

# **PROFIT ORIENTATED OR CULTURAL PROTECTIVE? SC ELECTRECORD SA- CASE STUDY**

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**Abstract:** : The economic environment includes all factors that influence the economic capability of the company to compete and perform in its activity field. In this paper we analyzed, on a real company, the economic evolution correlated with the technical up-grade over the time and sales. A company does not function on its own, but in an environment, whether local, national or international. Competitiveness, from a profit viewpoint, is only a small part of what it really means and does not offer the certainty of a good long term evolution. There are other aspects that need to be taken into consideration. For that reason, we have taken a look over the context and the international trend in that particularly activity field. Our purpose has been to conclude whether the company has a general context approach or only a local one, baring that fact that the world trend affects local evolutions.

**JEL classification: O10, O14, O43**

**Key words: technology, analysis, company, market, competitiveness**

## **1. INTRODUCTION**

The present economy of Romania passes through the same crises as well as other countries do or did. There are several solutions offered by specialists in the field, but for the present paper we have chosen to analyze the viability of the technical management and innovation stimulation theory applied at company level instead of macro level.

If proven as functional at micro level, one could expect, in certain conditions, to generate a structure on which an economic viable program can be made in order to re-launch the Romanian economy.

The practice of the countries that managed to overcome the crises has demonstrated that stimulating innovation in order to transform the weak parts into advantages represents one of the possible solutions. If that should work here as well, one can only hope, since the conditions offered to Romanian innovation system are not the same as those offered in the countries mentioned before.

Romania has to conceive a strategy based on innovation and modernization of the society's bases, unless it wishes to situate among the countries which, in the next 20-30 years, will not be able to compete in any field but it will only become a distribution market with low costs of the labor force.

The alignment to the international trend of evolution is compulsory, especially at micro level, since the world trend affects customer's options and, furthermore, the sales.

For a production company this is a must, as well as the alignment to the technological trends and innovation in its activity field, so as to offer the best products and

services at the most convenient prices, and thus, to keep and improve its market share.2.  
Objectives

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## **2. THEORETICAL NOTIONS**

Technology Management represents a set of management disciplines that allow an organization to manage its technological fundamentals, to create competitive advantage. Typical concepts used in technology management are: technology strategy (a logic role of technology in the organization), technology mapping (identification of possible relevant technologies for the organization), technology road mapping (a limited set of technologies suitable for business), technology project portfolio (a set of projects under development) and technology portfolio (a set of technologies in use).

The role of the technology management function in an organization resides in understanding the value of certain technology for the organization. Continuous development of technology is valuable, as long as there is a value for the customer and therefore, the technology management function in an organization should be able to argue when to invest on technology development and when to withdraw.

Technology Management can also be defined as the integrated planning, design, optimization, operation and control of technological products, processes and services, a better definition would be the management of the use of technology for human advantage.

The Association of Technology, Management, and Applied Engineering defines Technology Management as the field concerned with the supervision of personnel across the technical spectrum and a wide variety of complex technological systems. Technology Management programs typically include instructions in production and operations management, project management, computer applications, quality control, safety and health issues, statistics, and general management principles. [1]

Perhaps the most authoritative technology input to our understanding is the diffusion of innovations theory developed in the first half of the twentieth century. It suggests that all innovations follow a similar diffusion pattern - best known today in the form of an "s" curve though originally based upon the concept of a standard distribution of adopters. In broad terms, the "s" curve suggests four phases of a technology life cycle - emerging, growth, maturity and aging.

These four phases are coupled to the increasing levels of acceptance of an innovation or, in this case, a new technology. In recent times, for many technologies an inverse curve - which corresponds to a declining cost per unit - has been postulated. This may not prove to be universally true though for information technology, where much of the cost is in the initial phase, it has been a reasonable expectation.

## **3. CASE STUDY – SC ELECTRECORD SA**

To exemplify the effort of a company commercializing culture, in the conditions of constantly depending on its technology, we have decided to analyze the evolution within the technical storage device field of Electrecord SA, simply because we have considered useful to emphasize a productive effort.

