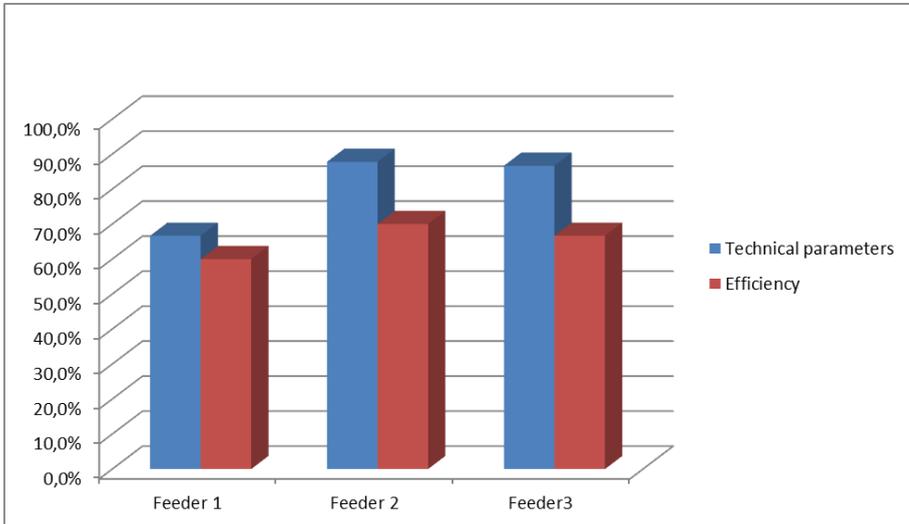
## **4. RESULTS**

### **4.1. The impact of the technical performance level of the broiler production units**

During the research three different feeding systems were identified, which were evaluated by the interviewees according to their technical parameters.

After that we linked the calculated general operational efficiency and the result of the technical evaluation of the feeding system.

Chart 1 shows the general operational efficiencies calculated from the natural performance indicators and from economic data in comparison with the technical evaluation of the feeding systems.



***Chart 1: Technical evaluation of three feeding systems and the general operational efficiency***

*Source: Own calculations*

It can be seen from Chart 1 that the different feeding systems have different evaluation result regarding their technical performance and the calculated general operational efficiencies differ as well. An interesting finding of the research is that the relation between the (evaluation of the) technical performance of the equipment (feeding system) and the general operational efficiency of the broiler production unit is not linear. The general operational efficiency belonging to Feeder1 is not that much lower compared to Feeder2 as it should be justified by the difference in the results of the technical performance evaluation.

The overall efficiency also depends on other factors than only on the technical performance of the equipment so by improving these factors the efficiency may be further increased.

Based on the above **Hypothesis Nr. 1.** phrased earlier: *the technical level (equipment and solutions) used by the broiler farms play a significant role in the performance of the national broiler production* – **is correct** since the high technical performance level of the equipment is a profound necessity in order to achieve better operational efficiency, in other words the desired efficiency can only be achieved with high technical parameters. It also means that equipment with better technical parameters have an advantage in the broiler fodder supply equipment market as they allow the users to modernize their broiler production units, improve their efficiency, in case of new farms allow them to have a better return on investment, all in all allow them to increase their competitiveness.

