

A MARKET CRISIS FOR AN INFORMATION TECHNOLOGY COMPANY: THE DARK SIDE OF INDUSTRIAL PROPERTY. A CASE OF STUDY.

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Abstract:

This paper is related to a crisis situation occurred to a company that handles with Information technology. This crisis was solved by a deep and accurate technology alert exercise, where the organization's intangible values and the technological assets are explored and revaluated, so the company may increase its position in the market. As this is a small company, it may be an example of how can SMC identifies its technological strengths and take profit of active technological alert's results as the basis of strategic planning to solve such a like crisis.

Summary:

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1. Introduction:

This paper raises a crisis situation that occurred to a company that handles Information technology. This crisis was solved by a deep and accurate technology alert exercise, where the organization's intangible values and the technological assets were explored and reevaluated so the company could remain in the market. As this is a small company, this example may contribute to the solution of similar crisis if the SMEC's identify their technological strengths and take the findings taken from an active technological vigilance to a level of strategic planning.

2. Case of study

2.1 Situation description:

This small company is dedicated to information management for industrial providers in Mexico. To that effect, it works mainly in two ways: printed directories and the Internet. The printed media has been a tradition since 1958, and in the Internet, since 1995. In both cases, it relies on an industrial provider database which includes: company name, contact data, key people and products among other relevant information. This database is segmented by the industrial spin of each company.

From the Internet's point of view, it is considered as a high tech company. As it is well known, information technology enterprises have a very high technological change rate: according to Makridaky's¹ research, change rate is five times faster than in other technological areas. In this kind of systems technological alerts plays a main role in competitiveness and survival, as can be clearly seen in this case.

The "Portal" runs on home made programming. It has two search engines and a two level horizontal structure. It is the first industrialized web site launched in Latin America. Since the beginning, it offers links, organized by product, to the web pages of its subscribers and the

¹ MAKRIDAKYS Spyros, "Estrategia y Planificación para el Siglo XX!", Ed. Díaz de Santos, Spain, 1993, PP. 71- 94.

possibility to ask for quotations with a single mouse click. The requests are sent directly to the providers.

The company has managed a suitable technological transfer to its subscribers and a friendly system for a market with not long experience. The market is beginning to grow, which leads to more sophisticated products being required. Commercially, the website has in its database 90% of Mexican industrial companies on internet and had bases its strengths in a simple interface, information neatness and good position in the main search engines. The website has kept a wide leadership in the market since its launching.

2.2 Crisis definition:

In a word, a transnational company starts attacking the website's natural market after a leak of strategic information such as the client list as well as commercialization models from potential substitute products. It can be predicted that, if it succeeds, it may invest large resources to attract the sector's change value.

2.3 Elements obtained from the technological alert:

Some of the salesmen leave the company.

At the same time, The Y! Mexico Search Engine launches the attack on the internet's industrial sector so as to place the sponsored results by different companies on key products.

It is discovered that the salesmen that left the company have signed a representation contract with The Y! Mexico Search Engine.

Corrupted practices and disloyal competition are detected from the representation of The Y! Mexico Search Engine as well as evidence of leak of protected strategic information.

Case documentation is started to undertake legal action based on foundations.

Shortly after, the Portal is excluded (banned) from The Y!'s search engine, losing its position in this engine as well as others in which it served.

Monitoring is sharpened in regard to companies investing on publicity in different media and specially in The Y! Mexico and in the G Search Engines.

It is detected that The Y! Mexico Search Engine is following the same attack strategy on the market that worked for the Portal.

2.4 Strategic planning:

It's been a year since the Company Management decided to reform the company to achieve a better competitiveness, for which this work team was contacted. After analyzing the strengths, weaknesses, opportunities and threats, the following information arised:

<p>Strengths: Ability to develop autonomous systems, position in the market, neutrality in the management of information (reliability), high income barriers, attempts from the high directive to suggest a culture for change adaptation, healthy finances, possibility of line diversification, loyal employees due to human treatment and work valuation.</p>	<p>Weaknesses: Evident lack of capability to create administrative and technological competition for the staff, a deficient client support with dull procedures, commercial strategy focused on the environment instead of the system, dependence of a third party in the position of the web site, reluctance from the directive to delegate authority and responsibility, lack of cohesion in the sales team and a trust crisis derived from a breaking with an important salesman.</p>
<p>Opportunities: Need of relevant, ordered and in a digestible format information, need of reducing informative noise, need of information safekeeping with a trustworthy provider, growth in number and proficiency of industrial cybernauts, very high cost of substitute products.</p>	<p>Threats: Changes in basic technology (in computers or in internet navigation software), changes in the basic rules of internet behavior, substitute foreign websites, alternate ways of communication, on-line substitutes, changes in search patterns.</p>

With the facts detected through this technological alert, one of the threats becomes a crisis situation and the company is forced to use an alternate strategic route.

After the analysis has been made, the decision to develop an alternate information management line, with relevant technology ad-hoc for SMC's in Latin America and regional investigation and development centers, is taken, which supposes easily-using tools, low costs and results in information management structured by client.

To reach this goal, the first step is to increase the core competence of the people working in the company and consolidate a group feeling. At the same time, the development is started in a strictly confidential way for new systems that locate, extract, treat and present the information contained in several interesting databases.

Furthermore, it is known that basing the commercialization of the website on its positioning in search engines is a mistake, so alternate ways of spreading must be found.

