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Grupo Columbia: A Strategy for Integrating Information in the Health Care Sector in Mexico

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Abstract

Grupo Columbia is a Mexican organization whose major business activity is related to the health care sector. The organization, facing a new global environment, establishes a corporate strategy for increasing its competitive position. Through this vision, Grupo Columbia finds information systems as the most suitable instrument for achieving its strategy.

In order to implement the process, Grupo Columbia creates a profitable business unit called ColSis, seeking to encourage a culture of informatics in the health care sector. Furthermore, it defines among its activities the development of an information system to provide information about the whole spectrum of medical diagnoses for generating a nation-wide, permanently updated intelligent database used for sharing necessary information among various stakeholders within the health care sector, thus turning the project into a financially feasible one.

Introduction

The major challenge that business organizations face nowadays is defining how to build and how to keep viable business that are capable of dealing with constant changes in the marketplace and the business environment as well (Kotler, 1994). Mexico's recent opening of its global commercial activity has accelerated the process of an intense competence in every sector of the domestic market.

In order to deal with this situation, Mexican organizations are seeking to implement new strategies that allow them to compete in the new global marketplace, and it is in the process that they have found information systems as the necessary and most effective tool for achieving those strategies.

The health care sector has not been isolated from the changes that have taken place in Mexico, because in spite of having a great share of the medical services provided by governmental agencies, the private practice of medicine includes an important amount of participants in the whole country (see Table 1).

Table 1. Private Practice of Medicine in Mexico

1995	
Medical units	2,816
Clinics	12,022
Doctors	58,724

Source: [Dirección General de Estadística e Informática. Secretaría de Salud]

The participation of several stakeholders like doctors, hospitals, laboratories, pharmaceutical companies, suppliers of medical equipment among many others and constant and very significant growth in this industry makes this sector a very attractive one in Mexico.

The Case of *Grupo Columbia*

In Mexico, the opening promoted in the commercial arena has forced organizations to look for new ways of making business. Considering this environment and the presence of a great number of competitors, organizations are eagerly applying Porter's ideas (Porter, 1985) in order to identify areas for improvement in industry through which they could obtain some competitive advantage in the marketplace.

Strategic alliances between Mexican organizations have turned into elements that allow the survival of organizations, thus generating a major impact both in the domestic and the international markets. There is a growing number of organizations that are in the process of implementing their business strategies through some type of alliance, which sustains the point of view as expressed by Kotler (1994).

The experience of *Grupo Columbia* serves as a particular sample of the preceding statement. This particular organization, through the use of industry analysis techniques for the health care sector identified a business opportunity with enormous potential benefits involving strategic alliances as a key feature.

By means of analyzing information obtained from the health care sector, *Grupo Columbia* found out that there is practically no competition in this area in Mexico, there is a growing trend for this market, and due to the strategic value this information represents, it identifies that the number of potential customers is high, therefore creates a strategic business unit to deal with this market.

On the other hand, as a result of the analysis, the organization found out that the capital requirements for taking part in this industry are high, thus making it impossible for just any organization to enter the sector. Because there is a great opportunity in it, *Grupo Columbia* establishes strategic alliances with leading companies, for a nation wide coverage to be achieved.

A Strategy for Integrating Information

Grupo Columbia is a Mexican organization whose major business activity is oriented to the health care sector. In recent years, this organization has implemented important actions in order to secure the survival and competitive position of the organization, as it faces the new demands from the domestic market in which several stakeholders play an important role, namely private physicians, hospitals clinical and pharmaceutical laboratories, just to mention a few.

With this perspective in mind, *Grupo Columbia* defines as its corporate strategy the gathering of information related to the private practice of medicine in a common database useful for the stakeholders of the health care sector to search and to fulfill their information needs as well, both in the health care provision and the business aspect.

The concept is based on offering on-line information, making sure of its survival in the mid term by means of providing an innovative service for medical management, that of focused advertising and real time information.

With a global working vision in mind, *Grupo Columbia* perceives information systems as the most appropriate means for achieving this strategy. They believe the first step is to foster a culture around informatics in this particular sector in the country, that's why ColSis is created (ColSis stand for Columbia Information Systems for the Health Care Sector). It emerges as a company oriented to providing information services to the health care sector.