#### **4.2. Marketing expenses and their impact**

##### ***Correlation between marketing costs, revenue and income***

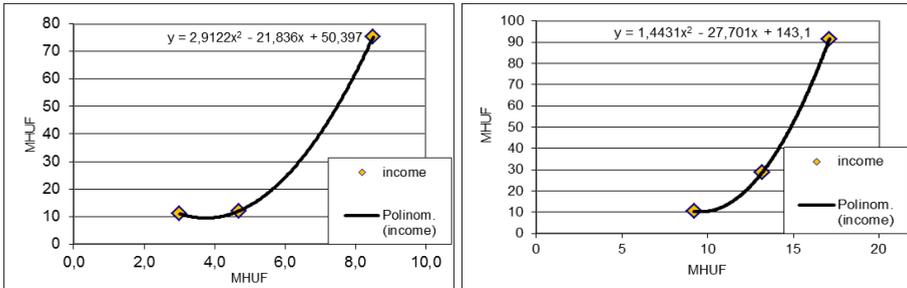
By calculation of correlation the correlation between the marketing costs (x) and the revenue ( $y_1$ ) and then the correlation between the marketing costs (x) and the income ( $y_2$ ) have been analyzed. Coefficient of correlation (r) and coefficient of determination ( $r^2$ ) have been calculated as well as curvilinear regressions have been fitted ( $y = y(x)$ ).

##### ***Correlation between marketing costs and income***

If the data of the two distributor companies are examined together, the **coefficient of correlation is  $r=0,68$** , which means that **there is a stronger than medium relation between the marketing costs and income**, which can be expressed by a quadratic curvilinear regression. From the calculated coefficient of determination, we see that marketing costs have an impact on earnings of 46%, which is rather significant.

In company “A” a quadratic curvilinear regression was fitted to describe the correlation between the marketing costs and income (Chart 2.a).

$$y = 2,9122x^2 - 21,836x + 50,397$$



**Chart 2.a and Chart 2.b: Correlation between marketing costs and earnings in company “A” (Chart 2.a) and in company “B” (Chart 2.b)**

Source: Own calculations

The same was done for company “B”, the equation of the curvilinear regression is (Chart 2.b):

$$y = 1,4431x^2 - 27,701x + 143,1$$

### **Correlation between marketing costs and revenue**

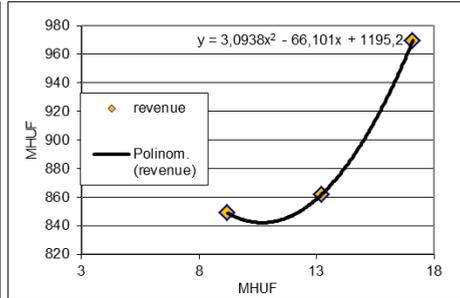
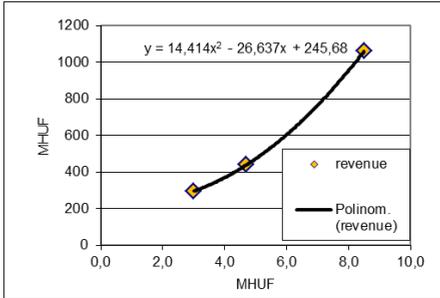
The revenue of the companies is not only influenced by the distributors themselves but also by the market to a great extent. The revenue highly depends on e.g. the existing demand for the product, on the success of sales, on the price of the product etc.

**There is a stronger correlation between marketing costs and revenue than between marketing costs and income. Here the coefficient of correlation is:  $r=0,77$  that is considered especially strong.**

**The value of the coefficient of determination is close to 60% ( $r^2 = 0,59$ ) which also shows that marketing costs have a great impact on revenue.**

In company “A” a quadratic curvilinear regression was fitted to describe the correlation between the marketing costs and revenue (Chart 3.a).

$$y = 14,414x^2 - 26,637x + 245,68$$



**Chart 3.a and Chart 3.b: Correlation between marketing costs and revenue in company “A” (Chart 3.a) and in company “B” (Chart 3.b)**

The same was done for company “B”, the equation of the curvilinear regression is (Chart 3.b):

$$y = 3,0938x^2 - 66,101x + 1195,2$$

Based on calculation we can conclude that *the revenue of the distributors of broiler fodder supply equipment is in a positive correlation with the marketing costs.* This correlation can be described by quadratic functions so it means that is to be optimized – at given market conditions -.

