

Dúl Nándor

Szent István University in Gödöllő, Hungary

**QUALITY AND EFFECTIVENESS AS THE KEY FACTORS
OF HUNGARIAN FOOD RETAIL SMES LONG-TERM
COMPETITIVENESS**

*JAKOŚĆ I EFEKTYWNOŚĆ JAKO KLUCZOWE CZYNNIKI DETERMINUJĄCE
TRWAŁĄ KONKURENCYJNOŚĆ SKLEPÓW DETALICZNYCH NA WĘGRZECH*

Key words: Innovation, IT management, Service quality, SMEs

Słowa kluczowe: innowacje, zarządzanie IT, jakość usługi, MŚP

Abstract. This paper aims to give an overview of challenges and competition of the Hungarian food retail sector, and to provide possible answers of small and medium sized enterprises from the point of view of the higher level of service-quality and efficiency achievable through innovation and technological development. Nowadays the innovation efforts in the Hungarian food retail are fundamentally emphasizing the realization of two main objectives, both at sectoral and company level: the improvement of service quality and efficiency of retail activities. These objectives are also the requirements of such development tasks, which are simultaneously solvable through the high standard of information management. In the point of the related expensive technological improvements, the multinational retail companies are in a quite favorable situation, even so the domestic SMEs suffering from the lack of assets also have a fair chance to improve their innovation driven competitiveness and to make up for their relative handicap.

Introduction

The continuous conforming to the central components of gaining and retaining of competitiveness – the reasonable functioning and effectiveness – is important for both the individual companies and for the given country. Also Schumpeter [1912], the writer of the theoretical principles of innovation had accentuated, that getting of internationally rated competitiveness is depending on the countries' innovation skills and innovative acts, while the Nobel prize winner Lester Thurow was led to a similar conclusion, moreover he had already heightened the significance of the appropriate exploitation of technologies. However nowadays – from the point of view of competitiveness – Hungary is in one of the most disadvantageous conditions among the Central and Eastern European Countries, which is – according to the complex international benchmarks – the consequence of the imperfection of the national innovational framework and the lack of the development of skills. The World Competitiveness Yearbook 2009 of International Institute for Management Development foreshows, that two relevant of its four main monitoring components – the business efficiency and infrastructural conditions – has deteriorated in the last period compared to the other countries examined, and so in the respect of competitiveness Hungary's overall ranking is the 45th from the 57 countries evaluated in the yearbook. The World Economic Forum's The Global Competitiveness Report [2009] assessment also confirms that compared with the previous period Hungary's performance has decreased in the point of innovation and business sophistication, and according to the report only Greece's, Latvia's, Romania's and Bulgaria's competitiveness is worse than Hungary's from the EU member countries. Besides this the ninth edition of the European Innovation Scoreboard (EIS), which provides a comparative assessment of the innovation performance of EU-27 Member States denotes that Hungary even as the Czech Republic, Greece, Italy, Lithuania, Malta, Poland, Portugal, Slovakia and Spain are only moderate innovators, with innovation performance below the EU-27 average. The next figure (Fig. 1) based on some of the Eurostat i2010 indicators [www.epp.eurostat.ec.europa.eu] nicely illustrates Hungary's relative handicap in the point of technological readiness compared with EU averages.

The execution of innovative functioning and the utilization of up-to-date technologies would be especially important in the case of the small and medium sized enterprises, considering their economic magnitude and actual status (Tab. 1).

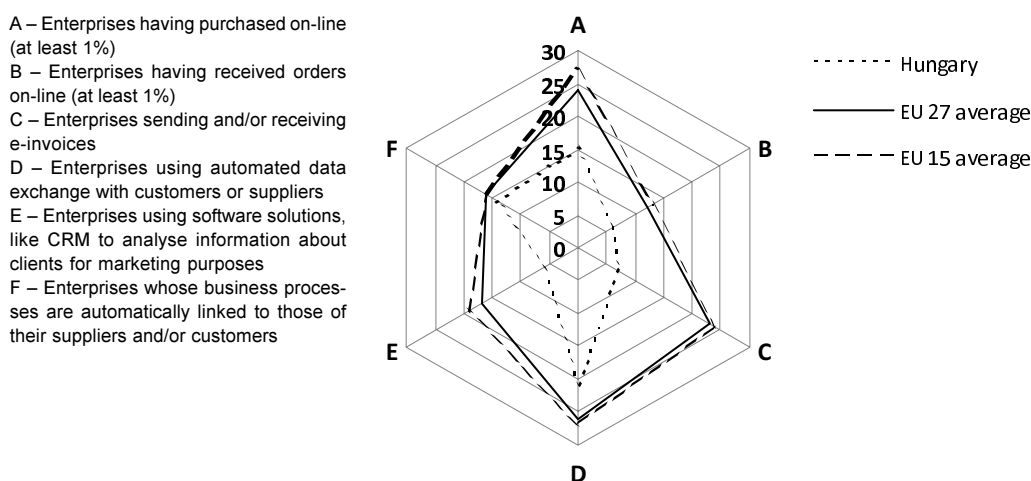


Figure 1. Technological readiness in Hungary and in the EU on the basis of 2010 indicators
 Source: based on the i2010 Benchmarking indicators.