Its mission clearly states "To provide real-time, reliable and relevant information for the participants in the health care sector by means of establishing a national information network based on dedicated systems and innovative application *software* programs, providing high-tech and high quality equipment in order to assist in the improvement of the performance of the health care sector as a whole.

This purpose is achieved by means of the development of *software* and information systems of the highest technology, strategic alliances with vendors of equipment and distributors, trained personnel, and promoting their continuous development.

The dimensions to be considered in the project make ColSis to include among its most relevant activities:

1. To make sure that medical information is properly obtained, captured and validated on a daily basis.
2. Proper installation of *hardware* providing the best service by means of establishing franchising agreements.
3. Training for users of the system.
4. Promotion and sale of the processed information.
5. To make sure of the appropriate processing of information.

In order to bring into reality the strategy established by *Grupo Columbia*, ColSis establishes two projects: the development of a medical information system (SINFOMED) and the generation of the Mexican epidemiology system (SIMECOL).

SIMECOL emerges as the first electronic information database dealing with the field of epidemiology of the private practitioners capable of providing continuous updates of recent developments in the several branches of medicine.

SINFOMED is a specific *software*, developed to provide doctors with an efficient information tool for the daily management of their practice, and at the same time, generate necessary data to be input into the SIMECOL database.

Plan for the Implementation of the Information Technology

For SINFOMED to be implemented, ColSis is planning to connect 25,000 doctors of a wide variety of specific practice of medicine in the country (30% of the total figure of doctors in the whole country), who are to be provided, cost-free, with status-of-the-art equipment on a 3 year leasing program. Furthermore, there is a specific commitment that by the end of that period the equipment is going to be replaced with a more modern technology in order to be constantly upgraded. Doctors could make use of the *hardware* not only for consulting the data base but also for running general purpose *software* of their particular interest. In order to collect and process all the information these doctors generate, there will be 125 local servers, 3 regional servers and 1 national server (see Figure 1).



Figure 1. The SINFOMED Net Distributed all over the Country

By the end of his daily medical practice, the doctor pushes a key in his computer to start transmitting information to the local server, located in the nearest service center. This local server then integrates the information captured from all the doctors this specific center is attending. By the end of this step, information is further transmitted to the regional server, which then processes regional information to be transmitted to the national server, this being the one who distributes information to the various users.

Once the information has been completely integrated, the SIMECOL database may generate several statistics regarding illnesses, treatments, occurrences, etc., at the local, regional or national level. Because this database represents an attractive tool through which several groups of interest can identify areas for improvement, commercialization of this information is then promoted.

The cost of sharing these statistics with Mexican pharmaceutical laboratories and the price for the advertising allocated represent the major source for financing the business plan for ColSis.

Besides the distribution of *hardware* to each doctor, ColSis is considering for its implementation plan to provide continuous training and specialized technical support for delivering a quality service and immediate solutions to the requirements expressed by the

users. Users will get training regarding the program application itself, on how to connect to the application, the management of files, technical capsules, as well as commercial capsules, proper handling of the equipment and on general purpose *software*.

On the other hand, in order to generate a data base as complete as possible, data programmers are to be available for bringing past data into the new system. The selling of information and any other related product is done through a clear segmentation of the market, in order to have adequate products and prices for each of them.

In order to successfully implement this project and to warrant its financial feasibility, it was of particular importance to have strategic alliances with organizations in the financial sector and services providers. Such is the case of the alliances with IBM, a national bank, a service network, ITESM, market research companies, and so forth.

The Future

An expansion plan for the ColSis project was formulated for a three year period, it consisting that by the year 1997 8,000 doctors in 26 cities all over the country are connected, and have the rest of them connected by the year 1998, thus having a target of 25,000. However, the strategy started by *Grupo Columbia* does not end here, but there is a plan for becoming international in the long term.

Furthermore, there is a plan for including in the near future some other telecommunication services to help improving the effectiveness of the various groups taking part in the project, namely, connecting to the Internet.

Conclusion

Analyzing ColSis plans it can be conclude that strategies of this type would not be possible without applying information technology aligned to corporate vision. Because of the evolution in technology it is possible to integrate, exchange and share information from a wide variety of sources in order to generate a significant impulse of the medical industry in Mexico. In addition to this, *Grupo Columbia* has created a new source of revenue and profits, having an important contribution to the group's strategy and vision.

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