

# ANALYSIS AND DESIGN OF INFORMATION SYSTEM FOR THE MANAGEMENT OF THE "DOMINGO SAVIO" HOTEL. STRATEGIC PLAN FOR THE IMPLEMENTATION OF THE GUESTS MANAGEMENT SYSTEM

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## SUMMARY

In a changing context, companies need to carry out new competitions and to have a in-out cosmo vision of their organizations. This demands extraordinary attitudes and aptitudes at all levels and, for which, strategic management tools are needed. One of the strategic tools constitutes the system, based on computer technology that allows to integrate all the information required, for successful management and quality.

This work constitutes a knowledge production in the framework of the development of an analysis work In Situ and the design of an Information System for Management in the Hotel industry, in whose framework, a Strategic Plan is developed for the Implementation of the Guests Management System in the, "Hotel Domingo Savio", enterprise.

The Project consisted in the diagnoses, planning, execution and evaluation of actions whose central action axes were: to

achieve differentiation as to other competitors, to develop a framework tool and to operate one's business, internally in a more efficient way.

The production and application of tailor-made software, has been achieved and patented, that works under LINUX operating system. It is for the hotel management industry, whose engineering, developed in modules (guests' management, administrative management, accounting management and performance management evaluation: with the tool Balanced Scorecard), they were developed as from the hotel industry primitive service processes.

**KEY WORDS:** Information Systems, Strategic Plan, Hotel Management

## **INTRODUCTION**

Strategic planning and innovation are today, vital elements for the competitive and differentiating sustainability of an enterprise.

On the other hand, framework conditions demand the enterprise to be prepared to consent to a more and more sophisticated demand in an open-framework, where the concept of quality will have to be applied in all their dimensions and in continuous evaluation.

The change should be planned, based on the exhaustive analysis of the situation and of the internal and external conditions in which the organization operates. So that the innovation generates efficiency and effectiveness in the processes of enterprise production, the handling of information is indispensable. In this sense, the technological and development research process generates a quality level, with which the enterprise obtains differentiation and competitiveness in the framework, although this demands, significant but necessary investments.

Also, to achieve effectiveness and efficiency in the application of information systems it is necessary to adapt the organic structure of the enterprise, which should be a previous step for the project success.

So, an integral strategic plan is developed, clearly defining the direction of the organization, with a mission, vision and precise objectives for the effective implementation of the information system for the hotel industry management.

The project is centered in the application of an information system with the use of computer technology in the hotel industry. More specifically, in the "Hotel Domingo Savio", enterprise, located in Encarnación, Itapúa Department, Paraguay, in a strategic plan, it seeks to achieve the implementation of a computer system that works starting off from one's own database, and with the purpose of optimizing its management as an enterprise, looking for service differentiation, efficient internal operability and as a framework tool.

The plan definition starts off from presenting the problem, as an innovation necessity with technology implementation as competitive advantage in the hotel industry. The following queries are tried to be answered in an optimal way:

- Which is the current situation of the Hotel Enterprise, "Domingo Savio" and its disadvantages to face the future within a higher performance sustainability framework?
- How to face the higher performance maintenance sustainability plan, to achieve competitive advantages in the local and regional framework, implementing an information system with computer technology?
- Which are the advantages of the plan?

With the objectives that have been proposed, the following were aimed at:

- To implement a database and computerized system for the achievement of competitive advantages within the framework of a sustainable superior (S&MSE) Small and Medium Sized Enterprise, in the hotel industry services sector.

- To achieve differentiation as to other competitors.
- To use the computerized data system as tool for optimizing the enterprise management.
- To internally operate the enterprise in a more efficient way.

The development sets off from of an intra and extra managerial diagnostic, outlining the objectives and the concrete actions for their achievement.

Also, in an integral organization adaptation context, an enterprise human talent training program, is being developed with the purpose of preparing the same within the framework of the implemented innovations. These actions have been developed under the vision that efficiency should be focused in function of its entire structure.

The result, of the project is synthesized in the following aspects:

- Computer engineering Development with software production to modulate guests, office workers and accountant's management, starting from a database of the management processes for the Enterprise "Domingo Savio". This product has been achieved by means of the strategic alliance between the Domingo Savio Hotel Enterprise, and Cybira Consulting. The program is an alternative solution for the multiple requirements in the hotel industry.
- Innovation of the guests' management processes, from the manual to the technological, by means of the development and implementation of tailor-made software, according to the necessities of the enterprise and considering that information is a vital resource for making strategic decisions.
- Installation of quality culture, in the processes of hotel industry services production.

## THE THEORETICAL AND CONCEPTUAL BASES OF THE PROJECT

At present the information systems and computer technology respond to managerial strategy, offering solutions to obtain competitive advantage in the enterprise management.

As to this, the strategic planning of information systems, at the present consists in *“to implement systems with strategic impact in the business. (...) the business depends in great measure to information technology, due to three fundamental factors for their operation”*<sup>1</sup>:

- **To achieve differentiation as to other competitors**
- **As a marketing tool**
- **To internally operate the business in a more efficient way**

This project looks for the application of an information system, using computer technology in the hotel industry. More specifically, in the “Domingo Savio”, hotel enterprise located in Encarnación, Department of Itapúa, Paraguay, in a strategic plan, aiming at the implementation of a computer system, that works starting off from one's own database, and with the purpose of optimizing its enterprise management, assisting the three factors mentioned.

The definition of the plan sets out from a diagnosis, as from which the problem, is presented, as an innovation necessity with technology implementation as a competitive advantage in the “Domingo Savio” Hotel industry Enterprise, and its importance resides on the following points:

- a. To have a complete registrar of clients, allowing an added value in the attention of the clients registered, by means of their immediate recognition.
- b. To Speed up guest registration
- c. Service Quality

1- LARDENT, Alberto, Information Systems for Enterprise Management. Planning, Technology and Quality. Prentice Hall Ed. Buenos Aires, Argentina, page 31.

#### d. Processes Control

Rico and Dorian's ideas are valid in this context, who sustain that *"the power of computers allows one to treat each consumer by name. The enterprises should manage their client's information as an important asset and, as such protect it"*<sup>2</sup>.

So, the present project looks for the use of computer technology as a tool for the optimization of the processes in guests' management of in the "Enterprise Domingo Savio".

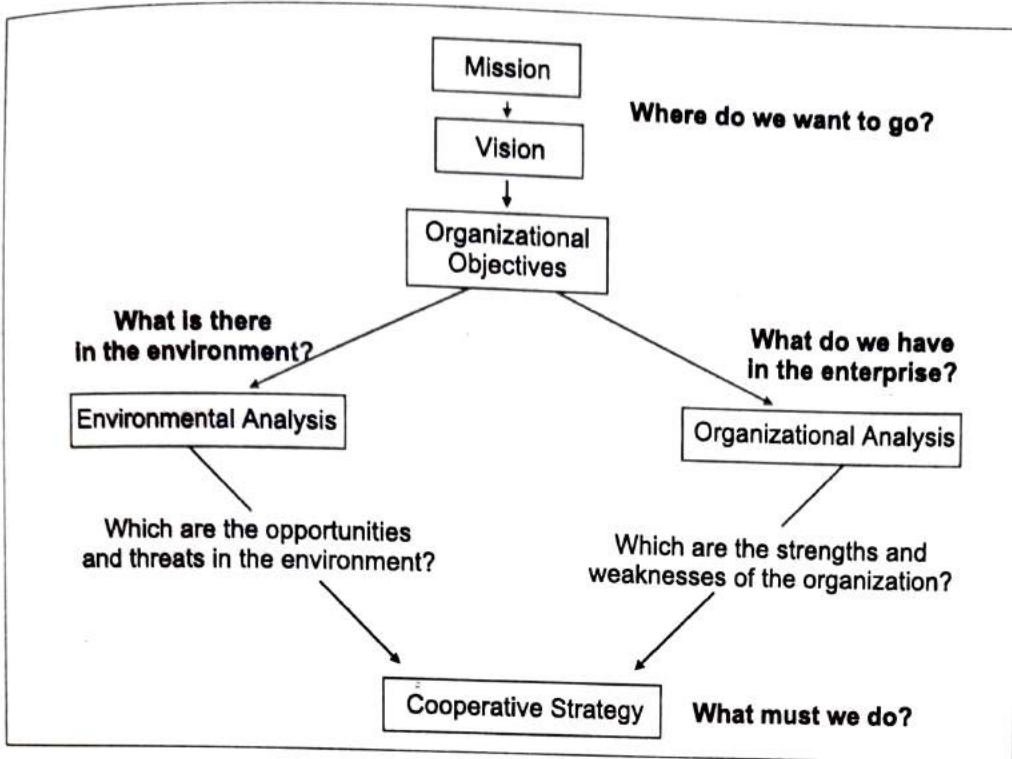
### THE FORMULATION OF THE MANAGERIAL STRATEGY FOR HOTEL MANAGEMENT

According to Chiavenato<sup>3</sup>, *"the strategy sets off from the strategic objectives of the mission and vision that they seek to carry out, and it is guided by two types of analysis"*. On one hand the external analysis (environmental), to verify and to analyze the opportunities that should be taken advantage of, and the threats that should be neutralized or become opportunities. On the other hand, the internal analysis (organizational) to verify and to analyze the strengths and weaknesses of the enterprise.

In the following chart, the components of the managerial management strategy and their relationships are established.

2- RICO; Rubén R. and DORIA, Evaristo. (1999) *Inattentive Enterprises. Practical Steps for better management, in the anxiety era.* Ed. Macchi. Buenos Aires, Argentina, page 148.

3- CHIAVENATO, Idalberto (2004), *Human Talent Management*, Ed. Mc Graw Hill, Bogotá, Colombia, page 59.



Source: CHIAVENATO I. (2004). P. 61.

From now on, each one of these components is developed in function of the project of strategic implementation of the information system, for the hotel management Enterprise "Domingo Savio".

## INFORMATION SYSTEMS STRATEGIC PLANNING, AS A MODEL FOR HOTEL INDUSTRY MANAGEMENT

*"The information refers to the received data, their meaning and knowledge is the action that is generated with that information"*<sup>4</sup>. In this way, the information is considered as an intangible asset and it is so because with it you can develop knowledge for the sustainable and differentiated development of the organization.

4- TAÑSKI, Nilda C. (2005) Marketing Administration. Markets Integral Segmentation. Ed. Gráficos S. R.L. Posadas, Argentina, page 58.