### **3.1 Short history**

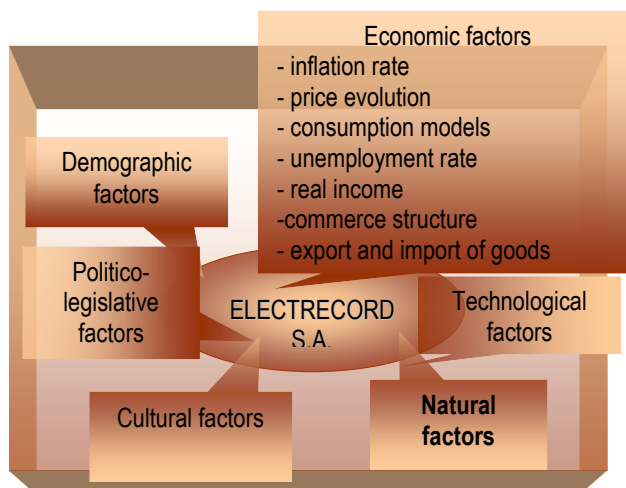
Electrecord SA was founded in 1932, as an anonymous company, being in the first years of its existence a commercial company dealing with sales of pianos, gramophones and other musical instruments and scores. In 1934, the company produced the first discs.

Another production unit developed alongside called "Colombia", a branch of an international concern. The Nationalization Act of 1948 brought together the two private companies into one called "Electrecord". It inherited from the former two private companies, small shops and old equipment with an advanced degree of wear. In 1956, the first stage of retech occurs when the electroplating sector was modernized. Subsequently, one upgraded other products as well. 1956 - 1980 has been a continuing period of modernization of the industrial sector. The period between 1975 - 1980 represented for SC Electrecord SA a huge investment effort that ensured, in a short term, equipments and technologies that were the peak of technique at the time.

In these conditions, SC Electrecord SA was able to ensure a production of 6 million units a year and 800 thousand pieces of recorded tapes annually. Until 1989, SC Electrecord SA was the only manufacturer of discs and recorded tapes owning the monopoly in the phonographic industry in Romania.

### 3.2 The analisys of general economic context

Before deciding which products are to be marketed, the company needs to analyze the economic environment in which it will conduct its marketing. Within the analysis, one will consider reports on the inflation rate evolution (particularly important with regard to the existence of an unstable economy), the consumer price index, the average net earnings, and finally, an overview of categories of products that are preferred within the consumption of the population, and the structure products import and export between 2007 and 2008.



**Figure no. 1 Influencing factors in S.C. ELECTRECORD S.A.'s activity**

The economic environment includes all factors that influence the economic capability of the company to compete in its activity field, and also the possibility and consumers' willingness to buy various goods and services. Among the factors that affect the purchasing power, one includes the inflation rate, price trends, consumption patterns of the population, unemployment, real income, wholesale trade structure, goods export and import (fig.1.). These aspects of the economic situation of the area in which SC Electrecord S.A functions, directly or indirectly reflects and determine the volume and

structure of the goods supply, income levels, demand size for commodities, price movement and the competition level.

The inflation rate in March 2008 registered a slight decrease of 0.1%, as compared to March 2007, even though services registered a rather significant 1.3% increase. Food goods have the largest weight in the overall inflation rate, namely 1.1%, leading to the idea that people allocate a larger budget to consumption goods to the detriment of other goods or services.

The inflation rate has a significant impact on marketing efforts of any company. A high rate means an economy in difficulty and therefore, a low marketing potential. Also, when nominal incomes exceed the inflation rate, it means that there has been an increase in real incomes and consumers can obtain increased quantities of goods and services.

The basic activity of the S.C. Electrecord S.A. consists of mounting media on different supports (compact discs and audio cassettes) and manufacturing the required typographic materials. One can easily observe that the market the company addresses to is a specific one, strongly influenced by the people's power of purchasing.

