METHODS AND TECHNOLOGIES USED IN MANUFACTURING BAKERY PRODUCTS TO THE METHODS AND TEHNOLOGIES USED IN PAPER PROCESSING

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Abstract

Get out of flexible manufacturing systems, which currently are really expensive but the advantage they need to sell products adapted to customer service capacity increases so on a large scale. In this paper I wish to show, methods, improvements in clients, staff working in a factory reorganization bakery versus a company specialized in producing paper for corrugated cardboard, using as raw material 100% waste paper and cardboard. Analysis and control is different because each has its own development strategy and operating systems are by SAP.

By they want to show you how to invest in Romania, as it is "calculated" every penny, which quality standards are at a very high because these companies know how to make money through investment programs aimed at increasing the production capacity, improving the quality of manufactured products, utility services, environmental protection and last but not least to improve working conditions.

Key words: *flexible processes, demand for products, , information flow, visual management.*

1. INTRODUCTION

The use of flexible logistics channels is dictated by the need to meet consumer needs. Each company faces different needs of customers and will opt for specific logistic formula. Flexibility logistics structures can be achieved by planning flexible procedures, alternative ways of serving customers. Loudness is a first element to be considered.

For Brasov, the degree of industrialization, economic and social development has reached high development of science and technology, research is intensifying century "speed" key objectives designed to ensure a new quality.

2. LOOK THE ENSEMBLE OF INDUSTRY , THE ORGANIZATION IN ROMANIA, LOGISTICAL POINT OF VIEW

I thought it would be interesting to analyze the overall industrial production in Romania to start from the statistical data of National Statistical Institute. We detail only two industries, namely:

- Manufacture of food products
- Manufacture of paper and paper products

Each of these functions differently, depending on experience.

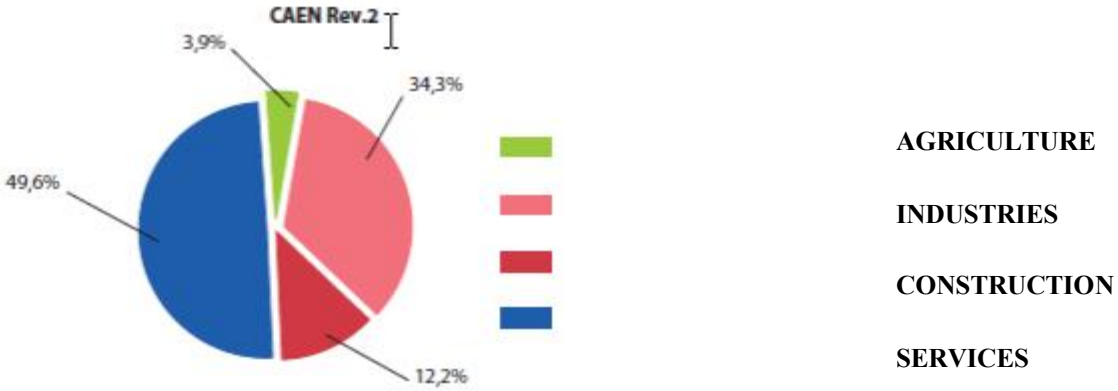


Fig. 1. Net investment, the principal activities of national economy in 2009.[6]

Preoccupations the integration of logistics activities as a single branch in Romania, after 1990 meet. Thus, we can say that companies that have designed and developed logistics organization in the organizational structures were oriented primarily to transport and storage activities, which are included under the control of logistics managers for more than 70%, followed by the order and delivery, inventory control and supply. In the large and medium-sized logistics function is headed by a manager or executive vice president position.