The project developed in the framework of the design implementation of the database and computerized system, for the achievement of a competitive management and a sustainable higher performance of the of Hotel industry "Domingo Savio" Enterprise, it supposes the computer science's use, as a management resource, equivalent to any other productive resource and the information as a right to be duly used to improve the competitive position of the enterprise.

In such a sense, it is important to keep in mind Tañski's ideas, who assures that, *"the companies of our environment will be able to survive in competitive times, using the technological innovation appropriately"*<sup>5</sup>.

Technology and, to be more precise, computer science applied to the managerial management, is a fundamental tool in the development of competitive advantages, starting off from the handling and application of information, to the processes either in production or in service.

In this context, the project responds to a strategic plan for the application of an information system and the use of computer resources in the enterprise, in order to answer to its operative and managerial necessities, and to help to reach the objectives of the business having an appropriate cost/benefit relationship.

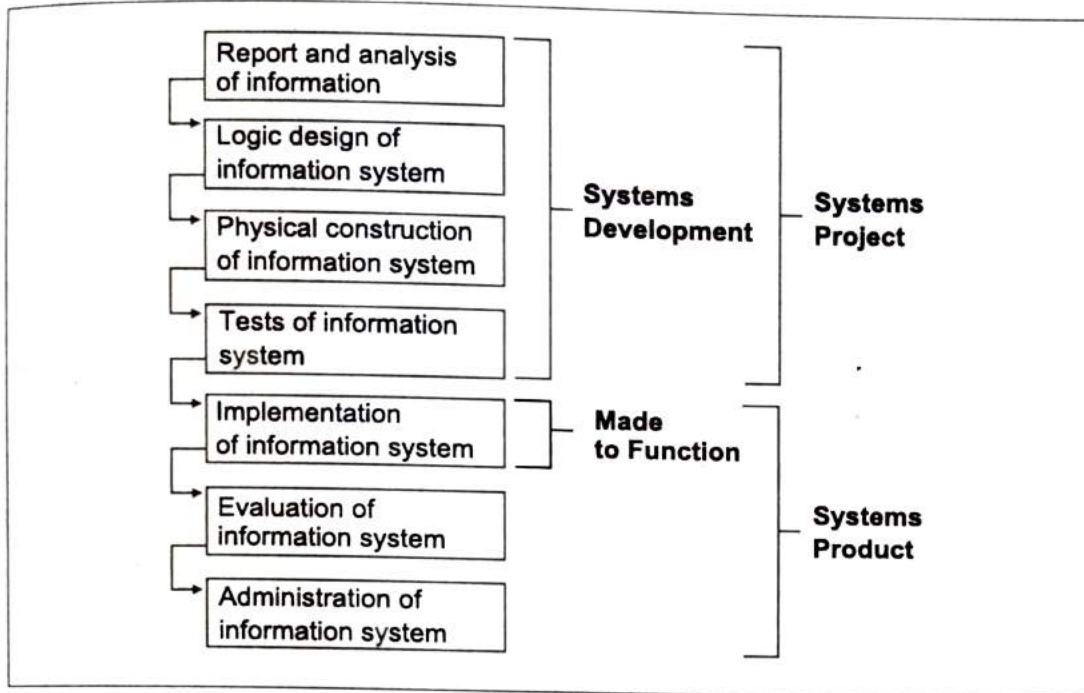
It should be said that the strategic plan foresees, not only the technology implementation in an isolated way, but rather a change that embraces the total organization environment, in a process of intelligent adaptation to the new organization culture, with support of information technology, to the enterprise strategy.

Structurally, this information system development plan, is part of the strategic plan, and responds to the following logical outline:

5- TAÑSKI, Nilda C. (2003) Op. Cit., page 52.

The project of the system foresees two fundamental phases: The project itself and the product. Development of Information System. Source; Lardent A. (2001), page 5.





Development of Information System. Source; Lardent A. (2001). Page. 5

The project of the system foresees two fundamental phases: The project itself and the product.

The first phase consists of four steps:

- Survey and analysis of information system: It has got to do with the database that is generated as from the processes in the production of hotel industry services.
- Logical design of the information system: It constitutes the engineering of the system.
- Physical construction of the information system: It is the development of the structure of the software that becomes the tailor-made application program.
- Information system test. The starting up in an experimental way, in order to know the system's generated results, and to detect errors.

The second phase constitutes the product itself and is made up of three steps:

- Applying the system: Software practical implementation, in the of hotel industry management process.

- Information system evaluation: Analysis of the results given by the computer system.
- Information system management: The use of the information given by the system as an intangible resource (knowledge) for organization management.

For the project implementation, a previous analysis of the situation is developed, by means of an internal and external diagnosis to the enterprise, to establish the comparative and competitive advantages by means of the incorporation of the computer technology and its implications.

On the other hand, the planning responds to the intention of the "Domingo Savio" Enterprise, of assuring its capacity to project and to execute a guests' management system, with the use of computer technology to achieve a clearly perceptible distinction of the client and, in this way, to create a different service. In consequence, the survival guarantee, consists on to develop and to operate a system, so that it is able to project a process that conquers the consumer's preference.

It is important to highlight the differences between an Information systems Strategic Planning, and a traditional planning. According to Lardent<sup>6</sup>, "(...) *in traditional planification technology is not*

6- Lardent establishes that the traditional focus as regards to the application of computer technology, presents in the practice two punctual problems (Lardent A. 2001:21).

"Absence of previous analysis to the decision of introducing technology and its consequence: negative results due to lack of planning. The acquisition of a computer was carried out without previously analyzing the necessities of the organization and without the possibility of applying programs and specific devices for the activity. This situation caused some teams to be months or even years without beginning to operate for the lack of systems and application programs.

"In the cases where planning existed, this concentrated itself on analysis of technical aspects. The information occupied a passive role in the business. The investments in technology were carried out on the base of advice given by technical specialists in computer architecture, as if computation was an objective in itself.

*implemented, based on a previous analysis, and planning concentrates on the technical aspects of technology, leaving the information in the background to and with a passive role”.*

For Lardent, strategic planning implies: a) *the determination of the primary objectives and, b) The formulation of a plan to reach them*”<sup>7</sup>.

In the determination of the primary objectives, the “Domingo Savio” Enterprise has intended to achieve the following objectives:

• **Basic objective: To implement a database and computerized system for the achievement of a competitive advantage in the framework of a sustainable higher performance of a S&MSE of the hotel industry services sector.**

Starting off from the mentioned basic objective the following three support objectives have been determined:

- **To achieve differentiation as to other competitors.**
- **To use the computerized data system as a tool for enterprise management optimization.**
- **To internally operate the enterprise in a more efficient way.**

As to the operative tactical plan for the achievement of the established objectives, the execution of the project has been developed keeping in mind three fundamental actions:

- To develop an operative plan able to answer a high complexity problem, in no longer than three months, to allow the implementation of the project.
- To be able to implement in the lapse of three months an experimental computerized system (software) tailor-made guests' management, starting from processes of a hotel industry service database.
- To put into operation, within the established lapse, the experimental pattern that allows the optimum operation of the enterprise, in terms of costs/quality/time.

That is to say, you tended to identify which was the best combination of components to attend to operative and administrative requirements”.

7- LARDENT, Alberto R. (2001), p. 14

- These axes, in turn, have demanded the following actions:
- Elaboration of the action plan, starting from the study of the application made by the Domingo Savio Enterprise, for the implementation of the database system, prior a situation diagnosis and enterprise characteristics, in function of the SOWT analysis (strengths, opportunities, weaknesses and threats).
  - Tailor-made engineering design and software development for computing the guests' management, starting from a database.
  - Planning and training of the personnel in charge of the processes in the hotel industry management.
  - Systematic evaluation and of process of the actions done, according to a scheduled chronogram.
  - Pilot Test of the implemented system operation.
  - Final evaluation of the system according to pre-established indicators.

The strategic objectives mark the direction of the enterprise, for which its management has a clear vision regarding what it wants to do; an intelligent decision, captured in the new vision of the enterprise, to achieve service excellence, as to what it offers. In fact, this position is the one that makes one understand the necessity of management change: from the traditional to the technological.

On the other hand, one should keep in mind that implementation on an information system strategic plan, is developed within the framework of a planned change. Montini considers that this kind of change *"is the systematic intent to redesign and apply in a deliberate way, a policy or new goals, a philosophy change, the climate or operating style of an organization"*<sup>8</sup>.

8- MONTINI, A. Enterprise Development and Management Work. Modules V and VI: Master in Business Strategic Management. UNaM UCI.

From Stoner's point of view "(...) *the planned change constitutes the design and the application, in a deliberate form, a structure innovation, a policy or new goals, or a philosophy change, the climate or the style of operating*"<sup>9</sup>.

## THE COMPETITIVE ADVANTAGE AS BASE FOR THE DEVELOPMENT OF GUESTS' MANAGEMENT COMPUTERIZED SYSTEM

Peter Sengue affirms that "*the only source of sustained competitive advantage, is the capacity of an organization to learn sooner than its competitions. No external force can snatch away from us the impulse of this advantage*"<sup>10</sup>. The same author admits that "*if we continue learning and generating new ideas, incorporating them to the managerial work, you will always be ahead of the imitators*"<sup>11</sup>.

On the other hand, Héctor Zúñiga outlines that "(...) *today, in an open economy scenario, with freedom to undertake things, the permanency of the enterprise in the market, is won, created and maintaining a competitive advantage sustainable in time*"<sup>12</sup>.

When one has to produce manufactured goods or services the sustainable competitive strategy, is not based on offering the lowest price but to generate greater value in the face of the client's perception, it is there where initiative and creativity generate a permanent search of diversification of products and services and each enterprise creates its space with a differentiation strategy,

9- STONER, J. and others (1996) Management. Sixth Ed. Pearsons Education. México, page 455.

10- SENGE, Peter (2004) The Fifth Discipline in the Practice. Strategy and Tools for building an Organization open to Learning. Ed. Granica. Buenos Aires, Argentina. Page 11.

11- Ibid.

12- ZUÑIGA, H. Strategic Planning, a focus for the new port scenario in Latin America. ASO, IX Port Conference, page 10.

the real competition is in quality and not in a war of prices, that is to say, quality understood as the satisfaction of clients' necessities. Drucker himself speaks of the importance of software in the development and managerial growth saying that, "(...) software would be the force that would dominate industry in the future"<sup>13</sup>.

In this context, one should understand that the analysis of the chain of value is one of the techniques that contribute to the differentiation of competitive strategies. The chain constitutes a series of phases, each one of those which adds value and generates costs. The chain of value was designed by Michael Porter<sup>14</sup>.