In the same time, there are other specific influencing factors, such as production line and procedure and the period of life of the commercialized products. For example, the compact discs and carcasses for cassettes and CDs are imported. The record procedure on CDs is carried out in collaboration with foreign firms, while the Romanian company is responsible for the packaging and printing of the necessary booklets. The audio cassette recording is made within the company.

The nominal production capacity was 800 thousand pieces / year recorded audio tapes, and now the capacity is estimated between 300 - 400 thousand pieces / year. The company is no longer producing analog discs and soon it will stop producing audio tapes.

This means that as a consequence of market study, the company decided that some of its products are overdone and need to be withdrawn of the market and the production line.

In order to understand why a production and commercializing decision of a product is hard to be made in this specific case, we have chosen to describe the production process in detail. One will understand the complexity, and, in the same time, the specificity of the process by going over the next chapter.

### **3.3 Description of technological process**

Within the production of recorded audio cassettes there are used several technological flows with the following main phases (fig. 2.):

- **RECORDING:** the operation performed using a recording magnetic tape device;
- **MASTER COPY:** the master tape is a "½" tape which is recorded on 4 tracks in the 2 ways of reading system, using a 50 minutes program; the copy is made on a "¼ 2" tracks tape and on a "½" 4 track tape recorder;
- **COPYING IN HIGH SPEED:** the copied tape is read on a master "½" 4 track cassette deck, after which is mounted in a continuous loop process; meanwhile, on coils of 2200 mm, the program from the master tape is recorded on a number of 6-10 "1 / 8" 4 tracks magnetic recorder slaves;
- **PACKAGING:** is made on special machines tooled with separation and ongoing system programs; the band is packed in CO boxes, program by program.

- **CONTROL SYSTEM OF PACKAGING:** in order to verify the registration in accordance with the prescribed parameters, one program is listened out of each 2200 mm coil; the tape within the cassette box is packed in cellophane (sealed) and stored in cardboard boxes.

The technological lines used in the production process were acquired in prior periods, namely that of the production of audio cassettes in 1975. During the time, they were supplemented or replaced by more modern machines.

The machines used in the technological flow of audio cassettes are:

- The multiplier installation made out of a magnetic tape called "master" and more magnetic tapes called "slaves". The multiplier installation is ELECTROSOUND ES 600, purchased in 1975, with 11 slaves, among which 4 are out of use. The functionality of this installation is currently difficult because there is no possibility to supply with spare parts. Worldwide, this installation type is no longer produced.
- 2 reelers type TAPOMATIC, purchased in Italy, in 1991, with the help of which the tape is CO packed. They are relative good operating conditions.
- 3 injection machines on which there were executed the parts of plastic material from which the box is constructed. These are TRUSYOMA type and were purchased in 1978, at present being physically and morally used.

Taking into consideration the above mentioned, the companies 'management needs to make a definite decision, based on market demand, which are very low since almost everybody prefers a CD or DVD by now, and technological production lines 'viability.

Analyzing both, as mentioned before, the management has come to the conclusion that this type of product is overcome and needs to be taken out of production. It has been a good and productive product and some of the consumers will still ask for it, but the level of demand is no longer profitable for the company. Therefore, the solution will be to keep selling the stocked products until finished.

#### 1. Compact Disc (fig. 3.).

Compact discs manufactured abroad, are randomly auditory controlled, but compulsory each 100 one and each 200 piece.

The production of this product is still on since there is a market demand for it. Taking into consideration the fact that, on the one hand, there is collaboration with the international companies in the field and, on the other one, the market is composed of internal and external parts, in variable percentages, the company will probably maintain production until market demands decrease to the unprofitable level. For the time being, that is not the case.

#### 2. Typography

The printing department makes booklets accompanying CDs, jackets for cassettes, posters, catalogs etc. For printing, the company uses two machines:

- An offset ROLAND type, 50x70 cm format, in two colors, being acquired in 1980 and repaired recently;
- An offset PLANET type, 70 x 100 cm format, in two colors, being acquired in 1987.