Table 1. Structure of enterprises by size, number of person employed, and value added in Hungary and in EU-26

	Number of enterprises		Number of persons employed		Value added (MEUR)	
	Hungary [%]	EU-26 average	Hungary [%]	EU-26 average	Hungary [%]	EU-26 average
Micro	94,7	91,8	35,8	29,6	15,8	21,1
Small	4,4	6,9	18,9	20,6	16,3	19,9
Medium	0,7	1,1	16,2	16,8	18,1	17,8
SMEs	99,8	99,8	71,0	67,1	50,2	57,9
Large	0,2	0,2	29,0	32,9	49,7	42,1

Source: SBA fact... 2009.

Nevertheless the European Commission DG Enterprise’s short summary [SBA fact... 2009] of the Hungarian small and medium sized enterprises potentials and features – similarly to the formerly mentioned reports – contains unflattering statements. The fact sheet’s relevant category, the „Skills and innovation” tells about particularly notable leeway¹ In pursuance of the above introduced malfunctions, the development of SMEs now should be treated as a priority, and therefore the related objectives are already appearing both in the level of the Hungarian government and in the level of the European Union. The National Strategic Reference Framework of Hungary called The New Hungary Development Plan’s [2007] most important objective is to expand employment and to create the conditions for the long term growth. Its first priority, the „Economic development” contains the following groups of relevant interventions:

- creating innovative, knowledge based economy,
- improving the income generating ability of small and medium sized business (this category among others includes the improvement of the capital supply of SMEs; the technology update; and the encouraging of partnerships between SMEs),
- developing the business infrastructure and services with planned tools as follows: developing industry parks; improving info-communication technologies (ICT) and the physical infrastructure; establishing the network of logistics parks; building broadband IT networks; developing the legislative and regulatory framework for the business environment.

¹ According to the report: the information available for this section places Hungary below the EU-level, in both policy areas covered by this SBA principle. The figures for Hungary regarding the participation rate in learning activities in micro enterprises are among the lowest in Europe (only ca 13% compared to the EU average of 47%). This relation also holds true for SMEs in general, although not as pronouncedly. The duration of the training provided to employees in Hungary is also shorter than in EU peers. As for innovation, it can be stated that the share of SMEs having new products or income from new products is quite low (46% compared to the EU average of 63%). The share of innovative SMEs cooperating with others is below the average (6,6% compared to the EU average of ca 9%).

At the level of the European Union, now the EUROPE 2020 Strategy's [2010] smart growth priority is aims to create the knowledge and innovation based economy, which is a key for the EU countries to get out fast from the current economic crisis and its effects.

At the same time this strategy is also strongly enhancing the necessity of the improvement of small and medium sized enterprises and the European business environment.

The Hungarian food retail sector and SMEs

The Hungarian retail sectors' annual turnover is 6,15 bln Ft, the sector in itself generates approximately the 11% of Gross Domestic Product. From the previous, the food, beverages and tobacco retail's annual turnover is 3,29 bln Ft [Hungarian Central... 2009]. The Hungarian fast moving consumer goods retail's sharp competition has basically two attendant phenomena: the yet independent stores continuous liquidation, or rather their joining to greater retail chains, in a word the market concentration. Since approximately the one fourth of per capita expenditures in Hungary is spent on foods, thus the conformation of consumer prices and the price sensitivity will obtain accentuated significance in the food-retail in the future, however – on the grounds of the typical principles of economics in intensive competition – the price driving effect of small and medium sized enterprises is limited, even in purchasing partnerships or franchise constructions. At the same time, competing with cheapness and low prices in the long run is inexpedient, because beyond a level it has profitability limits. The figure 2 presents a comparison between the Hungarian FMCG sector's largest retail chains' by their annual turnover and by the number of stores.