In the field of technology, Porter says that: "*the introduction of a very important technological innovation, allows to reduce the cost and to improve the differentiation at the same time (...)*"<sup>15</sup>.

In the concrete case of the Project, implementing a database and computerized system for the achievement of a competitive management, in the higher sustainable performance, of a small enterprise in the hotel industry sector, the chain of value is defined by the following differentiations:

- *Entrance logistics*: Excellent personnel preparation for clients personalized attention, with the use of computer technology; tailor-made software, patented (legal) and effective for the management of guests, as an applied product to the hotel industry service; infrastructure in excellent conditions.
- *Operations*: Effective use of time; rendering services without flaws; immediate recognition of clients, as from a habitual clients' database, simplification in the processes of the clients' identification, quick and reliable way of obtaining clients' information, personal relationship with the client, reliable and

13- FLAHERY, John E. (2001) Peter DRUCKER. Modern Management Essence. Prentice Hall. Mexico, page 121.

14- PORTER, Michael (2002) Competitive Advantages. Creation and the Sustain og a higher performance. 2nd Ed. Grupo Ed. Continental. Mexico, page 132.

15- Ibid. page 19.

quick information of the processes of decision making, from any part of the enterprise.

- *Exit logistics*: Effective rendering of a high quality service.
- *Marketing and sale*: Better labor conditions with technological support; positioning and image of the service; clients' database.
- *Maintenance*: Service quality control, effective control of the processes.

In the following chart the dimensions of the process, the conditions of their elements and the indicators of the clients' perception are detailed in the chain of value.

Dimension of the Chain of Value	Components	Conditions of the elements	Clients perception
Entrance Logistics	• Human Talents	<ul style="list-style-type: none"> <li>• Personnel Contact Capacity and dependability creating a superior physical environment in the delivery of the service product and the design of a superior delivery process</li> <li>• Excellent preparation of the personnel for the attention to clients with the use of computer technology patented tailor made software (legal) and effective</li> </ul>	<ul style="list-style-type: none"> <li>• Clients total satisfaction through perception of Optimum grade of use of the client's time</li> <li>• Solvency of the contact personnel</li> <li>• Quality in interpersonal treatment</li> <li>• Optimum grade satisfaction for room comfort</li> <li>• High grade of acceptance of edible products</li> <li>• Optimum acceptance of laundry service</li> <li>• Optimum acceptance of bellboys service</li> <li>• Optimum acceptance of parking service</li> <li>• Prices and correct invoicing</li> </ul>
	• Physical Resources	• Facilities in excellent conditions	
	• Technological Resources Telephone and fax System Computer System	<ul style="list-style-type: none"> <li>• Functionality and effectiveness of the computer system (hardware and software).</li> <li>• Excellent system of communications (telephone and fax).</li> </ul>	
	• Inputs groceries and cleaning products	• High quality inputs	
Process	<ul style="list-style-type: none"> <li>• Reception and guests registration</li> <li>• Handing over of service product servicing</li> <li>• Handing over the room communication services and food</li> <li>• Bellboys Service</li> <li>• Parking Service</li> <li>• Laundry Service</li> </ul>	<ul style="list-style-type: none"> <li>• Clients Effective reception and registration attention</li> <li>• Quality in the delivery of the service products (room in excellent comfort conditions).</li> <li>• Bellboys Effectiveness</li> <li>• Quality and security in the service of bellboys and of appropriate parking</li> <li>• Laundry service quality</li> </ul>	
Exit logistics	Service Invoicing	Fair Prices	

For the differentiation management in the hotel industry service, one should keep in mind that *"the solution to the competition of prices is to create an offer, a delivery and a differentiated image"*<sup>16</sup>.

Within the development framework of the present project, Kotler's ideas are taken, who says that *"the offer can include innovative characteristics that distinguish the offer of the enterprise from those of its competitors"*<sup>17</sup>. In short, differentiation sought to be achieved by the Domingo Savio Enterprise, is constituted in the implementation of computer technology for the management of guests.

## THE INFORMATION SYSTEMS AS MARKETING STRATEGY

The analysis and design of the information system for the hotel industry management allows to develop a modern marketing strategy in service offering. Kotler and Armstrong, sustain that service differs from tangible products and, therefore, they require additional marketing focuses. *"(...) in a service business, the client and the front line service employee, interact to create the service. Therefore, the service providers should interact efficiently with the clients to create a higher value during the service encounters"*<sup>18</sup>.

Indeed, the "Domingo Savio" Enterprise is searching to have the appropriate operation conditions:

- To recognize the Client: Tañski<sup>19</sup>, outlines that in today's competitive times, the organizations should develop and apply strategies that allow the consumer to be better known. The guests' management system will allow the organization, to

16- KOTLER, Philip and ARMSTRONG, Gary (2001) Marketing. Ed. Prentice and Hall, Mexico, Mexico, page 270.

17- Ibid.

18- Ibid, page 269.

19- TAÑSKI, Nilda C. (2003) Op. Cit., page 55.



immediate recognize the client, acceding to data that allow him to treat the client in a personalized way, as from his name or document number. In such a sense, the technological support, with an extensive database, will allow to recognize the necessities, desires and preferences of each client, becoming a powerful tool for the development of personalized marketing.

- To value the consumer's time: The client of a hotel in general arrives tired, stressed and concerned, therefore he requires pleasant and quick attention. With the development of the information system, one has the advantage of speeding up the guest's registration and to do it only once, as the client will be registered in the database, that at the same time will allow him to be recognize quickly and precisely.

- To maintain the clients' satisfaction and loyalty: In all the cases, as satisfaction increases, loyalty also increases. This last aspect will be the result of the competitive strategy developed by the organization.

## COMPUTER TECHNOLOGY AND INFORMATION SYSTEMS FOR THE MANAGEMENT OF HOTEL INDUSTRY

In this section the following fundamental question, should be asked: Which is it the necessity for the software design and implementation, for the management? To answer this query, Lardent is mentioned, he says "*traditionally the companies have appealed to the manuals of those which are considered as a systematic body that contains the description of the activities that should be developed by the members of an organization, as well as the procedures through which those activities are completed*"<sup>20</sup>. The same author recognizes the importance and

20- Ibid., page 121.

the advantages of the manuals; however, their limitations are also evident<sup>21</sup>.

The use of computer technology in the companies is based on the necessity of innovating on the traditional systems of development of production processes. *"The mega tendencies as regards computer technology and information system refers to the development of products, services, technology and methodologies that affect all, and that will model the future of the information processing..."*<sup>22</sup>.

In relationship to the implementation of computer technology in services development, in the hotel management industry, it is worthwhile to keep in mind Lardent's contributions that make reference to the current requirements (and future ones) for its users, among which are mentioned, the following necessities:

- To be able to access to the data from any place of the enterprise.
- To integrate the data which are dispersed in different applications and systems and to develop a multidimensional vision of them.
- To trust the integrity of the data with which one is operating.
- To avoid the unnecessary duplication of resources.
- To have the possibility of applications portability.

Without forgetting the disadvantages offered by the use of computer science, as for example the necessity to depend on a

21- Lardent admits that, in the communications era, the manuals (statutes, laws, decrees, internal instructions, functions descriptions, responsibilities, activities and execution frequencies, activity areas description and procedures descriptions, answers to enquires on situations that appear during the process), generate serious problems to organizations: the need to communicate to each of its members which are their obligations, how they should do their work, to be bound to what norms and how to relate their work with the others. On the other hand, the clients sometimes see themselves frustrated when their requests are done, and do not receive a quick answer or adequate satisfaction, due to lack of information

22- LARDENT, Alberto (2001), op. cit, page 149.

computer team, or the vulnerability of the data, when being connected to Internet, as there is the possibility of it being used by other people to their whim, Lardent sustains that computer technology is justified fully for<sup>23</sup>:

- To support the process of decision making, opportune and right.
- To fundamentally change the form in which business operations are executed; to facilitate the management “by processes” and not “by functions”.
- To reduce the processing costs, communication, storage and development of applications.
- To facilitate to achieve greater productivity to the user.
- To facilitate the reach to a greater organization effectiveness.

## **TECHNIQUES TO IDENTIFY INFORMATION SYSTEM REQUIREMENTS**

According to Lardent<sup>24</sup> there are two techniques to formulate a global outline for the use of information system on behalf of an enterprise, so that it can act competitively. These categories are:

- Techniques for processes analysis.
- Technique for information analysis.

In the application of the project for the Domingo Savio Hotel industry enterprise, both techniques have been applied.

With the processes analysis, the idea is to conceive the structure of the enterprise according to its processes, instead of making it according with its functions, as it was doing traditionally.

In this case what is understood as process is the series of activities or functions that are carried out with certain frequency (daily, weekly, monthly, annual) that constitute the labor activities of the enterprise.

23- Ibid, page 158.

24- LARDENT, Alberto R. (2001), page 12.

These activities imply the reception of entrance information, their treatment or transformation and the presentation of results as exit. Each one of the activities or actions constitutes an executed function on an object that has for purpose to support the objectives of the enterprise.

## THE PROBLEM OF COMPETITIVENESS AND COMPUTER TECHNOLOGY IN PARAGUAY

Competitiveness is an aspect that should be well understood, in the managerial environment and to understand it one must set off, necessarily, from the conception of competition. According to Lepey<sup>25</sup> *"the competition concept has two meanings, a negative and a positive one"*. This author says that the destructive competition consists of: *"an instrument designed and used by people with the purpose of destroying an opponent"*. On the other hand, *"the constructive competition is a management instrument that (...) consists on observing similar organizations with the purpose of seeing what they do well to make the things better..."*; this process is called *benchmarking*.

In this context, competitiveness consists on the capacity of the organizations or companies of achieving success within a framework of constructive competition; this is, to do things better than the competition.

According to the mentioned author, in the era of the knowledge, *"competitiveness increases in direct relationship with the management capacity that is born due to people's creativity, the capacity to innovate, the ability to think, to design and to carry out organizations that are characterized by decentralization in decision making, the participative leadership, effective communications and the matrix structure in the organizations"*<sup>26</sup>.

25- LEPEY, Maria T. (2001) Management and Quality in Education. An evaluation model. Ed. McGraw Hill. Santiago. Chile, page 73.

26- Ibid., page 74.

The image that Paraguay projects towards the world, within the environment of competitiveness, highlights a deficiency in this aspect. The world 2005 economic forum places the country in the 113<sup>th</sup> position, of a total of 117 evaluated countries. The indicators kept in mind to determine the index of growth competitiveness are three: the quality of the macroeconomic atmosphere, the state of the public institutions and the level of technological alert. It is necessary to see that these conditions favor little in the creation of a favorable atmosphere for the managerial development.