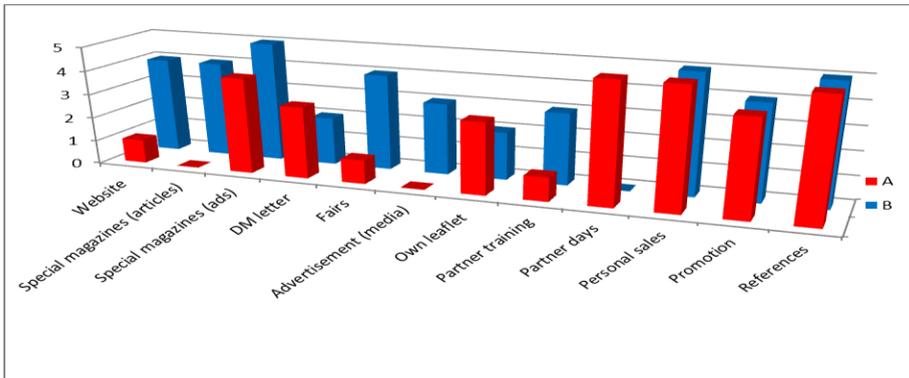
**Marketing costs are ideal expenditures from the companies’ economic aspect as they have an advantageous impact on both the revenue and the earnings.**

*Hypothesis Nr. 2* phrased at the beginning of the examinations *stating that: marketing and the related expenses spent on the activities of the national distributors involved in the sales of fodder supply equipment*

are differently emphasized by the companies but their impact on the profitability of the companies is significant – is **partially correct**. However, the examination did not prove the significant correlation among marketing costs and income as well as revenue. Yet the calculations of correlation show a stronger than medium correlation with regard to the examined input (marketing cost) and output (revenue and earnings) factors, thus there is a stronger than medium effect between the marketing expenses and profitability.

### 4.3. Marketing communication strategies of the distributors

There is a wide range of marketing communication tools applicable during the sales activity of broiler fodder supply equipment. Chart 4 shows which tools play a role in the marketing of the two distributors and to what extent:



**Chart 4: The applied marketing communication tools and their importance in the two companies**

Source: Own survey

From Chart 4 it can be seen that *personal sales and reference farms are the most important for both companies.*

During the expert’s interviews done with the managers of the companies it was confirmed that the *reliability* of the sales person and *personal relation with the partners is key to success.*

The business relation does not stop by the realization of sales but also includes continuous follow-up, consultancy and providing

professional information. Company „B” puts an especially great emphasis on the education of its partners by the professional assistance given during the sales activity, by publishing *expert articles*, by sending *DM letters about the newest technologies/developments*, by giving *online consultancy*, by publishing guides and useful information on its website, etc.

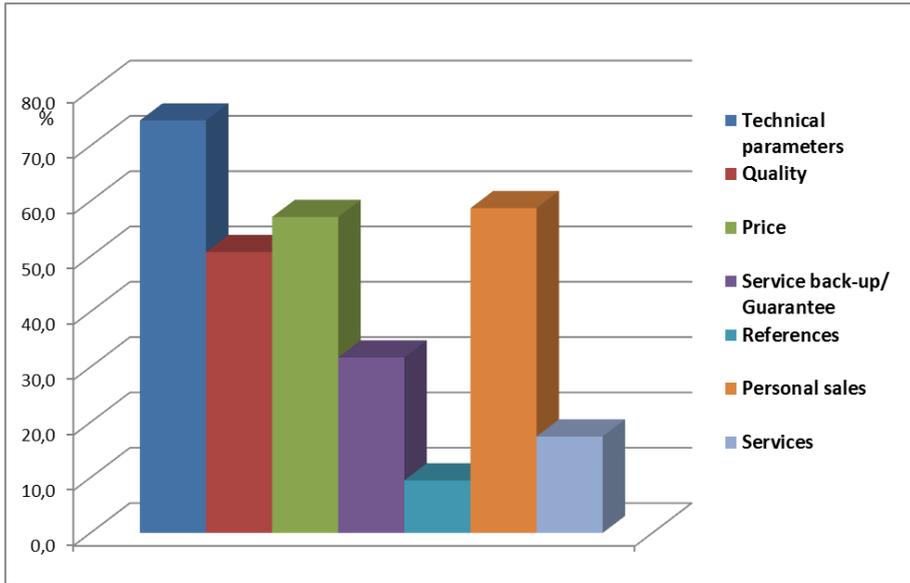
Company „A” uses limited marketing communication tools as it can be seen from Chart 4.