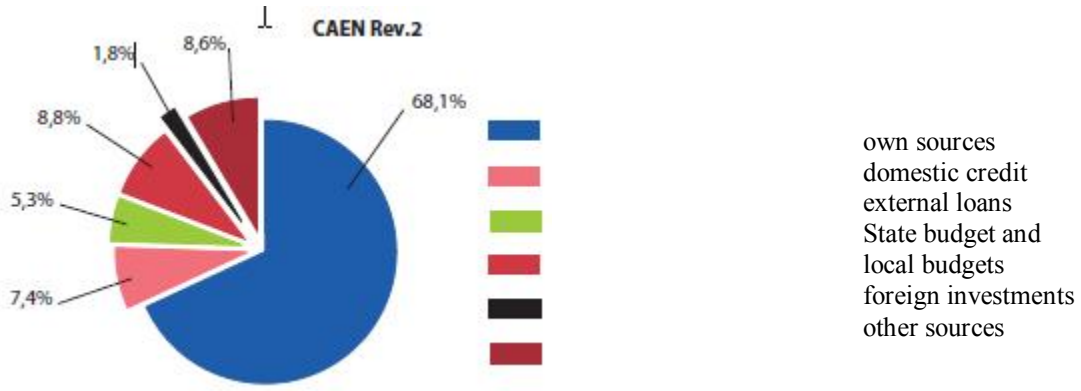


Fig. 2. Net realized investment, on the sources of financing in 2009. [6]

He started that in Romania, from entering the EU, to emphasize the environment. Thus they were encouraged small and medium enterprises contribute to economic development.

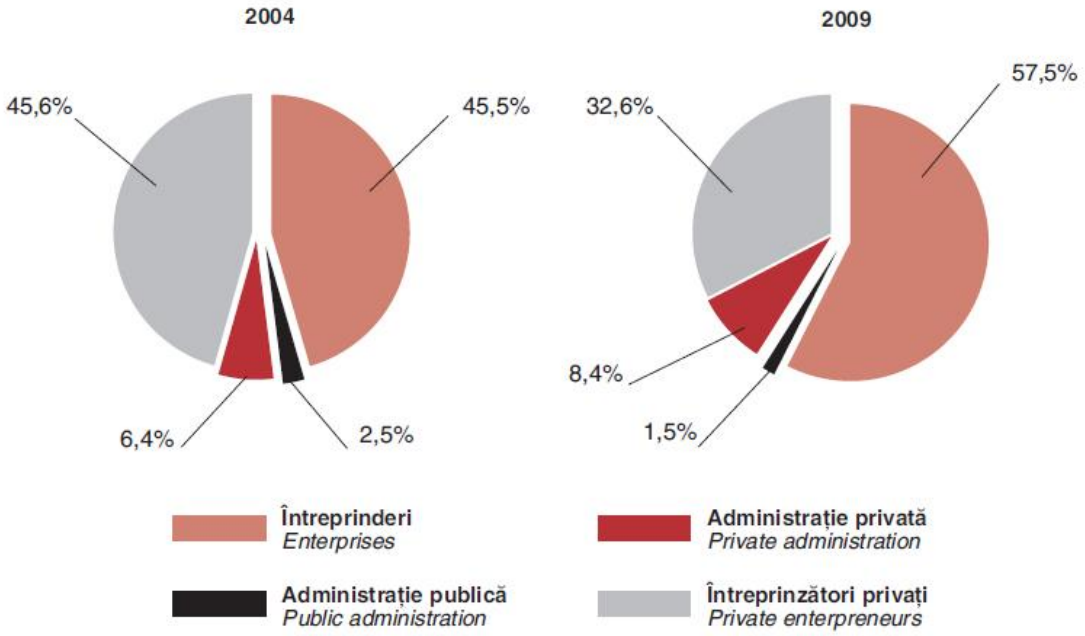


Fig. 3. Structure of active economic and social operators of national economy[5]

Table 1. Concentration of enterprises, by activity of national economy, in 2009 [5]

Activity	**Număr întreprinderi** *Number of enterprises*	**Număr mediu salariaţi** *Average number of employees*	**Cumulat în % din totalul** **Cifrei de afaceri** *Cumulated in % of total turnover*		**Cumulat în % din totalul** **numărului de salariaţi** *Cumulated in % of total employees number*	
			Primele 5 *Top 5*	**Primele 20** *Top 20*	**Primele 5** *Top 5*	**Primele 20** *Top 20*
Manufacture of food products	8407	164825	4.7	18.0	5.4	12.8
Manufacture of paper and paper products	798	12816	19.4	51.0	18.4	40.8

3. ABOUT THE COMPANIES AND TECHNOLOGY

Analysis of current situation is to create a clear and common "target system" in the observation, in connection with "actual".