On the other hand, in the Paraguayan computer technology environment, a problem that affects the companies in a substantial way is the illegality in the use of this technology. According to a study presented by BSA (*Business Software Alliance*) "Paraguay figures for the second consecutive year as the biggest software pirate in Latin America"<sup>27</sup>.

According to the report of the aforementioned enterprise, in South America the greatest number of falsified computer programs, there circulated about 66% in 2004, and Paraguay figures among the biggest pirates of the region. The following square shows the computer programs piracy indexes per country in Latin America.

Paraguay	83%
Bolivia	80%
El Salvador	79%
Nicaragua	79%
Venezuela	79%
Guatemala	77%
Dominican Republic	75%
Argentina	75%
Honduras	75%
Peru	73%
Source: <a href="http://www.bsz.org">www.bsz.org</a> .	

Robert Holleyman<sup>28</sup> sustains that software piracy produces losses that have a deep impact in the economy of the countries. Among the consequences that has one can mention<sup>29</sup>:

- *"Weakening of the local software industries, due to competition with foreign quality pirate software.*
- *Loss of revenues for taxes,*
- *Work loss due to the lack of legitimate market.*
- *Costs of application of laws"*.

However, one of the solutions to the problem of the piracy could be done in an effective way, through the use of free software and that, in fact, is being developed, advancing the entire world over.

Free software is that that has the permission so that anyone can use it, to copy it or to distribute it, be they in their original form or with certain modifications, be they free or with cost. Especially the modification possibility implies that the source code is available. If a program is free, potentially it can also be included in a free operating system. In this case the free software that is in the market is the Linux operating system.

Ricardo Ulke<sup>30</sup> affirms that the use of free software constitutes a powerful alternative in developing countries and that it should even be kept in mind within the environment of government's policy. A clear example in the region is the Brazilian government *"a country that he has carried out a strong bet on this type of systems that outlines a true revolution in the form of adopting and using computer solutions"*<sup>31</sup>.

The advantages obtained in the use of free software is synthesized in the following aspects<sup>32</sup>:

28- BSA President.

29- [www.abc.com.py/informatica](http://www.abc.com.py/informatica) 21<sup>st</sup> May 2005

30- 30. ULKE, Ricardo (2005) Free software advances in the region, and becomes an option for our country. ABC Color. 18<sup>th</sup> June 2005. Asunción. Paraguay. At [www.abc.com.py/informatica](http://www.abc.com.py/informatica)

31- Ibid.

32- Ibid.

- It allows, due to the low implementation cost, a greater of the population to new technologies, shortening the existent digital breaches.

- It allows to re-use resources, as being old model computers, which in another way would be incompatible with the latest versions of proprietary systems such as Windows.

- It facilitates the development of own solutions, facilitating the creation of a net of services and developer communities, also generating new employments and making the economic resources stay in the country.

### **GUESTS MANAGEMENT SOFTWARE AS PROPERTY BELONGING TO THE "DOMINGO SAVIO" ENTERPRISE**

It should be said that, with the development of the project of implementation of a database and computerized system for the achievement of a competitive management, in the sustainable higher development of the Domingo Savio Enterprise, it has been possible to lead the change in the sense of designing a tailor-made software and the necessity of the enterprise, adjusted to its size that it becomes its property. This allows to register the product as an intangible asset that opens up the opportunity to generate profitability.

Kastika says that it should be counted as creativity and as an intellectual capital. *"The ideas should be formalized to become intellectual capital. This process that goes from the implicit to the explicit is the true factory of knowledge"*<sup>33</sup>.

On the other hand, Chiavenato admits that at the present time, *"the main cost components of a product are R&D (research and development), intelligent actives and services. (...) The new reality*

33- KASTIKA, Eduardo (2003) Introduction to creativity. 30 recommendations to innovate in business. Innovate Buenos Aires Innovators school. Buenos Aires. Argentina, page 99.

indicates that most of the most valuable goods in the successful organizations are intangible, as well as the ability, organization, technological know-how, the knowledge of the market, the loyalty of the client, peoples' morals, the corporate culture, the behavior of the partners of strategic alliances, etc."<sup>34</sup>.

The development of the software was achieved starting from a strategic alliance between the **Domingo Savio Enterprise and Cybira Consulting**<sup>35</sup>.

In this context, it is considered that the strategic alliance constitutes a vital element for the development of the technological product in question; since it is considered that it is difficultly to develop good utility software, without waste, in an individual way. On one hand, one needs to know in depth the activity and the processes of the managerial matter in which one wants to implement the computer technology and, on the other hand, the knowledge on specialized engineering, in the software production tailor-made that it is really effective.

The product was development based on the contribution of the know how of both companies, on one hand the Domingo Savio Enterprise contributes the whole development of the process of the nature of the business and Cybira Consulting gives the computerized solution to the arisen necessities, from these processes by means of the development of the tailor-made software.

The platform used for the development of the software is the programming language *Java* with database *Postgree SQL 8.2*. Operating under Linux, Operative System.

On the other hand, one should highlight that the software has been developed based on the following advantages:

34- CHIAVENATO, Adalberto (2004) *Human Talent Management. The new role of human resources in organizations*. Ed. McGraw Hill. Bogotá. Colombia, page 18.

35- CYBIRA CONSULTING. Paraguayan software producing enterprise, for large national and international corporations. Phone 021 557048. Asunción. Paraguay. Web: [www.cybira.biz](http://www.cybira.biz).



This enterprise also offers the Balanced Scoreboard, a strategic tool tailor-made unemployment.

- Developed under the LINUX operating system, free.
- It is legal.
- It is patented.
- Its demonstration is available on the Web: <http://demo.cybira.biz/hotel>
- It has a great quantity of free utilities (legal) that can be used to develop tailor-made systems.
- It has programs of automation of offices (word processor, schedules, database, etc.) of great quality, without licenses cost.
- The system is very stable and more resistant to virus computer specialist than Microsoft Windows of.
- It allows the access to information nets, with high degree of safety.
- It is full color.

Software engineering is developed in modular form and each one of them is executed in an interactive way. These modules are<sup>36</sup>:

- Guests' management: It contains the following main windows:
  - Reservations
  - Entrance application
  - Clients
  - Services
  - Inventory
  - Rooms gallery
  - Organizer
  - Information and
  - Control panel
- Administrative management

<sup>36</sup>- One must mention, for the development of this project, only the guests' management module, will be applied.

- Accounting management
- Management performance evaluation: with the tool *Balanced Scorecard* (developed and available for the market)

On the other hand, in the environment of the development of the present project, one keeps in mind that it is not enough to develop software without an integral report of the needs of the enterprise and of its intention in the application of computer technology.

In such a sense, the engineering of the software should respond to such necessities and to be adjusted:

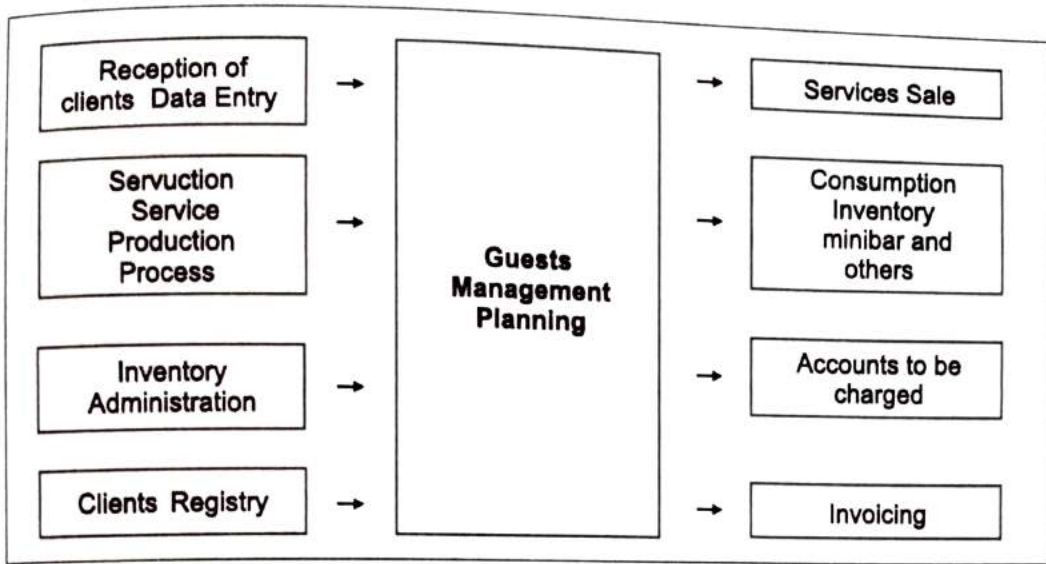
- Assisting to the specific necessities of the enterprise, keeping in mind which are the processes that will be part of the software engineering, what input data are necessary, in what way will this data will be processed and what information will be obtained as a result. All this oriented so that the organization can effectively optimize these processes.
- Considering the financial standing of the enterprise, without having to incur in overestimated costs, in the acquisition of technological inputs. In this case a study should be made on which are the specific necessities (hardware and software) tailor-made for the implementation of the system.

Therefore, for the effective implementation of guests' management software in the Domingo Savio Enterprise, as from an integral plan that observes the aforementioned aspects above, have been developed.

### **MODULAR COMPUTER MANAGEMENT DEVELOPMENT SYSTEM FOR GUESTS IN THE HOTEL INDUSTRY**

As has been said above, the developed software responds to a structure composed by the four mentioned modules that act in an inter-linked form, able to give sustainable solutions to all the requirements of a hotel industry Enterprise.

The development of this project foresees the starting out, in experimental form, of one of the modules: the guests' management one whose structure is shown in the following chart:



#### **MODULE: PLANNING OF GUESTS MANAGEMENT**

The objective of the module is to project the productive variables that affect guests' management. In such a sense, one should understand what the process production consists of, or servuction.

*"Servuction is the systematic and coherent organization of all the physical and human elements of the relationship client - supplier necessary for the realization of a benefit of service, whose characteristic and quality levels have been determined"*<sup>37</sup>.

#### **QUALITY STRATEGIC PLANNING FOR THE MANAGEMENT FOR THE HOTEL INDUSTRY SERVICE**

The management of total quality is a requirement that the enterprise cannot stop to keep in mind for assuring competitiveness.

Rico outlines four basic principles to design a thought and a valid strategic planning<sup>38</sup>:

37- EIGLIER, P. and LANGEARD, E. (1989) Services Marketing. McGraw Hill. Madrid Spain, page 42.