Both companies consider long-term partnership with clients, maximal customer satisfaction, strength of business relation, personal sales as well as trust and credibility very important aspects.

Based on the results **Hypothesis Nr. 3** stating that: *there are differences in the use of marketing communication tools at the examined companies but both of them consider personal sales as one of the most important one – is correct.*

#### **4.4. Factors influencing the decision making process of equipment purchase**

The other main area of the primary research dealt with the factors influencing the decision making process, what are the concrete needs of the users and which play the most important role in the decision making.



***Chart 5: Factors influencing the decision making of investors with their ranking***

*Source: Own survey*

From Chart 5 it can be seen that seven factors (excluding government subsidy) were identified that have an especially great influence on the investments aiming the purchase of broiler fodder supply equipment.

During the selection of the technology *the most important criterion is the technical performance of the product* that includes the feeding and drinking space of the product, the possibility of minimizing fodder spillage (waste), the anti-stick property of the inner cone of the feed bin, etc.

*The second most important factor in the ranking is personal sales* based on the answers of the broiler farmers. The quality of the business relation between the distributor and the client, especially the trust towards the sales person (concerning its expertise and creditability) and often previous business experience play a crucial role in the purchase process.

*The price of the product as an influencing factor got almost the same % value as personal sales* so it is as determinative as personal sales

during the technology purchase. Price includes elements like the price-value rate of the product or the payment conditions offered by the distributor.

According to the analysis *the fourth factor in the ranking is quality* that was evaluated separately from the technical parameters by the participants of the survey. In this meaning quality represents aspects like the reliability of the product, durability, change of re-purchase of the equipment.

*The remaining three factors are far behind the previous four elements. It is surprising that the service back-up/guarantees related to the product, the offered services as well as the importance of reference places were ranked much lower by the broiler farmers.*

In comparison with the results gotten at the distributors the followings are to be concluded:

- according to the opinion of the distributors the technical parameters of the product is crucial and personal sales is the most important factor among the factors influencing the decision making;
- broiler farmers consider the technical parameters and personal sales the most important, which means that the distributors and the investors have the same opinion in this regard;
- price is also considered important (ranked almost as important as personal sales) in the decision making but it is not the most important.

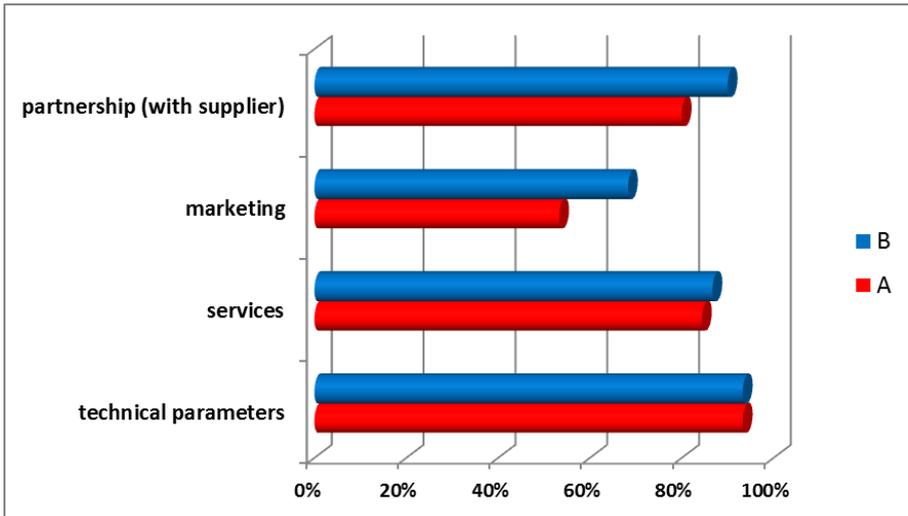
On the basis of the above presented results **Hypothesis Nr. 4** stating that: *broiler farmers consider price as the most crucial one whereas distributors believe that the expertise and persuasion of the sales person have the greatest influence on the buyer's decision making - is not correct regarding the opinion of the broiler farmers but is correct concerning the distributors' judgment.* In case of the investors (broiler farmers) the decision is made based on the technical parameters of the product, price and personal sales follows that.