Analysis purposes consists of defining the existence of business we are involved, why we exist, we do, how we act, how to add value to business and customers, as we reach our goal. To know the situation using a variety of instruments.

3.1. K-Touch Technology [8]

Vel Pitar Brasov is the biggest bakery producer in Brasov County, offering, in addition to the nationally distributed lines of products, products specific to the area, including sliced potato bread, pretzels and assorted 1.1-kg pound cakes. Vel Pitar is permanently invested in producing healthful products, characterized by wholesome ingredients and high nutritious value.



Fig. 4. Keine Touch = untouched product (source: http://www.velpitar.ro/en/page/emphasis-on-quality/keine-touch-technology)

The Keine Touch technology guarantees that you, the customer, are the first person to touch the bread. Production and packaging are performed using automated equipment – thus, under highly hygienic conditions. When purchasing these products, please check the packaging to ensure it is sealed.

3.2. EcoPaper S.A. is a company specialized in producing paper for corrugated cardboard, using as raw material 100% waste paper and cardboard, thus contributing to environmental protection. Is currently the top manufacturers of corrugated paper in the country.



Fig. 5. Producing paper (source: http://www.ecopaper.ro/content/html/tehnologie.html)

4. SOME EXAMPLES, COMPARISON BETWEEN THE 2 COMPANIES

4.1. Analysis

4.1.1 Analysis of "Triple A": agile, adaptable, aligned

Situation analysis aims to create a clear vision and a common "target system" in the two units analyzed in connection with "that produce new" and provide input for planning change and improve, creating a clear vision and common about "where we are today." Instruments used to define the target system can be: analysis of input / output analysis of mission or purpose, the added value analysis, benchmarking agile versus lean.

Agile - dimension data security: the need to respond quickly to changes in demand or supply and to recover quickly and easily from shocks such as natural disasters, computer viruses, loss of markets, etc..
Adaptable - size-oriented: that evolve over time with changing technology, economic progress and political change in general, any new trends.

Cooperative character in line: aligning their interests in participating firms in which each chain is still responsible for what he produces or provides.

Table 2. Comparison of Lean and Agile by Their Distinguishing Attributes [4]

Distinguishing Attributes	Lean Supply	Agile Supply
Typical products	Commodities	Fashion goods
Marketplace demand	Predictable	Volatile
Product variety	Low	High
Product life cycle	Long	Short
Customer drivers	Cost	Availability
Profit margin	Low	High
Dominant costs	Physical costs	Marketability costs
Stock-out penalties	Long-term contractual	Immediate and volatile
Purchasing policy	Buy goods	Assign capacity
Information enrichment	Highly desirable	Obligatory
Forecasting mechanism	Algorithmic	Consultative

In both cases a high volume of goods will allow the company to use direct logistical channels using their own vehicles for delivery of goods at the customers. A small volume of orders requires the use of logistic indirect channels, in pursuit of operational efficiency through the use of storage building and should consider the nature of products. Rotational speed of the products will determine the option of using central warehouses or some area. In retail units will maintain a limited stock on goods displayed for sale plus a minimum safety stock.