38- RICO, Ruben R. (2001), page 37-40.

• *Principle 1: New vision of strategy.* The new vision of strategy presented by Rico, is based on Michael Porter's ideas who proposes two basic aspects to keep in mind within the framework of this strategic focus<sup>39</sup>:

a. "The strategy is to create an option with singular and different value, it is to do different things, it is to be running another career with another goal; but not because it is better goal, but because it is that in what one has chosen to be distinguished".

b. "The strategy is a system of activities, designed and tailor-made, to achieve the unique result that the enterprise wants to reach in the objective market".

The two aspects mentioned in the framework of the new strategic vision are part of the same essence of the project. In this case the strategy consists on the design and implementation of quality in the management of guests in the hotel industry service.

• *Principle 2: The importance of the strategic thought.*

The "Domingo Savio" Enterprise has a strategic, attentive and concentrated thought as to how to carry out changes according to the necessities and the clients' expectations, how the value migrates inside the market, inside the industry, inside the enterprise itself, what does and how does the competition do things, how to adapt the strategies and the plan in a consistent way.

• *Principle 3: New vision of the operational effectiveness:*

The enterprise is conscious that operational effectiveness is obtained doing the same things as the other companies, in a better way and arriving quicker; running the same race, quicker and better. The idea consists in that the Hotel Domingo Savio will offer the service the same as the other competitors but, with the difference of knowing its target (clients) through software, tailor-made.

With the implementation of the computerized system of guests' management, it will be able to improve the operational effectiveness

39- Ibid., page 38.

of the enterprise and you will arrive to a state in offering the best practice in reception and in clients' attention, to know their desires and necessities, obtaining a higher value, recognized by them.

When all the hotel industry companies carry out the same activities in the benefit of their services, what are necessary to be changed are the strategies.

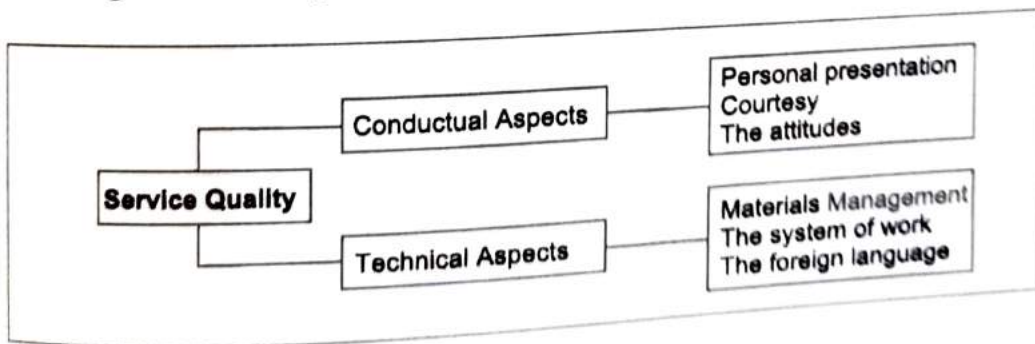
- *Principle 4: To fix the strategic limits:* The project is based on a singular strategy characterized by clear and precise objectives. According to Rico, the strategy "(...)implies to carry out concessions, to fix strategic limits (...). The strategy is to choose what necessities, expectations and preferences will satisfy"<sup>40</sup>.

The limits allow designing the plan in such a way that each activity allows it to achieve the result satisfactorily.

## INTEGRAL MANAGEMENT TOTAL QUALITY PROCESS

It is worth while to make a query of vital importance, when giving guests quality services: Which are the factors that impact in the guest's quality service?

To respond to this question, Báez Casillas' ideas are worthwhile. He in general terms, sustains that quality is the rendering of services to the guest and depend on the following factors<sup>41</sup>:



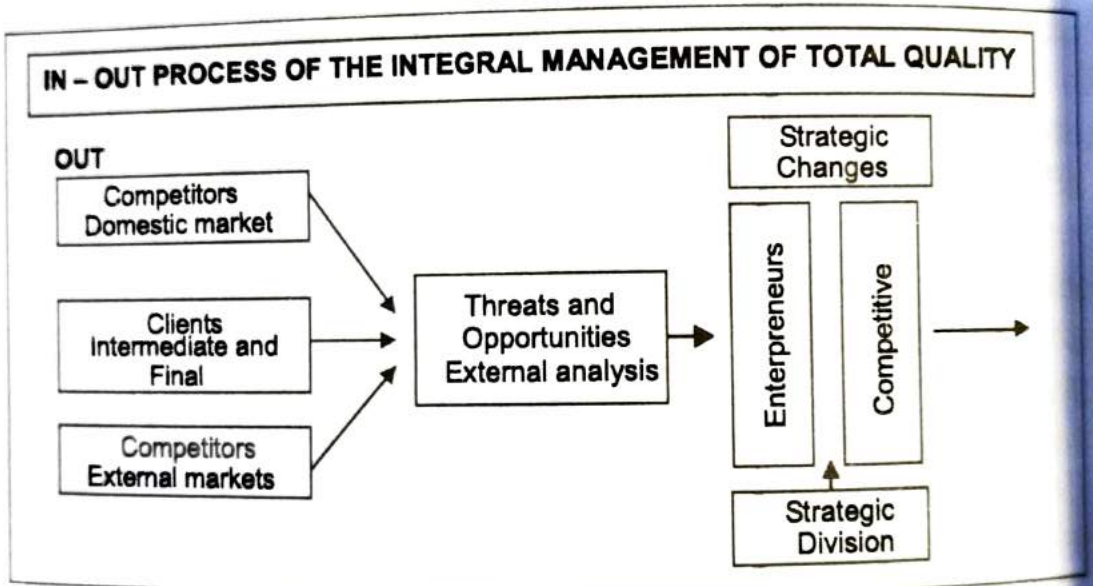
40- Ibid., page 45.

41- BAEZ CASILLAS, Sixto. (2004) Hotels. Ed. Compañía Continental S. A. Mexico. Mexico, Page 15.

According to the mentioned author, the two aspects of quality in service groups should fix quality standards that fulfill the necessities, desires and expectations of the client. This implies the creation of a quality culture, in rendering benefits to each guest, for which the human talent of the hotel industry enterprise should be conveniently prepared.

Rico, defines the integral Total Quality management, as a process and he denominates it "*in - out process of the integral Total Quality management*"<sup>42</sup> that should be understood as how the interaction of the variables intervene in this process.

The in - out process is explained by this author by means of the following graphics<sup>43</sup>:

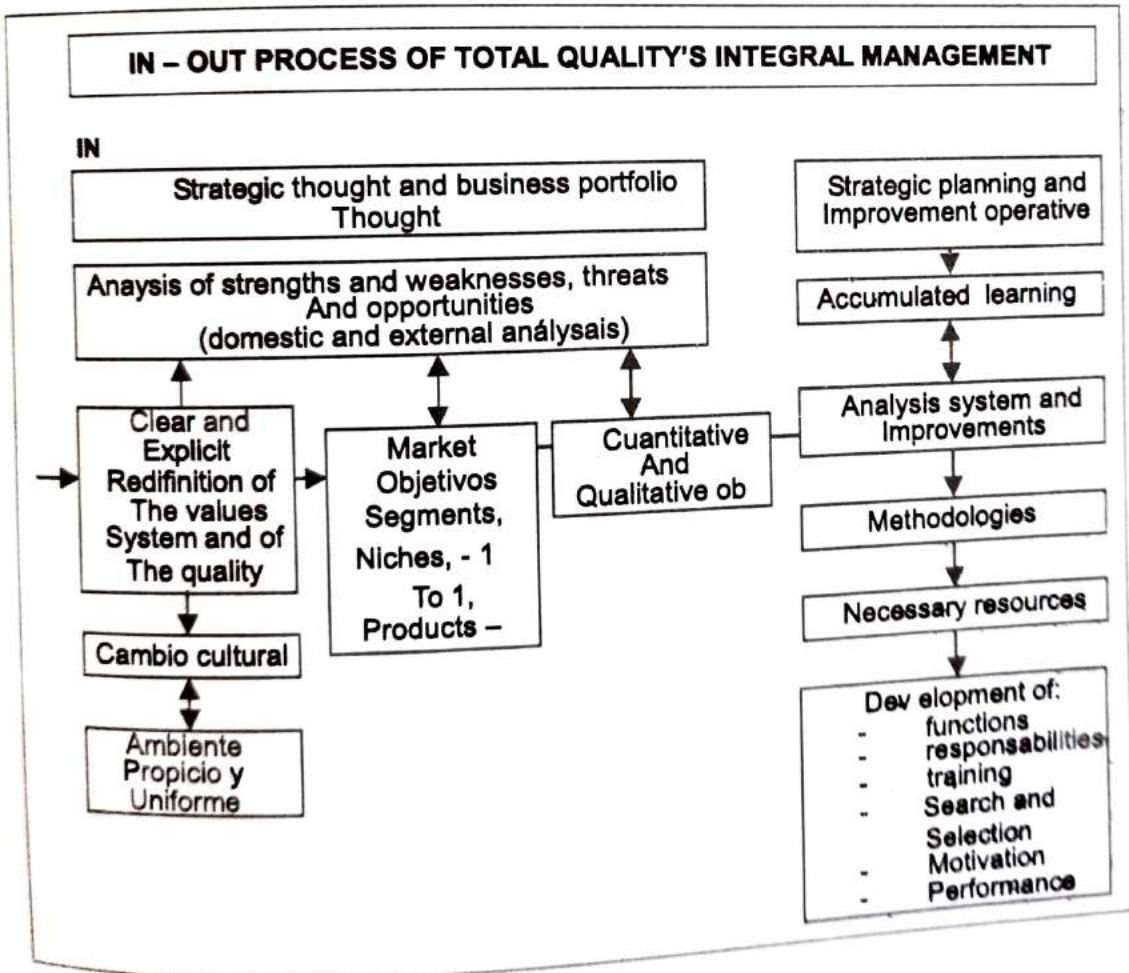


42- This author describes the behavior of said variables in the following way: The clients, the internal market competitors and the globalized external markets, generally produce threats and global and specific opportunities to the organizations, which generate the necessity to carry out strategic, enterprise and / or competitive changes. The demands then, of the markets in conjunction or in an isolated way, cause the analysis and make strategic decisions on implementing or not Total Quality. If the strategic decision is to incorporate Total Quality, in the enterprise, it will imply, redefining clearly and explicitly the values system.