The two printing machineries had no major repairs because, in the recent years, they have not been exploited to the normal production parameters, due to the extinction of disc records.

All used equipments and installations are specific technologies in the tape production, which are mainly imported from Western Europe, since there are very few

manufacturers of such equipments. They have a high degree of specialization in certain operations, without the possibility of being used for other activities.

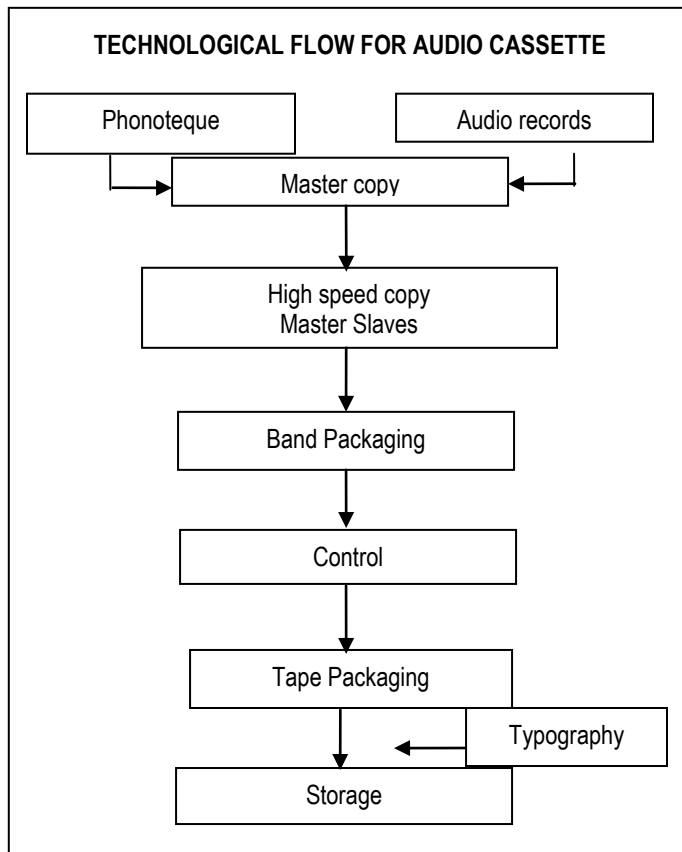


Fig.2. Technological flow for audio cassette

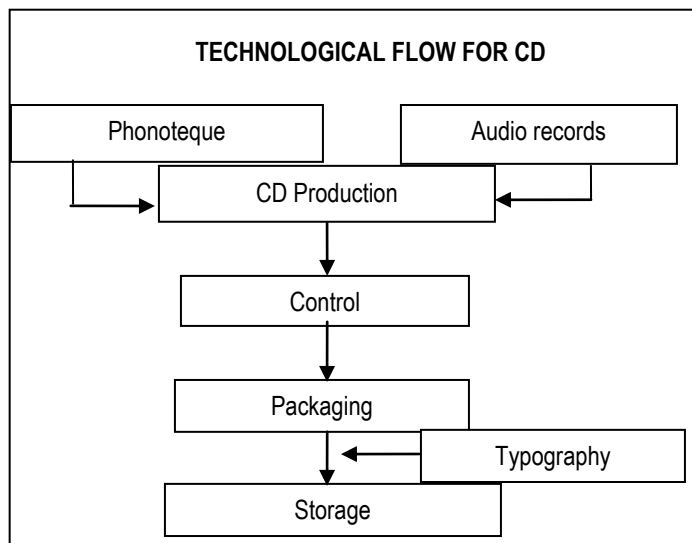


Fig. 3. Technological flow for CD

### **3.4 Technical state of equipments and their evolution in time**

Most of the technical equipments are physically and morally used since they were acquired during the years 1970 - 1980, but they are in relatively good operating conditions. Noteworthy is their low efficiency because they were intensively operated (until 1992, one used a two shifts operational program).