As it can be seen on the figure, Tesco was the first by turnover in 2009, and it was followed by two Hungarian owned chain, the CBA and COOP. From that matter the three 100% Hungarian-owned companies (CBA, COOP, Reál) was well placed, but it is practical to analyze the number of stores at each companies along with their turnover. Although this evaluation in itself would be unsuitable to draw a conclusion about efficiency for the sake of the various store categories and sizes, however it is remarkable that the number of the stores generating the given turnover is appreciably higher in the case of Hungarian retail chains. In addition, the number of people employed at companies squarely shows, that the foreign property companies productivity and efficiency is decisively better. According to the information available on the corporations websites the COOP employs 32 000, the CBA employs 35 000 people, while Tesco employs 22 000 and Auchan employs only 5000 full-time workers. With this, the turnover per capita in the case of the aforementioned chains are the following:

- CBA: 56 000 EUR/employed,
- COOP: 57 000 EUR/employed,
- Tesco: 100 000 EUR/employed,
- Auchan: 160 000 EUR/employed.

Therefore, it is very important now for the Hungarian retail companies to apply every devices and methods, by means of they can improve their competitiveness even under unfavorable economic circumstances. The small and medium sized retail companies' possibilities to improve the level of their service quality and activity, can lend them a distinctive character in the comparison with the others, furthermore these factors have more and more importance for the customers too.

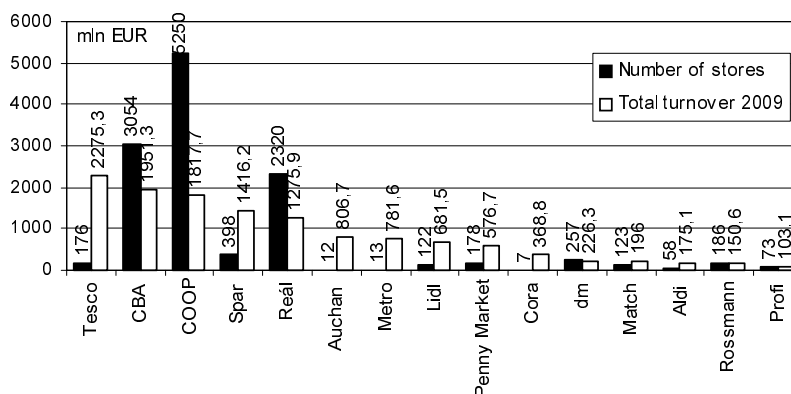


Figure 2. The Hungarian FMCG sector's largest retail chains by annual turnover and number of stores, 2009
Source: Toplist..2009.

Information management and service-quality

At companies with up-to-date conditions and infrastructure, the material and financial components of the business processes are mostly supported or followed with some kind of operations in IT systems, thus the tasks are abreast in connection with at least an administrative level procedure in information systems. While the quality-based retail activity primarily concentrates on the enhancement of customer satisfaction, thus in the course of discovering the coherency between retail IT solutions and quality management we should answer the question that how is it possible to use these IT equipments from the aspect of customer focus. The general need of fact-based decision making requires objective and numerical data about the costumers' needs and satisfaction, but then the relevant explorations (e.g. surveying based on questionnaires, observations, etc.) are always containing subjectivity to a certain degree, so the outcomes of the following data processing is only valid by a certain plausibility. Contrarily, the primary information provided by retail IT systems are squarely numerical, in most of the cases measurable and expressible in a sort of units (such as currency, piece, time, etc.) and these data are also appropriate for quality control. The following categories are systematically containing the IT solutions by the aim of their utilization.

Assortment optimization. Nowadays it is a real problem, that – especially in the case of the domestic-owned – retail companies are selecting their assortment in an intuitive way. This attempt-based approach must be changed by a conscious assortment planning method (for instance with Pareto-analysis, Cross-category analysis, BCG analysis and Toplists [2009], which really meets the local requirements and also considers the profitability aspects, thus this topic is both the question of the service quality management and the functional efficiency.

Food safety, identification and traceability. The traceability of products, as the interest of both the retailer and consumers is a central issue, nowadays its great importance can hardly be exaggerated. By the point of view of the current technologies the retailers can relatively easily suit the requirements of traceability, by using barcode and RFID based equipments, and what is more, they can also utilize these devices for additional purposes. (e.g. temperature sensor RFID tags).

Enhancement of shopping experience. It is a momentous element of the customer-oriented way of thinking. For the attainment of customers and also for keeping them it is necessary to recognize and understand their needs. This nowadays excessively area constitutes the important part of the retail's value-added. The related technological developments are including among others the CRM and loyalty-card systems, the RFID based applications, the interactive POS terminals, the face recognition technologies.