43- Op. cit., page 49.

In this graph, the phase *out* has relationship with the design and implementation of the computer system for the management of guests in the Hotel "Domingo Savio", when settling down that, with its implementation the possibility would be developing of offering quality in the service opposed to the other companies in the field, starting out from the diagnosis of the situation and the establishment of the strategic plan with objectives and very defined actions.

In the following graph; the phase *in* establishes the rules of the project in itself, with the structuring of its parts and processes. The elements of this phase are kept in mind in the development of the present project, in their different aspects already presented and others to be presented in the following pages.



## THE STATE OF ART OF THE OF HOTEL INDUSTRY ENTERPRISE "DOMINGO SAVIO"

In this chapter we find developed, on one hand, the systematic description of the current conditions of the Enterprise "Domingo Savio" in its internal dimensions and of the environment and, on the other hand the projection of this organization as from a strategic plan of the project of implementing the information system for the hotel industry management.

### THE ENTERPRISE "DOMINGO SAVIO" IN THE HOTEL PRODUCTION SERVICES

It is convenient to recognize the fundamental aspects that make the differences between a manufacturer enterprise and a service enterprise. Schroeder<sup>44</sup> establishes the fundamental differences

Manufacture	Services
The Product is tangible	The service is intangible
The property is moved the moment it is bought	The product is not generally moved.
The product can be re sold	It is not possible to re sell it
A demonstration may be made before the purchase	The product does not exist before the purchase
The product can be kept in the inventory.	The product cannot be kept
Production precedes consumption	Production and consumption are simultaneous
Production and consumption can be separated in space.	Production and consumption must be in the same place
The product can be transported	The product cannot be transported (although the producers may be transported.
The seller produces	The consumer takes part directly in the production process, and so can carry out a part of the production.
A possible indirect contact between the company and its client.	In most cases it needs direct contact.
The product may be exported	Normally the service cannot be exported, but the providing of the service is.
The enterprise is organized according to separate sales and production.	Sales and production cannot be separated as functions.

44- SCHROEDER, Roger G. (1996) Operations Management 3<sup>rd</sup> Ed., page 145.



among the industries of production of goods in relation to those of the production of services. The following chart summarizes these oppositions:

We admit that the Domingo Savio Hotel Enterprise, is an organization whose object consists in rendering lodgings to clients. The Domingo Savio Enterprise, used to be an organization with an antique management, based on note paper or manual notes.

## **THE ORGANIZATIONAL CLIMATE OF THE DOMINGO ENTERPRISE A DIAGNOSES OF THE BEFORE**

To have a panorama of the internal situation of the Company, we have proceeded to a diagnosis of its organizational climate. The operation consisted on the application of a structured survey.

Based on the processed results, analyzed and commented precedently, the information obtained within the framework of the research, this may be synthesized in the following terms:

- The enterprise personnel labor satisfaction is positive; there are no indicators that point that there is dissatisfaction. In this point it is recommended to maintain the detected indexes.
- The labor load shows dispersion that points towards group work excess, while another group admits the normality in the working quantity that develops. It is recommended to deepen in the study of the cases that manifest a labor overload. In what concerns the importance of the work for the employees, the data insinuates that all the employees consider, as important or very important, their labor contribution, which constitutes a good indicator in the organizational environment.
- The interpersonal relationships among the employees, according to the indicators, constitutes an aspect to be kept in mind, the tendency points towards a normal relationship and, and considering that the highest indicator is the "very good", strategies should be established with purposes of optimizing this relationships. These indicators influence in the team work,

which cannot be efficient as long as they do not have good or very good relationships among themselves.

- Technology and the equipment at work, according to the employees, there is innovation and there is also a predisposition for the acceptance of technological innovations on their behalf.
- There are no negative indicators in relation to the atmosphere and the labor security in the company.

## THE "DOMINGO SAVIO" ENTERPRISE AND ITS ENVIRONMENT

### SITUATION DIAGNOSIS

Due to a formal request of the Domingo Savio Enterprise, for the development project and implementation of an information system for the administration of the hotel industry service, a has been carried out of the internal and external situation in which the company operates. The diagnosis of the situation has been developed starting off from a FODA analysis, keeping in mind the proposed variables Lardent<sup>45</sup> and its highlighted aspects.

Internal evaluation		
Variable	Strength	Weakness
1. Profitability.	the rent covers the opportunities.	
2. Financial resources	Planned handling of funds.	
3. Physical resources	Possibility of growing according to demand.	Physical Limited capacity
4. Technological resource		Faulty
5. Position in the market	Mark Prestige. Good antecedents.	
6. Innovation	Strategic thought of continuous improvement.	The guests' management system is antique
7. Productivity	Good occupation percentage	
8. Development and performance of the Directives.	Experience curve wide and professionalized.	
9. Attitudes and performance of the personnel.	In the different areas there exist attitudes of collaboration and dedication, efficiency, in spite of the scarce technical level.	Lack of aptitudes
10 Working environment	Adequate	

45- LARDENT, Alberto (2001) Management Information System. Technology and Quality. Editorial Prentice Hall. Buenos Aires, Argentina, pages 17-18.

External Evaluation		
Variables	Opportunities	Risks
Aspects of the market	Demands for the quality in the service.	Economic crisis with the consequent demand restriction
Financial situation	Exchange stability. The State tries to adjust its fiscal balance	High interest rates for the productive sector. Micro economy is stagnant
Competition	The competitors do not develop management information systems	
State Policies	There are no restrictions for the development of SMSE	Lack of government policies: to back the SMSE –receptive tourism– improving the physical and technological portals for tourism development of the country.

With the analysis of the concurrent factors to the internal and external characteristics of the performance of the Doming Savio Enterprise, the appropriate conditions have been found for the Project development based on the following aspects:

- The demand of service quality of the market is becoming greater.
- The enterprise must maintain the quality and prestige it has earned in this matter.
- The need to innovate and optimize the management and service administration in the hotel industry, so as to create differences.
- The enterprise's financial solvency allows it to carry out the programmed investments.

#### THE CURRENT SITUATION OF THE MARKET IN THE REGION AND IN THE COUNTRY

The Paraguayan economy presents some characteristics in the current year which are very favorable, mainly taking into account some elements to be enumerated:

The political situation is stable, taking into account that in August 2003 the new President assumed thus giving all the inhabitants renewed hopes. These first months of management have been very peaceful, adding some interesting achievements in tax collection areas; customs controls and agreements signed with international organizations.

The primary sector (mainly agricultural) is at a highly positive moment for the international prices of cotton, soy, wheat and corn, as well as for the 2003 production, that reached extremely high levels. This production allowed the country to have an income in foreign currencies of more than 1,300 million dollars for that year.

The industrial and commercial sectors although they have a slow exchange process, we believe that thanks to the relative stability and the exports they could grow.

The current exchange rate of the Guaraní / Dollar tends to go down as is happening worldwide, and in this country, due to fiscal balance, that allows it to be projected one year without abrupt changes, being able to assume relatively controlled risks in investments and new projects. The information provided by the Central Bank of the Paraguay, in July 2005, established that the international reserves ascended to 1,273.7 million dollars (until the first semester of 2005).

From the local and regional point of view, being Encarnación the Department capital and frontier City it generates two situations: a) from the point of view of as Department capital, the situation of Itapúa is highly favorable, taking into account the recently registered annual grain production, as well as of other highly competitive products (yerba mate (*ilex paraguayensis*), dairy products, rice, etc.). b) As a frontier City it has an interesting flow of people from the Argentine Republic's neighboring cities, which generate an important commercial exchange, although determined by the variable of the exchange rate. This means that the potential buyers also evaluate if the relationship Peso / Guaraní and Dollar / Guaraní is favorable or not.

#### **Paraguayan Socioeconomic situation<sup>46</sup>**

- Population: 5,830,583 inhabitants General Statistical, Surveys and Census Department. - year 2003

46-Source: //http: www.bcp.gov.py.htm

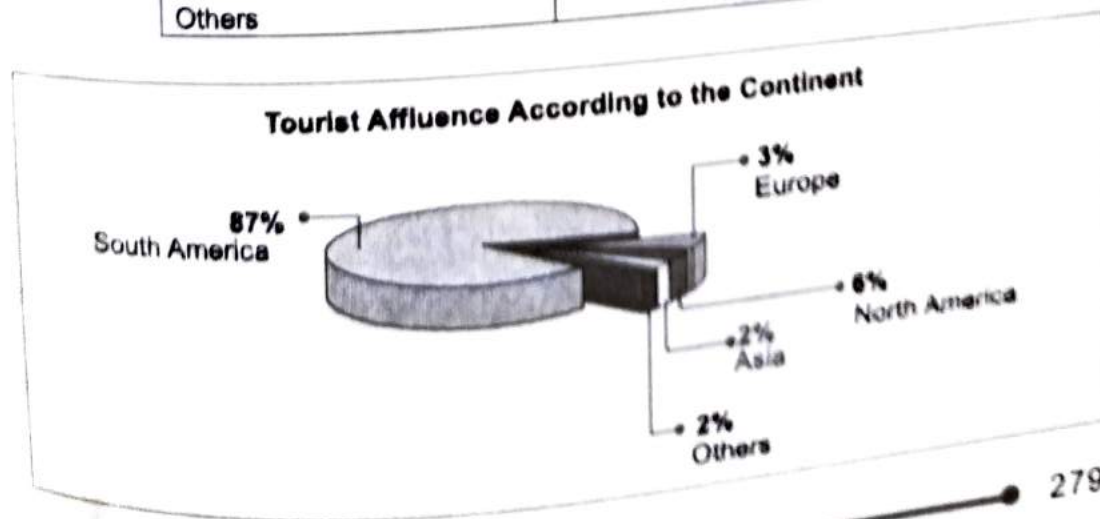
- E. A. P. (Economically Active Population): 2,762,459 people.
  - E. I. P. (Economically Inactive Population): 1,592,459 (36.6%).
  - Working Population: 2,560,612 (92.7% of the E. A. P.)
  - Unemployment: 10.9% of the E. A. P. in 2004
- Poverty: 40%.
- Minimum wage: 1,089,103 Guaranies (179.13 U\$S)
  - Cumulative rate of inflation (until June 2005): 5.1% year 2003

#### STATISTICAL DATA

The statistical data corresponding to the months of January and February of 2004 have revealed that the receptive tourist movement registered an increase of 11.85% with relationship to the same period in 2003, according to the National Tourism Board (SENATUR):

Total Tourists affluence figures of per year		
Years	Number of people	Percentage
2003	48.507	
2004	54.257	11.85% (increase)