After an analysis, the next ideas arise:

- A The website has been and still is the leading industrial contact through the internet in the region.
- B The technology for websites is a mature technology with a supportable future in a medium term, but with some hindrances in the long term.
- C It is possible to sustain the portal's business line in the planning horizon (a year) and beyond, fitting the business and with a different strategy focused on the buyer and not the announcer.
- D It is possible to launch substitute products within the same website that give specific technical information of the announcer's products, which is a difficult thing to do for the search engines without affecting its execution because of the way they work.

- E It is essential to move forward the launching of business lines focused on the management of industrial information of a high added value so to migrate the bulk of the business towards more unapproachable lines for the search engines and other large internet companies. To that effect it is of great importance to invest more resources (specially time) to the schedule of these systems and make a technological leap towards another advancement curve in information technologies.
- F The main obstacle for making a fast development on technological lines is the limitation in core competence for the personnel, for which a greater knowledge formalization of the technological competence lines most to be done.

From there, two main lines should be implemented: fit the actual business line and launch a brand new line.

To fit the actual business line, the following reforms are suggested.

- a. Offer as a free service all the directioning and the contacts made by the buyer through the website. This supposes the collapse of the exchange value of the sector in this area where the main competition is found.
- b. Migrate the contract portfolio to products with a larger impact within the same website such as technical specifications and on-line advertisement. Even if the product was already conceptualized, the competitor's aggressiveness promoted it's commercialization, coinciding with a maturity of the industrial market on the Internet and the need to concentrate more information in a single website. Because of that, this new line implies a transfer of technology from the website to the industrial environment of the Internet in the region.
- c. Strengthen the sales staff, mainly through a different segmentation of the customer list by type of client, recruiting of new salesmen and a continual training. In this sense, two basic kinds of salesmen are needed: opening salesmen and consulting salesmen.
- d. Service renovation: maybe this is the point where you need to increase the proficiency of key persons for, even if there's loyalty, the technological competences of the people that take part in the service renovation and customer service are far from being of high technology. Nevertheless, there are people inside the company that do have these proficiencies and are eager to be a part of the customer service, forming attention cells of three persons with very different but complementary proficiencies. The plan is that, during a three month period of work, the three persons of the cell have acquired the key proficiencies that are necessary to give service and technical support. This is an efficient way to achieve a redundancy of key proficiencies in the attention system and customer support, people feel that they are a part of a change, on the other side they learn and have options for personal growth and every person in the cell is a seed for future new cells.
- e. Update and extension of the data within the database. As the database has more than 100'000 entries, the process of updating it is permanent. In this case, a special effort is made on the quality of the data and the speed of update, having a goal of at most six months.

The change of approach to give a service targeted on the buyer and not the providers is fundamental in this process of change. Besides maintaining the survival of the website, this strategy of attention and service is targeted on increasing the core competences of the people so that in a four month period they can handle in a better way the attention of technological information services of high added values.

To launch a brand new business line, a growing need of technological information on different issues is needed. This information can be usually found on the Internet for free. The system department of the company has the capacity to develop tools to attract, store, process and present information in a useful way for the visitors.

2.5 Development:

A business plan is made in both the economic and technological parts; the costs for development, launching and operation are calculated and a separate business strategic unit is planned. This unit is set upon the structure and support of the actual business.

Tools for the management of technological and economical information have been developed coming out from different databases. The intention of this is to build a system of notices and industrial news with the possibility of information management and ordering.

To support the main line of business of the website, suggested changes are instrumented in a weekend; the efforts of the whole personnel is aligned in a week and the model is fit in two weeks allowing the service quality to mature through training and personal compromise.

While the courses are reaching the employees, the control systems and the management of information and materials get stronger and communication between actors improves. On the other side, cohesion inside the group has strengthened within the company and the training has given great results, specially in the sales department, services are more professional every day. Nevertheless, there is still much to do to improve customer support.

The core competences of employees, salesmen and directive corps within the company are beginning to be adequate after four months when speaking about the management of high added value technological information and the related services. This brings the possibility of a product launching to the market, but it will be necessary to keep the fast learning rhythm.

2.6 Considerations about intellectual property:

Even if the company has had protection elements towards industrial secret, such as confidentiality agreements and protection of strategic information through intranets and restricted access systems, sustaining a case of protected information leakage is very difficult under the actual laws.

Furthermore, it's amazing how little is known about protection figures to intangible assets, even from companies with a high technological base in forefront areas, and therefore the incorrect application of protection measures over these assets or even the total absence of these measures. For the present case, the businessman had an incomplete and limited idea about protection towards intangible assets. This became a leak of confidential information that in the end affected the development of the company.

On the other hand, internet services, and values and services of intangible nature in general, lack of the right protection figures in Mexico as software and services developers can only get protection from royalties and industrial secret figures. Corps responsible of the persecution of royalties violators in Mexico have not been effective, situation that gave rise to a large quantity of unauthentic products that invades the legislation. This has created a devaluation of royalties which strongly affects software and systems developers.

There's a third aspect that escapes the exclusive sphere of intellectual property for it concerns commercial legislation; we are talking about disloyal competition.

2.7 Conclusions:

Without a technological alert, the companies based on vanguard technological areas would not survive. Moreover, it's necessary to deeply know the protection figures of intangible values.

Technological alerts are also weak and strong signals, technological alerts, behavior of the pattern of client consumption. In this case, the first alert factor detected was a movement of personnel in the commercial area. This is a symptom of a possible crisis situation which, along with other signs detected by technological monitoring, derived in the definition of a crisis situation and the adoption of alternate actions.

An adequate strategic planning should be the grounding for technological planning. In this case, a strong technological position to attack a strategic niche is established in which large capitals have limited access possibilities. Likewise, an adequate technological alert gives key elements for the setting of alternate routes of action faced with a crisis situation.

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