Some aspects of efficiency improvement

The claim, that the companies would like to exploit at least their own information which are arising in the course of functioning, stimulates them to use up-to-date technologies. However there is a question that the modern devices are only used for covering basic retail activities or companies are using them in order to achieve a higher level of information management². According to a modern approach, the pretension of the enhancement of functional efficiency in retail is neither the result of the companies self interests nor the outcome of the intensive competition's requirements. It is rather a question of ethics, since the retailers should improve their margins and profitability across the optimization of their own processes and by the reduction their operational costs, rather than through the exploitation of customers. In the next points a some aspects and components of efficiency improvement will be summarily presented.

Process-efficiency. Just as before the adaptation of quality management systems, the initiation of retail information systems or devices also requires the detailed identification of the companies' processes, functions, and activities. The most important effects of retail ERP systems are appearing in the well determined structure of activities and the accuracy and rapidity of work. It means that the activities (e.g. personal selling) which were previously pushed into the background, can be easier performed after the de-allocation of human resources.

A higher number of transactions and higher turnover. From the point of view of customers, the size of assortment is also an undisputedly important factor of store selection; however the larger amount of products means more physical and administrative work. So it is evident that the previously mentioned, drastically simplifying and accelerator functions of retail information systems are allowing of the sale of hundred thousands of items in a bigger sized store, and therefore more transactions and the increase of turnover can be realized.

² About the strategic importance of utilization of IT devices see: Porter-Millar 1985.

Table 2. The value added per person and the number of employees by the various property structures in Hungary in 2008

Detailed list	Value added per person [th. Ft]	Number of employees [th. capita]
National economy, total, from which:	5635,3	2229,2
enterprises, 100% domestic property	3752,8	1630,0
enterprises, 100% foreign property	10 002,1	391,2
enterprises with at least 50% foreign property	13 162,1	146,9
foreign property (100 and 50%)	10 864,8	538,1
Foreign/national economy [%]	193	24

Source: Handout about...2009.

under-stocking and the low efficiency of shelf replenishment are collecting turnover and stock data, totalizing them in indices and efficiency statements, and simulating the effects of shortfalls.

Improving of store layouts. In this relation, the aim of the optimization is that the arrangement of equipments (shelves, displays, counters, islands, etc.) and the placement of products should faster the maximizing of turnover through the influenced movement(s) of the customers. The guiding of customers can rest on the carried products' demands and the costumers' preferences. For the sake of the limited available selling area, the so-called space-management is also an emphatic activity nowadays, especially in the case of the formerly built, anachronistic arranged retail stores. The basic information for the planning are the parameters of the customers' in-store behavior. The RFID technology plays an important role in mapping the customers' movements and actions, while with these devices the tracking and observing tasks can be easily executed.

Efficient supply-chains and information sharing. From the early 90's it is evident that supply chains are competing with supply chains, instead of individual companies or products with each other. [Cristopher 1992] From this view the effective collaboration and the information sharing among the partner-companies of the same supply chain or network is essential. The supportive EDI – beyond its simplifying role in B2B communication – can generate automated processes, which are taking out the often circumstantial, less efficient and wasteful activities. Thus the EDI is not a simple IT project, but a rationalizing project, which affects several of the companies' functional areas (e.g. reception of goods, purchasing, administration, invoicing, accounting, etc.). Besides of this, the paper-free realization of communication and administration is an important aspect of both the environmentalism and the cost-effective operation. The data synchronization is a relatively new global initiative and its aim is to ensure that the changes of relevant and verified data issued and stored in a company's ERP system are automatically being enforced in the accompanying (connected) corporations' ERP systems as well. The Global Data Synchronization Network is based on GS1 standards and the requirements of its application are improving and speeding up the data interchange and administration, and with this the movements of goods. The Hungarian food retail chains joining to the network expectedly starts in 2010.

Conclusions

According to the Hungarian Ministry of Finance's Handout about the economic and financial processes [2009], the productivity of foreign property enterprises' operating in Hungary is much higher than the domestic ones, while these are generating approximately three times more value added, than the 100% domestic owned companies. As an illustration, in the following table (Tab. 2.) the enterprises' productivity is expressed by the value added per capita, i.e. as the ratio of gross value added and the average of the number of employees. It is noticeable, that in the case of the in greatest part (50% and above) foreign-owned companies have approximately two times better productivity compared to total of the national economy, and what is more the difference is almost three-fold in accordance with the 100% Hungarian enterprises.

In addition, on the score of the number of employees in the different categories the foreign companies are employing much less people than the domestic ones. So the consequence is: the foreign companies are functioning effectively even with few workers, but simultaneously the Hungarian corporations are typically labor-intensive, and with the high number of employees these.

Inventory management.