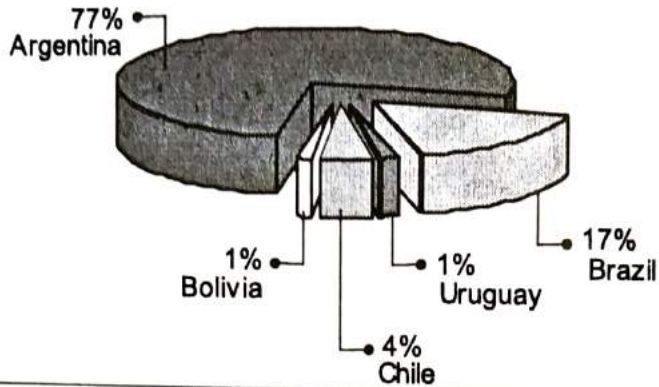
Tourists' affluence according to origin	
South America	88.12%
Europe	5.90%
North America	3.49%
Asia	1.67%
Others	1.55%



**Tourists' affluence for countries of the region MERCOSUR  
(South American Common Market).**

Country	Quantity	Percentage
Argentina	35.740	65.87%
Brazil	7,999	14.74%
Uruguay	593	1.06%
Chile	1,937	3.57%
Bolivia	571	1.05%

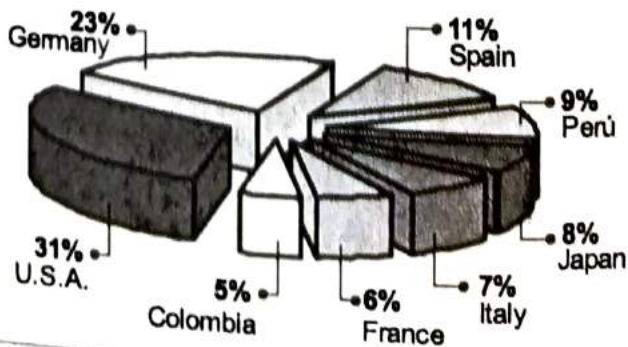
**Mercosur Tourist Affluence**



**Tourists' affluence for extra zone countries (not belonging to the MERCOSUR)**

Country	Quantity	Percentage
USA	1,534	2.83%
Germany	1,160	2.14%
Spain	574	1.06%
Peru	474	0.87%
Japan	400	0.74%
Italy	376	0.69%
France	316	0.58%
Colombia	238	0.44%

**Tourist affluence outside Mercosur**



## ENCARNACIÓN AS A TOURIST PRODUCT

Encarnación has at present 110,000 inhabitants, a population with a lot of European origin.

Most of them work in business and services. It is one of the cities with the largest development domestic exchange process.

It is 370 kilometers from Asunción, the country's capital. Attractive places for the tourism are: the Jesuit Reductions that are approximately 30 Kms from the City of Encarnación .

The Yacyretá Hydroelectric Dam, (bi-national enterprise) it is some 90 Kms from Encarnación. The future Corpus Projects is a new hydroelectric dam to be built between the two countries Argentina and Paraguay and it is located about 20 Kms away.

The flow of tourists can improve and become more important in relation to the last years, keeping in mind that the largest quantities of people who enter the country do it on what is called purchase tourism. Since December 2001, just in recent years one has seen a growth in receptive tourism in commercial, cultural environments (studies, congresses, visits to historical places) and for relaxation.

## THE CURRENT SITUATION OF THE HOTEL INDUSTRY MARKET IN ENCARNACIÓN

The hotel market situation in Encarnación continues being normal or stable. New offers do not exist, so competition is the same as it has been for several years. In the city there are 11 hotels that offer the same type of services with some relatively differentiated added values.

In all the cases the prices of the hotel industry services are not standardized. This happens due to the lack of hotel regulation and classification which causes a great breach between the minimum and maximum prices.

The problem affects Encarnación in a direct form and its population as has been described above. The following chart explains the city's most important hotel population.

Quantitative information and general description												
Encarnación hotel industry												
Description	Domingo Savio	Resort	Arthur	María	Cristal	Paraná	Itapúa	Acuario	Germano	Real	Cuarajhy	
	HD	HD	HD	HD	HD	HD	P	P	P	P	HD	
Lodgings regime	HD	HD	HD	HD	HD	HD	P	P	P	P	HD	
24 hs. Attention	24	24	24	24	24	24	24	24			24	
Bars	1	3	1	1	3	1	1	1	1	1	2	
Breakfast	*	*	*	*	*							
Jacuzzi												
Conference hall	*	*			*							
Garden	*	*	*	*								
Indoor parking	*	*	*	*						*		
Outdoor parking						*	*	*	*		*	
Palapa	*	*	*	*								
Single	77,000	198,000	99,000	77,000	82,500	77,000	38,500	44,000	22,000	33,000	44,000	
Double	110,000	253,000	140,000	110,000	137,500	88,000	66,000	77,000	38,500	77,000	88,000	
REFERENCES												
*	It has											
*	Outside the hotel											
**	In some bedrooms it does not have											



**Quantitative information and general description**

Encarnación hotel industry										
Description	Domingo Savio	Resort	Arthur	Maria Cristal	Paraná	Itapúa	Acuario	Germano	Real	Cuarajhy
<b>Guests' management computerized system</b>										
Has Computerized		*								
<b>Sports</b>										
Gym		*								
Volleyball	*	*								
Table tennis		*								
Swimming pool	*	*	*	*			*			
Horse riding		*								
Football 5		*								
Football		*								
<b>REFERENCES</b>										
*	It has									
*	Outside the hotel									
**	In some bedrooms									
	It does not have									

Quantitative information and general description

Encarnación hotel industry

Description	Domingo Savio	Resort	Arthur	Maria	Cristal	Paraná	Itapúa	Acuario	Germano	Real	Cuarajhy
<b>IN THE ROOMS</b>											
HEATING	*	*	*	*	*	*	*	*			*
AIR COND.	*	*	*	*	*	*	**	*	**	**	**
COLOR TV	*	*	*	*	*	*	**	*	*	**	**
PHONE	*	*	*	*	*	*	*				
MINIBAR	*	*	*	*	*	*					
PRIVATE BATHROOM	*	*	*	*	*	*	*	*	*	*	*
WARDOBE	*	*	*	*	*		*				
BEDSPRING BEDS	*										
WOODEN BED FOAM MATTRESS		*	*	*	*	*	*	*	*	*	*

REFERENCES

\* IT HAS

\* OUTSIDE THE HOTEL

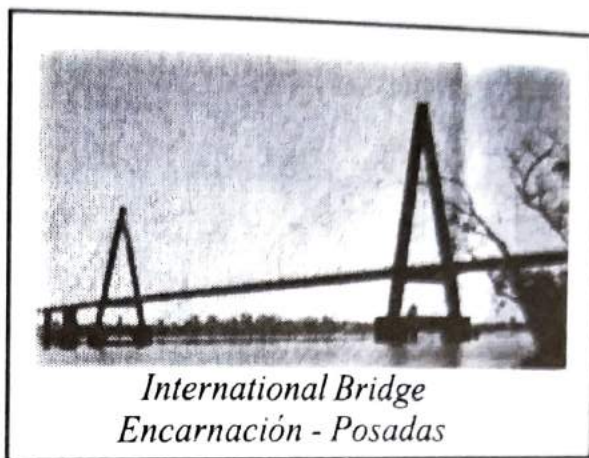
\*\* IN SOME BEDROOMS

IT DOES NOT HAVE

Sources: Own data (Marketing Practical Work) April, 2004.

Encarnación, capital of the Department of Itapúa, is a city located 360 kilometers south of Asunción, the capital; with a population of 120, 000 inhabitants, twinned to the city of Posadas, Argentina, by means of the Beato Roque González de Santa Cruz international bridge.

This city can offer an interesting expectation as to cultural, economy and leisure tourism, besides its inhabitants characteristics, inheritance from a melting pot of races, for the Jesuit Reductions, near it, such as Trinidad 27 Km. away, Jesus 37 Kms, and San Cosme y Damián 68 Kms. - , form part of a commercial triangle - Asunción, Ciudad del Este and Encarnación - the most important of the country, among other aspects, they constitute favorable conditions for the development of the tourist industry in the region.



According to estimates and informal polls in the Encarnación hotel sector, the quantity of people housed per day oscillates between 100 and 130 passengers. Most of the hotels have, inside their normal activity, a number of passengers that lodge from Monday to Friday due to labor reasons and at the weekend they return to their private homes. On the other hand one also finds within this kind of client salesmen, executives and professionals belonging to companies that carry out sporadic control visits or some other kind of activity.

There are times in the year when all the hotels are full, for example: carnival in February, Easter, winter vacations which one



*Geographical position of the Domingo Savio Hotel*

could call stars products for tourism in the area; this is, high seasons based on traditional activities, on the other hand, given the growth of university educational activities in the city, it is already traditional to have congresses, conferences, seminars and another kinds of activities of this nature, without forgetting the movement that is generated by the students themselves. The growth of the activities favored by the local Municipality wants Encarnación to also become a university city.

The growth of cultural activities that allow the visit of artists' of diverse parts of the country and from foreign ones.

The Encarnación carnival, which every year demands better preparation and is reported on by the press, generates a level of expectations that causes a greater number of people who come to the city, so they need to stay in relatively pleasant places and with competitive prices (accessible).

The existence of service groups such as Júnior Chamber, Rotary Club, Lions, also allows the realization of events and congresses for which the of hotel industry services and gastronomy demand is high, and the offer in this sector cannot satisfy the expectations.

Other elements to keep in mind for the demand, are the hydroelectric projects that are being developed in the region: Yacyretá, in construction, and Corpus, in project, allows us to believe that people of middle high level groups will need the aforementioned services.

The very grain trade and production for export activity, will allow the city to have a greater number of business visitors, this

means a number of passengers that will come to carry out business in the city.

#### OFFER ANALYSIS

The hotel industry market situation in Encarnación continues being normal and stable. New offers do not exist, so competition is the same as it has been for several years. We have 10 hotels that offer the same service as that of the Hotel Domingo Savio, with some added values that do not make a difference. The prices of the rooms oscillate between the 50.000 and 100.000 Guaraníes as an average (be they single, double or triples).

The only hotel that could mark a difference in design is the Encarnación Resort, due to its lodging the capacity, but as it does not have now the trademark that distinguished it, (Novotel) and as it does not to carry out innovations, this differentiation does not exist.