#### 4.5. Connection between the marketing activities of the broiler farmers and their business partnerships

During the interviews of experts the distributors identified four areas that are keys to their success (successful sales activity).

Chart 6 shows the comparison of the following four areas key to success in their sales activities based on the evaluation of the distributors:

- emphasis put on marketing within the organization;
- evaluation of the quality of partnership with the foreign broiler fodder supply equipment supplier;
- evaluation of the technical parameters and quality of the distributed products;
- evaluation of the services provided by the distributor.



**Chart 6: Comparison of company "A" and "B" based on the four examined areas**

Source: Own survey

The survey examined *the perception of the role of marketing within the company.*

Chart 6 shows that there is a difference between the self-assessment of company “A” and “B,” namely that marketing has a higher emphasis in company “B.”

The overall ranking of marketing is behind the ranking of technical parameters and service in both of the companies.

One reason could be that the distributed products are basically technical equipment where technical parameters are decisive together with the related services offered. The role of marketing is less important in the sale of broiler fodder supply equipment than in the traditionally marketing-driven sales of fast moving consumer goods.

Another factor that influences the marketing activity of these two companies is *the type of partnership with the foreign broiler fodder supply equipment supplier.*

One part of marketing is marketing in business markets where an important relation type is the interactive business relationship between the supplier and the distributor which determines the procurement behavior of the organization, namely the partnership between the supplier and the distributor.

*The “partnership” factor* shown in Chart 6 is the quality of the partnership between the foreign broiler fodder supply equipment supplier and the distributor, based on the perception of the distributor.

The most interesting conclusion that can be drawn from Chart 6 is that *there seems to be a close link between the quality of the partnership between the supplier and the distributor as well as the perception of the role of marketing within the organization.* However, this result is not quite surprising if we keep in mind that the role of marketing is crucial in business relations, especially if we agree with the modern concept of marketing in business markets.

**Hypothesis Nr. 5** that was presented in Chapter Introduction and Objectives states: *with regard to the marketing strategies applied by the national fodder supply equipment distributors, the quality and*

*strength of the partnership with the foreign supplier is determining – proved to be correct based on the results of the examinations.*

Company “B” having an exclusive distribution right has a closer partnership with its foreign supplier (manufacturer) than company “A” which is not a sole distributor. Overall marketing and the applied marketing strategy has a bigger emphasis in company “B,” which can also be explained by the closer business relation. It can be best illustrated by the fact that here the foreign manufacturer and the exclusive distributor defined their marketing strategy together.

#### **4.6. Model of the competitive marketing strategy**

**Overall characteristics** that have been found at both of the distributors involved in the research and **that provide the base for a competitive marketing strategy** are as follows:

- distribution of products with high technical performance (parameters) and of high quality;
- at a price level accepted by the market (whether at the optimal price/value ratio or at a higher price level intentionally positioned in that way and supported by the right professional and marketing communication tools);
- correct, reliable supplier background;
- continuous education of the sales staff, professional expertise, credibility;
- built-out clientele, long term partnerships;
- good business relation, strategic co-operation with competitors.