At the same time, there is the need to replace some installations and machinery with other more productive ones, especially those no longer internationally used and for which there is no possibility of purchasing spare parts.

The last action of modernization took place in 1980, when the production capacity was doubled and the whole factory was equipped with machines and technologies representing the peak technique at that time. In the 9th decade, traditional sound recordings on disc registered a continuous decrease, from 800 million copies in 1980 to below 80 million copies in 1993. Starting from 1980 – 1993, it was expected that around the year 2000, the sales of analog records will tend to 0. That led to the decision of turning off the production in the field.

In response, compact discs have known a spectacular development. Launched in 1982, they have reached over 1 billion in the 1994 and in 1995 production, the world production of CDs reaching 1.4 billion pieces. Worldwide, audio tapes, after a relative long period of success during the years 1980 - 1990, have reached the saturation of the market demand and declined.

At that time, according to forecasts magazine "Tape One", it was estimated that, in 2002, the worldwide sales of audio products would be approximately 47% higher than those of year 1995 (an overwhelming share in this growth with a production of CDs).

The Romanian market is similar with the analog world market developments in the matter of discs and CDs, the first ones disappearing while the CDs sales are steadily increasing. The production of analog records, representing 104% of the design capacity in 1989, has had a continuously decreasing trend, reaching now 0%, thereby following the market trend. The cassette production has experienced a smooth decreasing, except for the period 1991 to 1992. Thus, if in 1989, one achieved 107% of the forecast capacity, in 1993, the company achieved the level of 81% of the forecast capacity, following the same smooth decrease trend.

A particular attention was directed to the recording studio. In 1960, there were purchased the followings: an EMI desktop, an EMI mono magnetic tape recorder, a PHILIPS mono magnetic tape recorder and a reverberation chamber. In the years 1973-1974, the EMI desk was replaced with a NEVE one, having 16 channels, while the mono magnetic recorders were replaced with some STUDER (2 tracks) stereo and magnetic recorders, one STUDER magnetic recorder with 8 tracks, a modern, for that time, AKG B x 20 reverberation plate and a STRESSER vocal compressor limiter.

In 1990, the studio technology was developing very rapidly and one purchased a "2500 Sony Digital Radio", that replaced the magnetic recorders and the company went for an "ATARI digital" phonotequing system. The studio was also equipped with a DIGITAL EFFECT SYSTEM "LEXICON 480L".

In 1995, a new desktop was bought, type SOUND CRAFT 24 + 4-digital way and digital tape recorders, types MULTITRAK TASCAM DA 88 and TASCAM DA 30. New effects were acquired in November: Yamaha SPX 990 and Yamaha SPX 900 and a new compressor limiter, type KLARK TEKNIK DN 500. In 2000, the phonotequing system was upgraded through a PC digital system of recording - sound card MOTU 2408. In 2007,

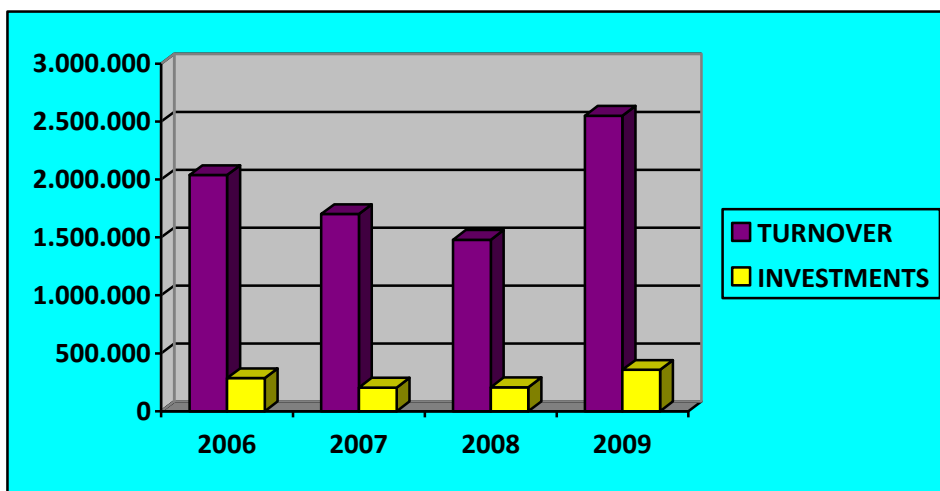
one acquired the digital cassette MULTITRAK REC FOSTEX 2424, that gave the company the opportunity to be technically endowed with the latest technology.