In order of importance, we mention the hotels: Arthur, Cristal, María, Paraná and Kuarajhy (in facilities and services)

Another very close category is conformed by hotels; Itapúa, Aquarius and Germano.

There are more with names of hotels but they do not form part of the group due to the type of facilities and services they offer (Nancy, Liz, etc)

In the regional aspect, the vicinity with Posadas, causes us to believe that the competition in services could be equally very strong, but the difference in costs makes it so, that not all consider it as a very valid alternative.

In the interior of the department the possibilities are scarcer still, we can consider as indirect competition the Hotels Tyrol in Captitan Miranda and Papillón in Bella Vista.

In all the cases the prices of the hotel industry services are not standardized. This happens for the lack of hotel regulation and classification, which gives place to a great breach between the minimum and maximum prices. (See annexed Prices and Services).

## DEFINITION OF THE PRODUCT: HOTEL DOMINGO SAVIO

**Hotel Domingo Savio.** Lodging service with a capacity of 28 rooms completely equipped with bedspring beds, minibar, televisions, telephone, video cable, private bathroom and air conditioning. Total capacity of beds: 45, to accommodate approximately 65 to 80 people daily.

### KINDS OF ROOMS

- 10 multifunctional rooms used as singles and double for couples.
- 10 multifunctional rooms used as double and triple.
- 2 family suites.
- 3 multifunctional rooms used as triple, quadruple or quintuple
- 3 separate double rooms.



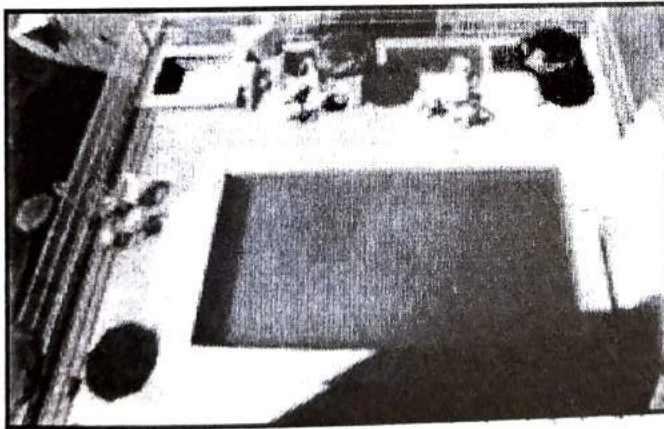
*Domingo Savio Hotel Façade*



*Hotel Reception and Lobby*



*Breakfast Services Area*



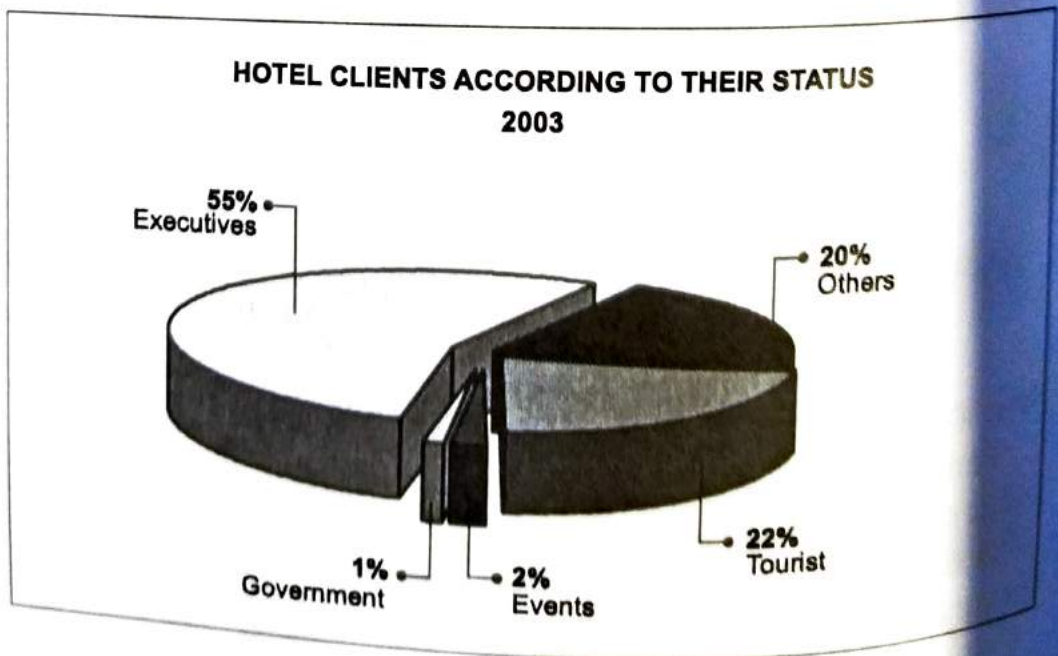
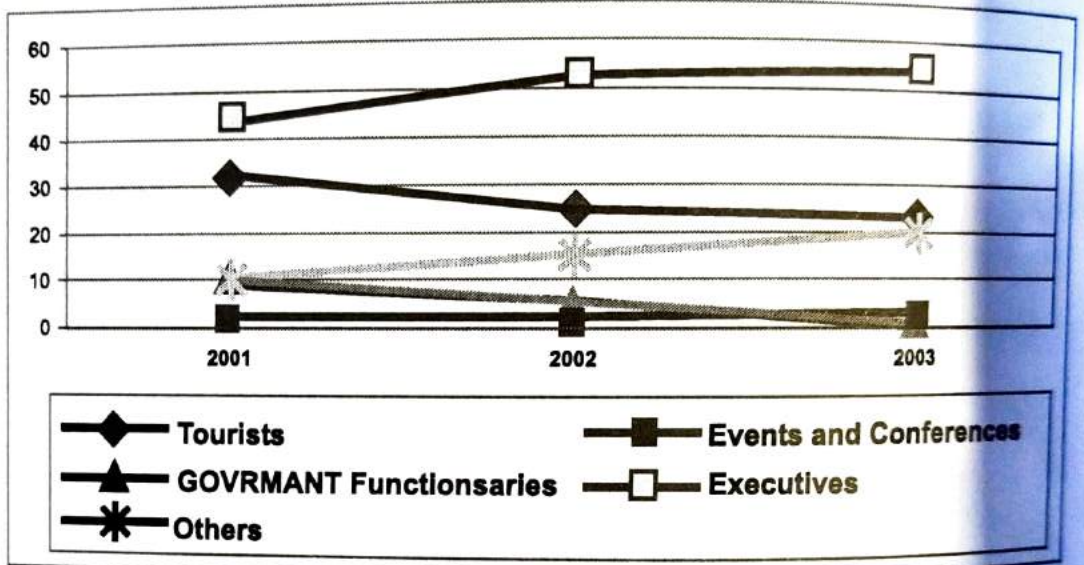
*Hotel Pool*

**HOTEL "DOMINGO SAVIO" HABITUAL CLIENTS**

Family Groups, professionals, executives, enterprise salesmen, public corporation employees etc.

A study carried out in the Hotel showed the following results during a three year period, according to the clients' reasons:

Reason	2001	2002	2003
Touristor in transit	32%	25%	22%
Participant in events and conferences	3%	2%	2%
Government officials	10%	5%	1%
Executives o n business trips	45%	53%	55%
Families and others	10%	15%	20%





One should point out that, considering the of trade triangulation, the flow of tourists for purchases was greater. Nowadays, when these advantages have finished, when the country offered the sumptuous products, tourism flow has diminished considerably. On the other hand, the opportunity arises of developing attractions that generate people's flow for example, beaches, water sports, zoos, inclusive improvements in the Jesuit Reductions environment and landscape.

#### GENERAL OBJECTIVES OF THE ENTERPRISE

- To develop quality in the activity related to hotel industry and the tourism.
- To offer a different hotel service.
- To internally operate the enterprise in a more efficient way

#### ENTERPRISE VISION

*To be recognized as a enterprise in the hotel industry sector dedicated to the satisfaction of its clients, with top quality in service, efficiency and technology, in the whole of the south region, with national and international presence.*

#### ENTERPRISE MISSION

*To be a services enterprise which wants to satisfy its clients with high- level quality by means of permanent innovation; that it seeks to be a harmonic community where team work is shared among, employees and shareholders, to make it a profitable enterprise and with social responsibility.*

#### ENTERPRISE MOTTO

**"THE COMFORT THAT YOU AND YOUR FAMILY DESERVE"**

#### ENTERPRISE VALUES

The values of the Domingo Savio Enterprise, inwards and outwards, are defined within the environment of:

- Sense of belonging
- Cordiality

- Integrity
- Effectiveness
- Total Satisfaction

## **CONCLUSIONS AND CONTRIBUTIONS**

Before doing a conclusive synthesis of the work, it is convenient to say that the present work is just a part of the Project that will have continuity in its execution and evaluation, starting from actions that appear in the work that up to here has been developed. The "Hotel Domingo Savio Enterprise" has committed its effort in continuing with the development of the strategic plan that is presented in this document, as a first stage.

The information system implementation project, for the "Domingo Savio Enterprise" hotel industry management, has been developed in three dimensions or phases:

### **1. Strategic planning process:**

- Mission and vision Enterprise development.
- FODA Analysis.
- Strategic objectives of the project: To implement a database and computerized system for the achievement of a competitive advantage.
- Design of the operative tactical plan to be able to answer the outlined problem.

### **2. Development of computer engineering with tailor-made software production, by means of the following actions:**

- Report and analysis of information system: database generated from the processes in the production of hotel industry services.
- Logical design of the information system: system engineering

- Physical construction of the information system: development of the software structure which becomes the application of the tailor-made program.
- Information system test: starting it up in a experimental way in order to get to know the results that system generates the and adjustment of the program.
- Putting the system into operation: practical implementation of the software in the process of hotel industry management.
- Evaluation of the information system: Analysis of the results that are given by the computer system.
- Management of the computer system: The use of the information given by the system as intangible resource (knowledge) for organization management.

### **3. Planning and training of the personnel in charge of the processes, in the hotel industry management as a productivity strategy**

#### **4. Systematic evaluation of the executed actions.**

The result of the project will result in the following elements:

- Tailor-made software: product developed, based on the contribution of the know how of the Domingo Savio Enterprise and Cybira Consulting, that works under the Linux operating system, a legal and patented product. The software engineering is developed in module form, (the module developed in this project is that of guests' management)
- Hardware acquisition with favorable characteristics for the implementation of the information system for the management of guests.
- Experimental implementation of the software, computerizing guests' management.
- Effective execution of human talent training plans: aiming at the development of the human factor as one of the main assets of the enterprise.

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