**Other crucial elements needed for a competitive marketing strategy:**

- highly emphasized and well-developed marketing activity, marketing support and marketing communication (both from the supplier to the distributor and from the distributor to the user);

- combination of innovation and product development with an efficient marketing communication (products with high technical performance, easy to distinct from the competitors);
- advantageous purchase and sales prices, payment conditions (both from the supplier to the distributor and from the distributor to the user and compared to the competitors);
- flexible, reliable supply, well-developed service background, logistics.

**In order to develop a competitive marketing strategy there are some conditions** that must be fulfilled – **regardless from the marketing strategy**-. These are the followings:

- efficient organization (optimal number of employees, qualified work staff, appropriate language knowledge for keeping contact with the foreign supplier);
- stable financial-economic background;
- well-developed informatics.

The main features of the competitive marketing strategy are shown in Table 1.

**Table 1: Model of the competitive marketing strategy**

		<b>Supplier</b>	<b>Buyer</b>	<b>Competitor</b>
<b>Business relation</b>		reliable partnership	built out, long term partnership	good business relation, possibility of strategic co-operation
<b>Marketing as a functional element</b>		significant marketing assistance from the supplier	high marketing costs to support the buyers	differentiation of the products by the use of marketing tools
<b>Marketing mix</b>	<i>Product</i>	innovating R&D strategy, high emphasis on innovation	high technical performance	better technical parameters than the competitors' products have
	<i>Price</i>	advantageous purchase price, payment conditions, credit limit	price accepted by the market, best price/value ratio, special payment conditions according to the type of the buyer	similar price policy as the competitors but with better payment conditions
	<i>Distribution</i>	direct contact, reliable, fast supply	direct supply to the buyers, well-developed service background	more flexible and more reliable supply than the competitors offer
	<i>Marketing communication</i>	marketing communication support to distributors	wide range of marketing communication tools at good quality	the use of more innovative and up-to-date marketing communication tools than the competitors do

Source: Own development

## **5. NEW SCIENTIFIC RESULTS (RESULTS ACHIEVEMENTS)**

**The scientific results** - based on the primary research carried out at two market leaders distributing broiler fodder supply equipment in the national market as well as at eight broiler production units during four years (2007-2010) and based on information gained from secondary research – **allow the distributors to get new aspects when developing their marketing strategies to become more and more competitive. The scientific results were found based on the parameters** deriving from the survey with questionnaires (including mainly quantitative data) covering a period of four years **are relying on mathematic-statistic calculations.**

- 1. The data collection and processing method needed for the primary, demoscopic research in the broiler fodder supply equipment market has been developed by the candidate based on her own research method.**
- 2. Based on the result of the research there was a significant difference in the opinion of the users and the distributors with regard to the factors influencing the competitiveness of the marketing strategy, which does not help (in certain cases even hamper) the sales of broiler fodder supply equipment.**
- 3. A strong correlation ( $r=0,77$ ) was found between marketing costs and revenue of the broiler fodder supply equipment distributors, which connection has not yet been examined in the national broiler fodder supply equipment market.**
- 4. There is a correlation of medium strength ( $r=0,68$ ) between marketing cost and income (operating earnings) in case of market leader distributors at the broiler fodder supply equipment market.**
- 5. The quadratic functions describing the correlation between marketing costs and revenue/income allow the**

**distributors to optimize their marketing expenditure at given market conditions.**

## **6. SUMMARY**

Currently in animal husbandry the automated technical solutions are determining for the production performance of the farms. Regarding this fodder supply equipment (feeding and drinking systems, feed bins etc.) are the basis, without them we cannot speak about modern animal husbandry. So we can conclude **that successful operation of the fodder supply equipment manufacturers and distributors depends greatly on the volume of animal husbandry and its production level.**

Among the Hungarian (national) animal husbandry sectors broiler production represents an exception as this is the only sector that could keep its production volume and even increase that slightly during the last decade, however the technical solutions used in fifty percent of national broiler production units do not comply with the modern technical requirements.