The effective inventory management can be facilitated by the retail information systems' order proposals. While inventory management is a very difficult optimizing task (its inputs are turnover data, resources, capacities, time and costs, etc.), which in practice would insolvable without the ERP systems. Beyond this, the available data-mining solutions designed for clearing up the anomalies of

According to the cited informant the significant difference in the productivity is due to the foreign firms' modern technology and advanced working culture established against the less innovative Hungarian companies, that are suffering from the lack of assets. But in virtue of the numbers of the table there is a further recognition. Namely, that without the foreign direct investment based modernization Hungary's overall work productivity, its share from the world trade and the tax revenues of the state budget could be much lower than the current level. However considering the Hungarian SMEs role in the national economy (especially in employment), it can also be declared that a trim in the property composition, which would be optimal from the aspects of both the national tax revenues, the social welfare or rather the progression, is not yet evolved in Hungary. Of course, these relations are also valid in the food retail sector, where in point of the profitability's critical influential factors (i.e. both the technological readiness and general infrastructure or rather the work organization principles) there is a need of a considerable development at the domestic enterprises. In the course of the Szent István University TATA Excellence Center and IT Institute's researching activity, and the personal consultations with retail companies' executives, we were led to a preliminary conclusion, that in the case of the Hungarian owned food retail SMEs the utilization of IT equipments (if these are available at all) often only supports the basic functions, such as registering and following transactions, though it is apparent that the more competent application would be particularly significant for the sake of the market competition. Actually, the realization needs a change of mind and basically the following arrangements need to be made by the companies.

- first, they have to keep abreast with the technological development of their specialty, and get acquainted with the possible impacts on the operation; for this, the companies have to improve their knowledge by benchmarking, visiting conferences and exhibitions or rather by requisition of professional consulting firms,
- on the other hand companies should take steps to get the best possible technologies, and by the planning they should use the necessary calculations, such as ROI and TCO,
- and finally, companies have to provide for the effective exploitation of the IT devices' possibilities, namely the organizational and human background of decision supporting should also be created.

After the revision of the problems, it is ascertainable that the few solutions which were mentioned in the paper could be the catalyst of the small and medium sized companies' development, even though that these have a relative handicap, since their flexibility and adaptability can be decisively better than the multinational companies. Nevertheless on behalf of the prosperity the government of Hungary and the scientific sphere also have tasks. The government should support the domestic enterprises through the beneficial educational and development policy, the incentive actions of innovation, and by facilitating the companies to obtain more financial resources, while the science should promote them by means of development of business intelligence and the knowledge transfer.

Bibliography

- Christopher M.** 1992: Logistics and Supply Chain Management. Pitman Publishing, London.
 EUROPE 2020. A European strategy for smart, sustainable and inclusive growth. 2010: European Commission, Brussels.
 EUROPEAN innovation scoreboard (EIS) 2009, 2010: Pro Inno Europe Paper, no. 15. European Commission, Brussels.
 Handout about the economic and financial processes. 2009: Hungarian Ministry of Finance, Budapest.
 Hungarian Central Statistic Office. Data for 2009.
 i2010 Benchmarking indicators [www.epp.eurostat.ec.europa.eu].
Porter M.E., Millar V.E. 1985: How information gives you competitive advantage harvard business review. July-August.
Porter M.E. 1990: The competitive advantage of nations harvard business review. March-April, p.75.
 SBA fact sheet Hungary, 2009. 2009: European Commission DG Enterprise.
Schumpeter J.A. 1912: Theorie der wirtschaftlichen Entwicklung. Duncker&Humblot, Leipzig.
 The Global Competitiveness Report. 2009: World Economic Forum, Geneva.
 The New Hungary Development Plan. National Strategic Reference Framework of Hungary 2007-2013. 2007: Employment and Growth The Government of The Republic of Hungary
 Toplist of the Hungarian FMCG retailers. 2009: Nielsen survey [www.hu.nielsen.com/site/20100420.shtml].
Thurow L. 1992: Head to head. The coming economic battle among Japan, Europe and America. William Morrow and Company, Inc., New York. pp. 23-24.

Streszczenie

W artykule dokonano analizy kluczowych czynników wpływających w długiej perspektywie na konkurencyjność sklepów detalicznych oferujących żywność na Węgrzech. Analizą objęto średnie firmy, wskazując na jakość, innowacyjność i efektywność jako główne determinanty ich rozwoju.

Corresponding address:

Dúl Nándor, Ph.D.
 Szent István University, Faculty of Economics and Social Sciences
 H-2100 Gödöllő, Tessedik S. u. 6., Hungary, phone: (+36) 30 649 39 97, e-mail: dulnandor@gmail.com