According to the above table we analyze the two companies:

Table 3. Lean supply by the agile supply

Distinguishing Attributes	*ECOPAPER*	*VEL PITAR*
Typical products	Commodities	fashion goods
Marketplace demand	Predictable	Volatile
Product variety	Low	High
Product life cycle	long	long and short
Customer drivers	cost and availability	cost and availability
Profit margin	High	Low
Dominant costs	marketability costs	marketability costs
Stock-out penalities	long-term contractual	immediate and volatile
Purchasing policy	buy goods	buy goods, assign capacity
Information enrichment	Obligatory	Obligatory
Forecasting mechanism	Consultative	consultative

Table boxes are not colored (white) is the situation the company is lean.

Gray colored boxes represent the situation in which the company utilizes lean tools and agile but because the situation.

Colored dark gray boxes represent the situation where the company is agile.

4.1.2 Product life cycle

Performs a function basic product, which reflects the consumer's purchase motivation, according to the major advantage compared to consumer needs.

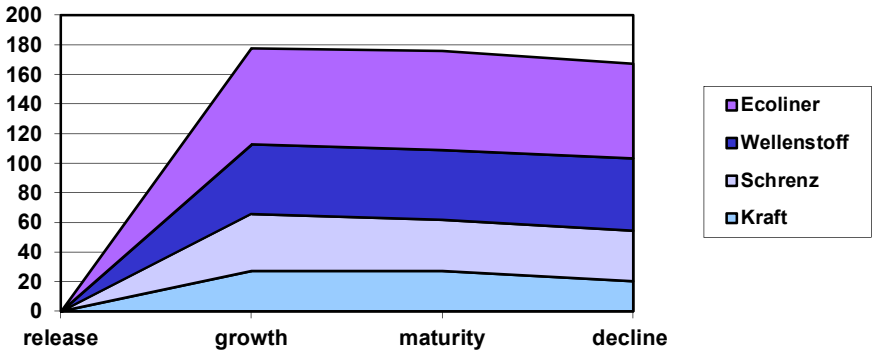


Fig. 6. Paper and bakery product, life cycle

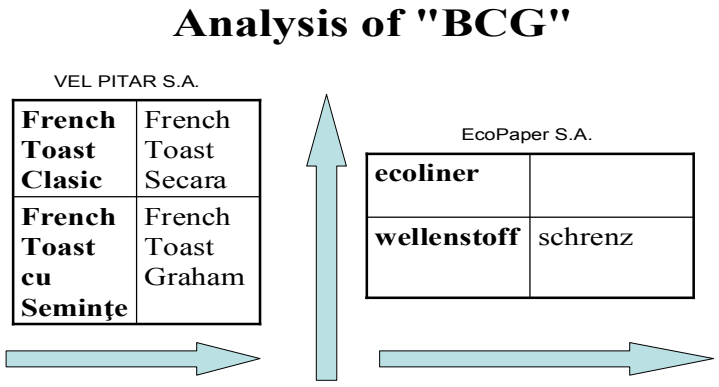
Timeless products as bread, have a linear trend and a virtually unlimited lifetime. Overall life cycle is very long maturity, with slight and temporary trend growth or decline.

We can classify companies according to the degree of introduction of new services, proactive and adaptive institutions. The initiates proactive market changes. Market leaders usually have a strong marketing behavior and consequently a clear orientation on customer needs. An adaptive strategy requires the institution to wait for market reaction, depending on which introduce the same service with the same characteristics or service "identical" but "superior" (with some improvements). The novelty of the product may result from: changes in technology, changes in consumer demands, changes in competitive strategies.

In turn, changes in technology and consumer needs can be proactive and adaptive.

We can not give here a certain period of time because they are raw, but the fact is that the life cycle of paper products is similar to bakery products.

4.1.3 The model Boston Consulting Group



French Toast Classic / Ecoliner - Stars have leadership and act on a growing market

French Toast with seeds / Wellenstoff: Products is a leader on a stagnant market, make profits, provide liquidity,situation situated at maturity in the life cycle of products.

French Toast Graham / Schrenz: Without profit nor loss, product in the beginning of decline.

French Toast Rye / Kraft: Dilemmas, products in the launch phase, do not know that it will, is an assumed risk and uncertainty.