**We can state that further production increase of the broiler sector as well as the modernization of outdated broiler fodder supply equipment together represent a significant potential for the broiler fodder supply equipment manufacturers and distributors.**

In order to turn this potential into successful sales the distributors must **adapt their marketing policy to the demand of the market. A basic element of this marketing policy is the marketing strategy of the distributors.** The adaptation can only be efficient if the distributors know the needs of the users and **know the competitors** to the greatest extent.

However it seems that the distributors are „followers” regarding the demand of the market, yet, **they must develop and maintain an own, personal marketing strategy** – accepting the needs of the users to the maximum - **in order to improve their competitiveness.**

Despite the obvious differences in the marketing strategies of the two companies we studied representing two thirds of the sales of Hungarian broiler fodder supply equipment they have the same primary objective, which is the increase of their market share.

From the survey with questionnaires answered at the distributors and at eight broiler production units, **they have a different opinion on the priority ranking of the main aspects of their marketing strategies.**

Based on this information they may **decide on the measures necessary to increase the efficiency of their marketing strategy.**

Marketing activities represent not only an organizational but also a material question. It is almost an evidence that the amount spent for marketing activities must have a return.

**The increase of cost efficiency is also an expectation in this field, at least on the long term.** The results of the research prove that **there is a stronger than medium correlation between marketing costs and revenue as well as income of the two distributors.**

Since these connections can be described by quadratic functions, there is a chance to optimize marketing costs. We must keep in mind that the applied models are static so they are only true under given conditions.

**This fact as well as the ever changing (dynamic) market conditions together force the distributors to continuously update their marketing strategies as they can only stay competitive in this way.**

## **7. LIST OF SCIENTIFIC PUBLICATIONS AND LECTURES RELATED TO THE DISSERTATION**

### **7.1. Scientific publications published in edited journals in Hungarian:**

1. **Benke H. (2007):** Világceg a hazai takarmányozási eszközök piacán (A global company present in the national fodder supply market) – *Gazdálkodás* 20. számú különkiadása 182-188. pp.

### **7.2. Scientific publications published in edited journals in English:**

2. **Hedvig Benke – Rózsa Csatai (2013):** The Impact of Marketing Costs on the Revenue and Income of the Broiler Fodder Supply Equipment Distributors, *Acta Agronomica Óváriensis*, 2013/2. (to be published)
3. **Hedvig Benke – Antal Tenk (2013):** Main features of the marketing activity influencing competitiveness in the broiler fodder supply equipment market, *Acta Agronomica Óváriensis*, 2014/1. (to be published)

### **7.3. Lectures presented at scientific conferences in Hungarian:**

1. **Benke H. (2007):** Egy világceg szerepe a hazai takarmányozási eszközök piacán (The role of a global company in the national fodder supply market), „Gazdálkodás a következő ötven év felé” Tudományos Konferencia, Mosonmagyaróvár, 2007.04.25. CD

2. **Benke H. (2010):** Beruházási döntések kritériumai a takarmányozási berendezések létesítésekor (Criteria of the investment in fodder supply equipment), „A magyar élelmiszergazdaság jövője a KAP reform tükrében”, XXXIII. Óvári Tudományos Nap, Mosonmagyaróvár, 2010. 10.07. CD

#### **7.4. Lectures presented at scientific conferences in English:**

3. **H. Benke (2013):** Competitive marketing strategies in the poultry housing equipment market, Science for Sustainability – International Scientific Conference for PhD Students, The University of West Hungary, Talentum Project, Győr, March 19-20, 2013, Proceedings 405-411 pp
4. **H. Benke (2013):** Competitive marketing strategies in the broiler fodder supply equipment market, „Hensch Árpád nyomdokain” - a Gazdálkodásban publikált PhD hallgatók és kutatók III. Országos Tudományos Konferenciája, Mosonmagyaróvár, 2013. április 25. CD