As promised at the beginning of the paper, we have presented the technical process and evolution, in order to emphasize the fact that the company has permanently struggled to be aligned to the innovation in the field so that to provide good quality products for the market and control cost production as much as possible, taking into consideration the input/output relation of obtaining profit.

The main concern of the company was to maintain a high level of technical endowment. That is why every year, one has allocated certain funds for investments (Table 1).

**Table 1. Evolution of technological investments**

| Year | TURNOVER (RON) | INVESTMENTS (RON) | INVESTMENTS % OF TURNOVER |
|------|----------------|-------------------|---------------------------|
| 2006 | 2.038.906      | 285.447           | 14%                       |
| 2007 | 1.701.124      | 204.135           | 12%                       |
| 2008 | 1.479.299      | 207.102           | 14%                       |
| 2009 | 2.550.000      | 357.000           | 14%                       |



**Fig.4. Investments versus Turnover within ELECTRECORD SA**

Dealing with culture as market product, it is compulsory to analyze the intellectual capital of the company and the weight of intangible assets present in the company's present portfolio.

Because of seniority in the field, Electrecord S.A. has accumulated a catalog of over 5,000 titles that are permanently offered to the market. A large number of such records, some of them historical, in the interpretation of Enescu, Lipatti or Folescu, dating from the interwar period, until most prominent representatives of contemporary art, are a true anthology of musical culture in Romania. If taken into consideration that some reconditioned records date from the 30s, as early electrical recordings, the historical and patrimonial value becomes more important.

This value is unquantifiable, but simply listing the names of persons, whose undisputed fame was built on the recognition of their value, it is sufficient to estimate the importance and weight that these names have given to the phonoteque.



Phonoteque's store records, of all musical genres and literary records, are grouped by gender criteria. The tapes are archived in the phonoteque after the catalog number of the disk that came on the market. The phonoteque has its own booth in which the tapes are run and unreeled, at certain times, in order to be maintained. In addition to the bands of discs that came out on the musical market, are the documentary tapes, which mostly have not been published yet. The content of each band is held in phonoteque catalogs, having a special band number.

## 5. CONCLUSIONS

Going through a company's system is a difficult job, that needs to be done with the highest precision, since decisions concerning the present and future evolution, are to be made based on facts. If the analysis provides insufficient or wrong data, the reality will be distorted and so will be the prediction.

If one is dealing with a small company with less complex activity, this job will be a little bit easier and the possibility of correction might be available without major implications on the company's evolution.

If one is dealing with a company that needs to take into consideration complex influencing factors, such as those presented here: international context, imports and exports, inflation rate, customers' priorities, technological and economic possibilities of investments, then, the management system needs to be a professional one, IT assisted, especially on the prediction part, with permanent available sliding strategies, strong marketing and promotion, society accepted and needed.

Within the ELECTRECORD SA company, the technological aspect has always been a priority, as well as aligning to international trend and providing the market with the best possible products at the best prices.

Thus, there is still much potential that can be exploited, resuming in intangible assets, if only the necessary means exist. Since there are always other priorities, for example, to maintain the company's economic profit that will assure its existence, sometimes, parts of the things that should be done only for the cultural aspect of the problem are postponed, until possible.

We believe that a little help from the public opinion will be more than welcome, since this is a company that is functioning for the community.

One can only hope that the Romanian society will be able to find the means of approaching this sector as well, purchasing this type of goods in an honest way, respecting property rights and mainly, recognizing the value of an original piece instead of a fake, even if that fake may come in handy.

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