Further, the integrated management of a logistics network can improve information flow, which would naturally lead to improved product flow and thereby shorter lead times. Many potential benefits can be obtained from lead-time reductions, including better responsiveness to market changes, more accurate forecasts, significant reductions of bullwhip effects throughout a logistics network, smaller order sizes, reduction in work-in-progress (WIP) inventory and inventory of finished goods, and improved customer satisfaction.[1-3]

4.1.4 Analysis SWOT

VEL PITAR SA

INTERNAL FACTORS	***EXTERNAL FACTORS***
Strengths • Special department of research, • tradition of company, • own petented technology, • corporate spirit, • specialists recognized among our employees, • products and services trademarks recognized, • reputation among customers, • reduced costs, • capacities available for products that are sought, • access to natural resources quality, • good distribution networks, • each product has a target market • The company does not have a high dependence on a client or client group.	***Opportunities*** • Increased demand for company products • new technologies • possibility to extend the company in other areas • the company could buy other small companies in the market • new markets • more permissive legal regulations • progress • existing legislative framework for the development of quality management
Weaknesses • organizational weaknesses • absence of interest of staff, • poor communication between departments. • staff fluctuation • decrease the number of agents led to lower revenues	***Threats*** • restrictive regulations • the political / economic • new customs and trade barriers • unfair competition • strong local competition, which comes the latter

Analysis of current situation is to create a clear and common "target system" in the two units analyzed in connection with "actual".

For analysis consists of defining the existence of business we are involved, why we exist, we do, how we act, how to add value to business and customers, as we reach our goal.

During this period, the emergence of more companies for the same market segment, increases competition. To keep customers, product quality must be producers to be able to produce in small series, while keeping costs competitive. To increase customer satisfaction, all design services, manufacturing, distribution is strictly necessary to collaborate and exchange data in order to minimize logistics costs.

ECOPAPER

INTERNAL FACTORS	***EXTERNAL FACTORS***
Strengths • tradition of company • The company does not have a high dependence on a client or client group, • corporate spirit • specialists recognized among our employees • has a portfolio of established • reputation among customers • reduced costs • capacities available for products that are sought • exclusive access to resources • each product has a target market.	***Opportunities*** • Increased demand for company products •removal of customs barriers and trade with EU entry • Possibility to extend the company in other areas • The company could buy or merge with other companies, increasing diversity • new markets • more permissive legal regulations • progress • existing legislative framework for the development of quality management
Weaknesses • Does not is a special department of research, • Organizational Weaknesses • absence of interest of staff, • poor communication between departments, • staff fluctuation	***Threats*** • The emergence of effective competitors • restrictive regulations • the political / economic • New customs and trade barriers • Unfair competition and national competition

5. CONCLUSIONS

Logistics management is based on the truth that is inconceivable without the development of logistics competitiveness without reaching levels of effectiveness, efficiency and acceptable quality. For this to be focused on:

- better availability of products based on an efficient management of stocks and market requirements;
- coordinate the production, distribution, inventory levels and supply links between the main chain, with the support of integrated information systems that provide real-time sales, scheduling and tracking information;
- creating strategic alliances and partnerships with customers, suppliers, warehouses and administrators who develop information technology;
- direct involvement of the client in defining the product / service and quality standards specify requirements for the operations that compose the physical flows of materials and products.

Steps of change proposed for future improvements:

- Map to view current flows

- Take each process and breaks, with bubble diagram in activities
- Activities that add value observed
- Rearranged activities, even processes
- Will redraw flows
- Will bring improvements with other lean tools.

Define objectives to be attained through future value stream map.

"The new findings, new technologies, new social structures in the outside world irruption into our existence in the form of accelerated pace of change, a progressive shortenings relationships. They push the speed increasing rate of daily life. They claim a new level adaptability and prepare conditions for that social disease with a potential for destruction - Future Shock "

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